



BILL RICHARDSON
Governor

DIANE DENISH
Lieutenant Governor

Permit
NEW MEXICO
ENVIRONMENT DEPARTMENT

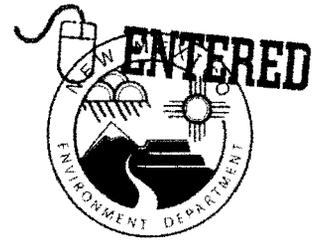
Hazardous Waste Bureau

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RON CURRY
Secretary

SARAH COTTRELL
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

November 30, 2010

**RE: FINAL DECISION AND RESPONSE TO COMMENTS
HAZARDOUS WASTE FACILITY PERMIT
LOS ALAMOS NATIONAL LABORATORY, EPA ID# NM0890010515**

Dear Interested Person:

On November 30, 2010, New Mexico Environment Department (Department) Secretary Ron Curry signed a Final Order issuing a final Hazardous Waste Facility Permit (Permit) to the Department of Energy/National Nuclear Security Agency and Los Alamos National Security, LLC (the Permittees) for management of hazardous waste at Los Alamos National Laboratory (LANL).

A public comment period was held on the draft Permit from August 27, 2007 through January 15, 2008. A revised draft Permit was released for public comment on July 6, 2009. A public hearing on the revised draft Permit was held from April 5 through May 7, 2010. The final permit incorporates changes made by the Secretary in the Final Order.

The Permit becomes effective 30 days after the issuance date and may be appealed under the provisions of the New Mexico Hazardous Waste Regulations, 20.4.1.901(H) NMAC, and § 74-4-14 of the New Mexico Hazardous Waste Act.

The Final Order, Permit, and Response to Comments may be viewed on the Department's webpage at <http://www.nmenv.state.nm.us/hwb/lanlperm.html> under LANL Final Permit.

Sincerely,

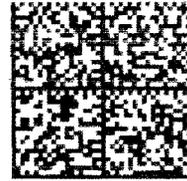
John E. Kieling
Manager
Permits Management Program

34163





Hazardous Waste Bureau
New Mexico Environment Department
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Hasler

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11/30/2010

Mailed From 87505

US POSTAGE

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NMED - HWB
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Santa Fe, NM 87505

NMED Response to Public Comment Submitted on the Draft LANL Permit November 30, 2010

A response to public comment regarding a draft permit is required by NM statute and regulation at 20.4.1.901 NMAC. In accordance with those regulations all written comments submitted on the Renewal Permit are considered in formulating a final decision regarding the Permit and the Department must respond to all public comments briefly describing all comments and identifying all related changes made to the permit.

Public comment regarding the draft Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit (Renewal Permit) was first solicited by the New Mexico Environment Department (Department) on July 6, 2009. That comment period lasted 60 days, or until September 4, 2009. During that time the Department received numerous comments and requests for a public hearing on the Renewal Permit. On February 2, 2010, the Department issued a revised version of the Renewal Permit, noticed a public hearing to begin April 5, 2010, and reopened the revised Renewal Permit to public comment through the period of the hearing. The public hearing on the Renewal Permit ended May 7, 2010 and the Department stopped receiving public comment on that date.

The Department received written public comment by mail and e-mail on the Renewal Permit during the public comment period. Written public comment, non-technical oral public comment, and technical testimony was received during the public hearing. Written public comment was also received by the Hearing Clerk. This Response to Comments addresses only the public comment. The written public comment may be found on the Hazardous Waste Bureau's web site at [<ftp://ftp.nmenv.state.nm.us/hwbdocs/HWB/lanl/permit/comments/>].

The Department provides a notice of this Response to all persons presenting written comments or who requested notification of the Department's decision in writing. This Response is posted on the Bureau's website. Associated with this Response "matrix" is an associated document titled General Comment Response. This General Comment Response document addresses repetitive comments on 17 specific issues and is also posted on the Bureau's website.

No.	Loc.	Comment	NMED Response	Δ
1	Gen.	STOP Open Air Burning of Hazardous Waste. I object to NMED allowing DOE/LANL to use the open air for burning 12,500 pounds of hazardous waste each year. The open burning releases poisons into the air we breathe, which poses a direct threat to the wildlife, public health and the environment. In 2004, NMED stopped the open burning of household trash because of toxic emissions. I support NMED requiring DOE/LANL to install a confined burn facility as an alternative to open burning.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
2	Gen.	Prohibit open-air burning of hazardous waste. I collected over 500 signatures on the petition to require LANL to stop open-air burning of hazardous waste and instead use a confined facility. The various organizations working on this issue collected over 1000 signatures, a clear indication that citizens object to LANL's practice of open-air burning, which poses a direct threat to public health, wildlife and the environment. Copies of all the petitions were delivered to the NM Congressional delegation. The Loretto Community asks NMED to actively work with them to change the law/regulation that allows for the open-air burning of hazardous waste at LANL. In 2004, NMED stopped the open burning of household trash because of toxic emissions. If NM Environment Department cares about the environment of New Mexico, we urge NMED to also work with the NM legislators to ban all open-air burning of hazardous waste throughout the state. There are many new thermal treatment technologies to treat high explosives and associated hazardous waste that LANL could use as an alternative to open-air burning. One company offering this service is EI Dorado Engineering, Inc. Please check them out at www.eldoradoengineering.com .	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments. Regarding the commenters' call on the Department and the State to ban all open-air burning of hazardous waste throughout the state, the comment is noted.	Yes
3	Gen.	Open burning is very toxic and hazardous and is very harmful to people and the environment. I have environmental illness and this is horrible.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
4	Gen.	Please do not do any open air burning and install a confined burn facility. Please protect the people in this area. We are at risk with living downwind and many people have no health insurance.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
5	Gen.	<p>Lichens receive their nutrients from the air in rain, not from the ground and are long lived plants, roughly 50 years. They take and store radioactive elements such as strontium 90 and cesium 137. They have been used in the arctic to analyze long term radioactive fallout. Have lichens down wind of LANL been analyzed to determine how much radioactive fallout, and other contaminants, have occurred from LANL during the past 50 years? If so, by who and where can the data be found? If not, why not? It seems to me that this analysis would be basic and preliminary to considering any hazardous waste incinerator.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p> <p>Regarding radionuclides, though the Department does have jurisdiction over the hazardous component of mixed wastes, the Department has no regulatory authority over the radioactive component or radionuclides in general. The Department is not aware that any wastes bearing radionuclides have ever been released to the environment at a RCRA permitted or interim status units, particularly wastes treated at the RCRA regulated open burn units at TA-16.</p>	Yes
6	Gen.	<p>First, I went to your website to see what was there. It seems like an intentional obfuscation of information, or at least that is the impact. I'm guessing that most visitors to the site would be the feel overwhelmed by sheer volume and possibly give up providing any opinion or response.</p> <p>So I'm just going to tell you my lay person's opinion without referring to all that overwhelming data online:</p> <p>a) Proposed hazardous waste facility for LANL:</p> <ol style="list-style-type: none"> 1. I would only be in favor of this if there were safe storage and/or disposal of hazardous waste. Not the way it is now; not in shallow unlined pits and not in deep 	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p> <p>Regarding the Bureau's web site, the Bureau is not intentionally obfuscating any information and limits documents placed on the site to documents requested by the public. The documentation</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>shafts.</p> <p>2. If burning is allowed, only in an incinerator with a filter to keep particles out of the air.</p> <p>3. Transuranic waste should be taken to a more secure site.</p> <p>b) Intent to deny permit for open burn units – Yes, I agree. No permit for open burn.</p> <p>c) Closure plans for open burn units – Yes, close the open burn units now operating illegally.</p>	<p>placed on the Bureau’s web site constitutes a very small fraction of the documentation managed by the Bureau</p> <p>Regarding transuranic wastes, New Mexico’s hazardous waste regulations and the Renewal Permit limit the storage of large quantities of mixed wastes to one year. The Department is aware that the Permittees are making a concerted effort to abide with those limitations and is moving transuranic waste to the RCRA permitted Waste Isolation Pilot Plant near Carlsbad, New Mexico.</p>	
7	Gen.	<p>I am wearing 3 hats, one as a citizen, one as coordinator of Agua es Vida Action Team (AVAT), a citizen watchdog group concerned about emerging contaminants in Albuquerque's tap water, since it is now coming from the Rio Grande, and one as a Physician's Assistant (PA). I have practiced medicine since 1974. As coordinator of AVAT, I have lab reports from the Albuquerque Bernalillo County Water Utility Authority (ABCWUA), of the treated river water, that is now in our tap water. These reports show that our tap water contains Plutonium, Americium, Radium & Tritium, among many other radionuclides and chemicals. The Water Authority believes that these toxins in the river are coming from Los Alamos. Since I live down river and am environmentally sensitive, I am very concerned about these toxic chemicals. I'd like to see NMED be more timely and diligent and deny Los Alamos National Lab (LANL) the permit to continue burning hazardous waste in the open air. This is because LANL has been a blatant polluter of our air, water and earth. Fining LANL does not seem to be effective, per their neglect of environmental stewardship. Denying the permit is one way to protect us. Wearing my personal and PA hats, I also support what Richard Moore</p>	<p>Comment noted. See the Department’s response regarding open burning in the document titled General Response to Comments.</p> <p>Regarding toxins in the Rio Grande, the Department is not aware that any wastes, including those bearing radionuclides, have ever been released to the environment at a RCRA permitted or interim status units. These units constitute the scope of the Renewal Permit. Legacy or past releases to the environment,</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>said earlier today regarding environmental justice and the need for a physical repository.</p> <p>Poor people cannot afford to move out of toxic environments or buy expensive air and water filters. In fact, none of us should have to buy these filters. As a health care provider, I am very concerned about public health and the effect of these industrial chemicals on our health.</p> <p>As you may know, there is an epidemic of cancer and diseases such as asthma and other immune system disorders. Real prevention of disease involves not producing these toxic chemicals in the first place, however, if they do exist, they need to be safely and carefully contained. The precautionary principle should be applied.</p>	<p>including those that may have contributed to toxins in the Rio Grande, are being aggressively pursued by the Department through a different regulatory document, the March 2005 Compliance Order on Consent.</p>	
8	Gen.	<p>We, the undersigned, state:</p> <ol style="list-style-type: none"> 1. All people, plants and animals are intricately tied to the health of our air. 2. Historic and on-going operations at Los Alamos National Laboratory (LANL) threaten our cultural, spiritual and ecological survival. 3. Our local, state and federal government agencies have a duty to protect the public health and welfare by setting and enforcing laws and regulations that protect our air. 4. Healthy communities and ecosystems require clean, innovative and life-affirming science and technology that will benefit the economy, the future and the health of all. 5. We recognize and respect that air does not seek or uphold political, social, cultural or economic boundaries. <p>To ensure the good health of our air, we demand that in 2009 LANL stop all open burning of hazardous waste and install confined burn facilities that will limit hazardous air emissions.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
9	Gen.	<p>As a resident of Santa Fe since 1982, I strongly oppose the open air burning of hazardous waste by LANL. There are other ways to dispose of this waste that will not</p>	<p>Comment noted. See the Department's response regarding</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>affect our lungs and the groundwaters. We should have learned by now of the risks of contamination by air and by water to the population.</p> <p>Over the past 10 years, serious deficiencies in the DOE/LANL emergency planning and response division have been found by several government auditing agencies, including the DOE inspector general, the Government Accountability Office, and the defense nuclear facility safety board. The reports described serious problems with the LANL fire protection BEFORE the Cerro Grande Fire of 2000.</p> <p>How many more wake-up calls do we need? Please keep LANL from endangering more of the inhabitants of New Mexico.</p>	<p>open burning and emergency preparedness in the document titled General Response to Comments.</p>	
10	Gen.	<p>The Multiple Chemical Sensitivities (MCS) Task Force of NM is a statewide advocacy organization comprised of chemically sensitive New Mexicans and supporters. We are dedicated to increasing awareness of MCS and educating others about the hazards of high and low level chemical exposures. MCS is a serious and growing public health problem that affects people of all ages, races, and economic backgrounds. A random survey conducted by the NM Department of Health found that 16% of the state's respondents reported being unusually sensitive to chemicals, such as household cleaning products, paints, perfumes and insect sprays. Most people with chemical sensitivities also get sick, some severely so, from exposure to other air contaminants, especially smoke. Burning of contaminated materials creates particularly toxic smoke.</p> <p>In addition to those with chemical sensitivities, approximately 26% of the population is under the age of 18, 12% are over 65 years of age, 11 % of adults have asthma, and approximately 20% have cardiovascular disease. All of these groups are known to be at increased risk of harm from air pollutants.</p> <p>In order to better protect people with chemical sensitivities, asthma, children, the elderly and others who are disproportionately affected by poor air quality, we make the following recommendations:</p> <ol style="list-style-type: none"> 1. Deny LANL's permit applications for open air burning of hazardous waste. 2. Require DOE/LANL to install confined burn facilities as an alternative to open 	<p>Comment noted. See the Department's response regarding open burning, public participation, emergency preparedness, and financial assurance in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>burning before any permit is finalized. The permit must include limits as to the type and amount of waste and the frequency of burns.</p> <ol style="list-style-type: none"> 3. Include requirements for NMED and DOE/LANL to provide enhanced participation as required by EPA for <i>"early, often, continuous and meaningful contact with the public"</i> for any burning activities. 4. Require DOE/LANL to establish both a physical Information Repository in the Espanola Valley, as well as a virtual (electronic) Information Repository before a permit is finalized. 5. Require DOE/LANL to meet the emergency management, planning, preparedness and response requirements. 6. Require DOE/LANL to meet all of the financial assurance requirements for each of the 24 hazardous waste management units. <p>It is essential that NMED exercise its authority and mandate to minimize air contamination in the state. Open air burning of hazardous waste by LANL should be prohibited. LANL should be required to use alternative methods of hazardous waste disposal, including, but not limited to, using confined burning facilities. In addition, burning of hazardous waste should not be exempt from state smoke regulations.</p> <p>LANL should not be allowed to shift costs to the public. Too often, government agencies use burning to achieve a goal because it is cheaper than alternatives. This can reduce costs to government but increase costs of those who get sick from the smoke and/or must evacuate the area in order to protect themselves from it. It is unfair to burden the public with medical bills and costs of transportation, alternative lodging, masks, air filters, lost work, and other expenses they may incur as a result of LANL's open burning. It is also unacceptable to put public health at risk for the lab's convenience.</p>		
11	Gen.	<p>I am a one-time career Marine Corps officer and a member of the Joan Duffy Chapter of Veterans for Peace in Santa Fe. I am here today to address specifically one of the rationales that Los Alamos National Laboratories offers in support of their application for the 10 year open burn permit, to wit:</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>“Without open burning, the Lab's research on detecting explosives, defeating improvised bombs, and creating stronger armor would be jeopardized.”</p> <p>Or, as expressed more emotionally by LANL employee John Gustafson,</p> <p>“The New Mexico Environment Department is considering an action that will put at greater risk the lives of our military personnel in Iraq and Afghanistan.”</p> <p>As a former active duty Marine, I naturally resonate with proclaimed efforts to "protect our troops." However this resonance is greatly attenuated when I reflect on the fact that "protection of the troops" as a screen for less admirable motives has been associated with the work and products of our Defense Department in General and LANL in particular from 1945 onward.</p> <p>In the first instance, that claim was offered as the reason for the atomic bombing of Japan, even though there is ample evidence that the Japanese were earnestly seeking to surrender under terms essentially identical-to those ultimately accepted weeks before the bombing.</p> <p>More recently, between 1961 and 1971, American forces sprayed nearly 20 million gallons of Agent Orange and other herbicides on Vietnam "to protect the troops" who were assured by the government that that was the reason for supporting the open burn. I would suggest that the real reason is to avoid the tough political work that would be necessary to obtain the funding necessary to provide a safe means for disposing of this legacy waste. Safe proven means of waste disposal, notably confined burning, have been available for years and must be required of the Labs.</p> <p>The disposing of waste is a largely unrecognized cost of the Lab's programs. As long as we allow the Labs to externalize these costs, they will continue to be paid in a variety of painful ways by New Mexicans for generations to come. I urge the New Mexico Environment Department to live up to its responsibilities by denying the open burn permit.</p>	Comments.	
12	Gen.	Thank you for the opportunity to offer my comments regarding open burning at the Los Alamos laboratory. As a resident of Santa Fe County, any airborne materials affect the overall welfare of my family and of my community, and that includes the entire population of Santa Fe County. Truly, I would rather the lab be involved in the science of humanity, or in innovative research that solve our problems confronting us today	Comment noted. See the Department’s response regarding open burning in the document titled General Response to	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>rather than in weapons related industry. That I should be concerned of the effects of possible contamination of our air, water and soil is unfortunate. Will you re-assure us that there is no need to worry? That misfortune and disaster is not a foregone conclusion? Or will you take appropriate measures and every safety precaution to ensure that the health and safety of the labs own community, and communities that extend beyond the city limits of Los Alamos has been considered and valued? To lessen risk is reasonable considering the cost of disaster, so I hope NMED denies the permit for open burning.</p> <p>And further I hope NMED continues to be the advocate for the welfare of each and every citizen of this state.</p>	Comments.	
13	Gen.	<p>Several years ago, the accumulated dust in my home tested too high in Strontium 90. This could only have come from emissions from Los Alamos Lab. I live in Llano; approx. 40 miles directly downwind from the Lab. I live a healthy lifestyle, which involves growing a garden, working and walking outside, and hiking in our mountains. My yearling spiritual pilgrimage is to the top of Jicarita, much as others walk to the Santuario. Studies have shown even higher levels of radiation in the soil at or above 11,000 feet, obviously where the air comes directly over from LANL and then collects and settles into our valleys below. No longer can I hike in the mountains with the same sense of health and peace as I had before I knew the dangers.</p> <p>I have just been diagnosed with breast cancer and join the growing numbers of cancer cases among my friends and neighbors in the Penasco area. Surely the incidents are too high and while we may not be able to prove that they are caused by emissions from the Lab, we all know that this is a large contributing factor. Furans and dioxins are part of the emission from open air burning and are endocrine disrupters that interfere with our hormonal systems. Long-term low-level exposure impairs the immune system and accumulates in fatty tissues, particularly breast tissue in women. Like PCBs, they are complex chlorines.</p> <p>I came to Llano because it was beautiful, agricultural and rural. I did not at first know the invisible dangers of our west ward neighbors, so close as the crow flies. It is my home and I am not going to move. And while I have been here on 40 years, my neighbors and friends families have lived here for 400 and 4000 years. We are the</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p> <p>Regarding radionuclides, though the Department does have jurisdiction over the hazardous component of mixed wastes, the Department has no regulatory authority over the radioactive component or radionuclides in general. The Department is not aware that any wastes bearing radionuclides have ever been released to the environment at a RCRA permitted or interim status unit; particularly wastes treated at the RCRA regulated open burn units at TA-16.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>unwilling victims of a system that is dangerous and irresponsible. Open air burning should not be allowed to continue. Hazardous work and hazardous waste should not be allowed unless it can be contained on-site, which of course it cannot. We all share air and water, our more precious resources.</p> <p>If LANL and the government choose to emit toxins into the air and water, then they need to be responsible and willing (or required) to test the gardens, herbs, and fruit that we raise and use to support our health. And they need to give health insurance to all downwinders within a 50 mile radius. In my treatment I filled in a risk assessment survey and one of the questions that added significant risk was living within 50 miles of a nuclear waste site.</p> <p>We have suffered contamination for way too long. I have requested comprehensive health studies from all the clinics and doctors to determine how high and widespread are breast cancers, thyroid problems, brain tumors, and other diseases that are the result of work at the Lab, touted as being for our national security. Instead of making us secure, the Lab has made the world as much more dangerous a place. Our innocent farmlands are just part of the casualties.</p> <p>The oil spill in the Gulf and other events should show us that our technologies are out of control and on the wrong path. If we have not figured out how to deal with the waste, accidents, etc., then we should not be creating it. In the case of oil, at least we are all partly responsible for our greed to use massive energy in our everyday lives, to drive and consume. If all the radioactive emissions at the lab were from work with nuclear medicine, it might be a risk that we should have to bare. It is unconscionable that we are being poisoned because of the development of weapons of mass destruction, something that at this point in history should be banned (and are internationally).</p> <p>The NMED is supposed to protect our environment, not work with the Labs to dilute safety standards and cover up laxity with technical jargon and bureaucratic red tape. We need to return to common sense and work for the common good of humanity before it is too late. It is time to listen to native elders and bring them to the table in decision making, to chart a course that may allow future generations to survive.</p> <p>LANL and other decision makers, including the government, are acting like petulant children, playing with toys with no regard to the consequences of their actions. If decision making was conducted with a circle of native elders and women involved</p>	<p>Regarding the Department's protection of the environment, the Department has done everything within its legal authority to ensure that protection. Furthermore, the</p>	

No.	Loc.	Comment	NMED Response	Δ
		<p>(much like families around the table – old style) we would look to long-term consequences and responsible action as part of the process. It is time we grow up!</p> <p>With regard to jobs, there are plenty of jobs needed at LANL doing sane, safe work.</p>	<p>Department has strived to explain this to the public to the best of its ability.</p>	
14	Gen.	<p>I was here 21 years ago, not in this room, in another room, at the LANL hearings, and I'm sorry to say I still have some of the same concerns as I had 21 years ago.</p> <p>I think a lot of that concern comes from my questioning decisions that are made unilaterally and not from a board, from a board that's comprised of people from the community, for example, Concerned Citizens for Nuclear Safety, someone from that organization to be a part of a board to help with the cleanup that we are having to consider at LANL. And I know it started, but I do feel that the public has some information that can be given that can be very helpful for all this and all of us concerned.</p> <p>I'm concerned about the air. I'm concerned about the air because of the burning of hazardous waste. Air isn't just there and moves, but it also doesn't just move in the air, it can move into the soil. It can move into the soil and affect our aquifers, and that's exactly what it is that's happening.</p> <p>There was a committee -- evidently, no one knew about this until six weeks ago, but there was a committee that was established to look at and recommend a lot of really excellent things for Los Alamos to consider, and those secret documents were not released until six weeks ago. 21 years ago, no one saw those documents.</p> <p>Those documents, I think, need to be looked at and scrutinized and used.</p> <p>I'm also concerned about this public hearing, because, to me, the thought that I could be cross-examined doesn't feel real friendly. It's hard enough to stand up here in front of a judge -- actually, I don't think I've ever stood up in front of a judge before. But it's hard enough to stand up here with all of these experts sitting and listening to these inferior comments, because they are only based on opinion, and what does she know.</p> <p>I do know some things as a teacher, as a science teacher, and I do know a lot of things about the earth, and I'm concerned that if I am cross-examined, or if anyone from the public is cross-examined, it would come out that we are not experts; and, indeed, we are not experts, but I don't feel that not being an expert should discount the information that</p>	<p>Comment noted. See the Department's response regarding open burning and contractor documents in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>we are giving to you and to this group. Indeed, at one point, voting required that you own land. We had to have stipulations. You know, if this is really a public hearing, should we have a stipulation that we have to be experts in order to stand up with the -- from the interrogation that might follow? That concerns me a lot. In fact, there are a lot of public people right now that would like to be standing right here in line behind me that aren't, and they aren't because they are intimidated.</p> <p>I would like this to be a public hearing. I don't want it to be an expert hearing. I would like the public a part of the decisions that are made, because they are affecting my life, they are affecting my health.</p> <p>I also feel that it's not -- as a voter, I would like to feel that people who are elected to office feel like they want to listen to my opinion, that want to listen to other people in the public. If there are, indeed, people who are in public office or are planning to go into public office that don't want to listen to our comments and our ideas, I really would like them to question whether they should go ahead with that direction in their lives.</p>		
15	Gen.	<p>I've worked with a nonprofit environmental organization, One Sky New Mexico, in the past, and I'm a resident of Santa Fe, and I also express the lady's concerns about the contaminants that are leaking into the ground and might possibly be burning in open pits in the air. So I figure it's really the public's right to know if it will be burned, which I think is environmentally irresponsible. What will be the chemicals that are being burned, since we all have to breathe it?</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
16	Gen.	<p>I'm here to speak on behalf of the National Youth Network, called "Think Outside the Bomb." Think Outside the Bomb is the largest youth led network of nuclear abolitionists in the United States, and we are standing in alliance with community groups and leaders in Espanola, Chimayo, and across New Mexico, to demand an end to nuclear proliferation, excuse me, and the cleanup of the lab's toxic legacies. Los Alamos Laboratory's jobs of global destruction and death must be replaced with jobs that lead to an equitable, sustainable and truly secure future. We realize that our mission of transformation may not be achieved overnight and the that hazardous waste permit that you are considering today is an interim step towards a truly safe and secure environment in New Mexico.</p> <p>In that light, we offer these comments. We fully support the decision of the NMED to</p>	<p>Comment noted. See the Department's response regarding open burning, open detonation, and financial assurance in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>deny the continuance of the open burn permit. This denial is in the best interests of public health in the area and was reached with the public, not corporate, interests in mind. We don't believe the lab claims that open burning poses no risk to public health. We find arguments about the need to preserve these toxic practices to protect the troops overseas to be manipulative and unfounded. Please maintain your commitment to the public interests, as you are tasked to, and then deny the open burn permit.</p> <p>In addition to the existing burn units recommended for closure, Table J-1 lists three open detonation units. The draft permit is not clear as to whether it authorizes ongoing use of these units. We believe that the environmental and health consequences of open detonation are similar to open burning and recommend that those detonation facilities also be closed.</p> <p>The draft permit also lists more than 1,000 facilities in areas at the Los Alamos site that require corrective action because of waste contamination. Many of these sites are contaminated soils, storm drains, outfalls, and underground seepage pits. Nineteen of the sites are canyons that drain contaminated storm run-off beyond the facility boundaries. The hazardous waste permit must require cleanup of the existing contamination and assure New Mexico that future contamination will not occur. All off-site contamination from facility operations should be cleaned up before another hazardous waste permit is issued.</p> <p>New Mexican residents have already borne the health and environmental consequences of waste produced by the Los Alamos Laboratories. With that in mind, they should not be asked to bear the burden of waste from the states of Tennessee, Utah, Florida, Washington, and Texas. We request that the draft permit be amended to eliminate authorization to receive wastes from the facilities listed in Table L.</p> <p>We also respectfully challenge the stated mission of the reduction of global nuclear danger in Attachment B, Part A, page one. What are the direct linkages between the issuing of these permits and an increase in nuclear theft? In fact, the very practices that sustain the need to treat, burn, detonate, and store these materials are the practices that directly increase global nuclear danger. These practices, as a whole, are not sustainable and are detrimental to the public and natural resources of the area.</p> <p>Estimated closure costs for all of Los Alamos waste facilities is 26 million dollars. This cost estimate is too low, given the number of facilities and type of wastes handled at the</p>	<p>Regarding wastes received at LANL from these off-site facilities, Permit Section 2.2.1(1) limits waste from these facilities to only those wastes generated at LANL, sent off-site for treatment, and subsequently returned to LANL. The Department concurs that off-site waste acceptance at</p>	

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		<p>facility. The closure cost estimate should be increased to ensure that the cost of cleanup and closure is borne by the private operating contractor and not by US and New Mexican taxpayers.</p> <p>LANL has put the health of the communities surrounding the lab against their purported need to protect the nation against threats to our security. This is a lose/lose scenario they are asking you to support. If LANL were to focus on cleanup and innovation and responsible areas of energy production, that did not have the consequences of highly hazardous materials, we would not be faced with these choices.</p> <p>It's absurd to claim that it's safer to burn materials that are too unstable to transport as though those are the only two options. It is safer not to produce these materials. But since it's too late for that, it is certainly not necessary to burn them and expose the area to higher levels of toxic pollution. We expect that this Bureau will maintain the wisdom of their original decision and deny the issuance of the requested permit -- the open burn permit.</p>	<p>LANL is generally undesirable, but the waste receive under the above described circumstances is LANL's responsibility and the off-site treatment process makes the waste safer to manage because it has been stabilized.</p> <p>Furthermore, the Department understands that generally these off-site facilities must return the stabilized waste to LANL because it is mixed wastes, it may not have a disposal pathway, and LANL's Site Treatment Plan is the appropriate regulatory mechanism to address the wastes.</p>	
17	Gen.	<p>I'm the lead organizer for the Embudo Valley Environmental Monitoring Group.</p> <p>Our organization formed here after the Cerro Grande fire in order to provide independent monitoring of LANL emissions in communities downwind from the Los Alamos National Laboratory. We also work on public health and safety issues related to LANL emissions and have been involved in the hazardous waste permit negotiations for the 40 days of negotiations. I'm speaking as the lead organizer and have not provided any technical testimony.</p> <p>There are a couple of things I want to talk about, and I'd like to connect a few things. The first thing I wanted to acknowledge is the public's generosity over the years of putting up with open burning from the Los Alamos National Laboratory. In 2004 NMED banned open-barrel trash burning in the State of New Mexico because of the hazards of burning our backyard trash. So, subsequently, Los Alamos National Laboratory had been burning -- doing their open burning practices under open-barrel trash burn permits, and so they were forced into having to apply for a burn permit in a different way.</p> <p>Several organizations, Concerned Citizens for Nuclear Safety, Tewa Women United and</p>	<p>Comment noted. See the Department's response regarding open burning and the information repository in the document titled General Response to Comments.</p>	Yes

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		<p>the Embudo Valley Environmental Monitoring Group appealed the permit that was issued for open burning at the same areas, at the TA-16 facility. It went before the Environmental Improvement Board, and subsequently in 2006, Los Alamos National Laboratory withdrew their permit for open burning. These are the same open burning practices that they were denied a permit for -- or not denied a permit for, but they withdrew, saying that they no longer needed the permit in 2006.</p> <p>So here we are in 2010, and the Los Alamos National Laboratory wants to open burn -- to continue to open burn. I want to acknowledge, again, the generosity of the public. In the -- during the first round in the appeal to the Environmental Improvement Board, we collected hundreds of signatures opposing the open burning at Los Alamos National Laboratory. Again, we provided hundreds of signatures from people living in downwind communities opposing open burning at Los Alamos National Laboratory.</p> <p>We also have been quite generous, the nongovernmental organizations, in providing alternatives for Los Alamos National Laboratory to open burning. We've researched the alternatives ourselves, and we have collected the support of the public to support a confined burn facility. Now, with this confined burn facility, Los Alamos National Laboratory can continue to do their burn practices, to dispose of their hazardous waste, their high explosives, their objects contaminated with high explosives, that include rubbers and plastics, and we just -- we don't see the reason that LANL has to continue this practice.</p> <p>We do understand that Los Alamos has pulled out concern -- they've raised concern in the surrounding communities using national security as -- as a curtain. What we would like to suggest is we would like to take this into the remedy of homeland security, because our communities surrounding Los Alamos National Laboratory are land-based communities. The indigenous cultures, the Hispanic settlements, the back-to-the-land movement, are all people who live in -- live downwind of Los Alamos National Laboratory and are involved in the land base or land-based cultures. We depend on clean air, clean soil and clean water to sustain us. This is our security.</p> <p>I'd like to also support the information repository at Northern New Mexico College. One of the keys in this -- in this information repository is communication. What we really need is for Los Alamos to open the line of communication. You know, a lot of people have talked about the various reasons why it's important to have the information</p>	<p>Regarding Air Quality Permit No. 2195-J issued by the Department to LANL pursuant to the Air Quality Control Act, that Permit specifically authorized "non-RCRA open burning activities associated with the flash pad located at TA-16." The open burn practices in the Permittees' RCRA application are not the same open burn practices addressed in Permit 2195-J.</p>	

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		<p>repository; they've talked about the way people learn, which is really important. Not everybody can learn sitting in front of a computer, not everybody has access to the internet.</p> <p>In my community, in the Rio Embudo watershed, there are over 6,000 people that live within like a 35-mile by 35-mile area, and there are three public computers available for 6,000 people, and it's way down at the end of the valley, which we call the banana belt, because it's -- it's -- the climate is actually pretty nice there compared to 12 miles away, when you're at 7,500 feet and, you know, valleys and mountain roads and stuff. So, you know, there isn't a lot of access to the computers at the library, but a lot of people are now attending Northern New Mexico College.</p> <p>We would really like to see this information in an institute of higher learning, because it -- it's a resource to bring our communities together. I think that Los Alamos National Laboratory has had this shroud of secrecy around it. A lot of people work at the lab where I live and a lot of people don't even know what they do. They don't know how it connects to the nuclear weapons industry, they are there providing for their family. By providing a place where people can go, it's not just to review documents, it's to develop community, it's so that people can talk about what the stuff means. You know, I have been doing this for about seven years now, and I look at these documents, and I am still -- I'm still perplexed by it, by the way they are written, that you can say public access is putting something on the internet so someone can go read it, when this is not going to -- none of this information makes sense to anybody, unless they've been trained to read it. That's the value of having a physical information repository, is you bring community into the issues of the Los Alamos National Laboratory, the environmental issues, how are all affected by what Los Alamos is doing. They aren't just creating jobs, they're affecting our communities in -- in ways that are harming us, and people really need to understand that.</p>		
18	Gen.	<p>I live with my family in Chimayo, and I'm a business owner. I have a small construction company. My business is located in San Ildefonso adjacent to the labs. I have my business there with my family there in San Ildefonso.</p> <p>I'm very concerned about the potential of burning this hazardous waste, and I fully support the New Mexico Environmental Department doing what they are supposed to do in representing me in denying this permit. I use the water that comes from the snowmelt</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

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		<p>to irrigate my land, to grow vegetables, and also to feed my animals, and we -- we use the milk from our animals and eggs and so on. The impacts from, you know, the burning of any hazardous waste that lands in our watershed will impact us many more times than you think, than any of the studies will ever take into account. The fact that my children play in the soil, they swim in the river, in the acequias, we use our land. It's -- we've become a part of this community in the last ten years, and it's in a way that I never knew before.</p> <p>When I was younger, you know, I grew up in a farming area, but we didn't have the traditions that I've learned to love and appreciate here.</p> <p>So it's vital to the survival of this community that we have these resources and that we are never afraid of using our water and letting our kids swim and play and catch the fish, you know. That's really important.</p> <p>The other thing, as a business owner, I work a lot in the tribal areas, we do a lot of renovations work, and, you know, we see the, you know, disenfranchisement of the community, but also I work building custom homes, and the last thing that we need, in our depressed economy up here in the custom home industry, is, you know, for people to see the real estate markets fall even further because there is hazardous materials being incinerated here and just thrown into our air. So that, you know, that part is a huge detriment to our business, you know.</p> <p>The other thing is being located in San Ildefonso with our business, we take pride in hiring local youth to work for us, and the -- the pride that I see in these young folks having meaningful work is one of the foundations of our business, and they would like to participate in the economic conversion of the labs. So part of that will be developing clean technologies, and incinerating waste on their sacred land is not something that brings a feeling of connection to their traditional places, you know.</p> <p>Those canyons belong to San Ildefonso. That land belongs to San Ildefonso, and from time immemorial, and the idea that it can be dumped on once, and then again used as incinerating sites, is a violation of a sacred trust that they have with their creator. I don't get to go in the kiva, I'm not pretending that I know anything about that religion and that spirituality, I'm just a little bit around it, and I have great reverence for it, and the idea that we have the right to, you know, disregard the creator's sacred trust, God's, you know, gift to people, by taking toxic materials and incinerating them is an offensive to</p>		

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		<p>me. I can't even imagine how it feels to the elders over there, you know.</p> <p>I know that part of my family would want to be here, but one of the family members is in the hospital and they couldn't make it from San Ildefonso, and so I just wanted to express a couple of words on their behalf that have dealt with the effects of living next to a facility like Los Alamos for a long, long time, and I'd hate to see it get worse.</p> <p>I really appreciate the opportunity to speak to you, Your Honor, and I hope that we can, you know, find better ways of handling this situation, because it has to be taken care of, you know.</p> <p>I personally work at the facility doing cleanup, as long as it's containment and protecting my daughter and my sons, you know. There is -- you know, also, the records need to be public and they need to be made accessible. On my little dirt road, at least four people work up there at the labs, and they are not here today because, you know, they don't know how to participate. So we need to make access to these events.</p> <p>I know the Department of Energy tries to fulfill the letter of the law, but, you know, I'll go around and talk to them and tell them, but, you know, they are at baseball practice, they are making dinner, they are over with a sick relative, you know, and it's hard to participate in this, and even though many of them make their livelihood from the labs, they are very concerned, you know. I don't know how many guys I work with tell me, "Yeah, my son has cancer, has leukemia and barely made it through," or "My uncle, he passed away from the effects over there."</p> <p>So even know we know it's affecting us, it's such a huge financial institution, it provides so much, you know, money for select individuals, they don't know how to participate in this without seeming like they are against something that provides their livelihood. So it's quite a dichotomy, because here you have one of the richest counties in America, Los Alamos, next to one of the poorest here, Rio Arriba. So we're suffering from the effects of the environment there, but to come out against what's going on there, it takes away what little income that is available.</p> <p>So I am in full support of at least making records more available to the community, and in any way we can create participation, even if it means going door to door and talking to folks, you know. I really love this community, my family, my daughter is Chimayosa, she's proud, and we want to continue these traditions here, and we need our water to be</p>		

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		clean and our land to be clean.		
19	Gen.	<p>I live in Santa Fe, I have severe asthma, and I'm chemically sensitive. And for 35 years I've been trying to avoid chemicals that trigger my symptoms, and for many years I've needed some very specialized medical care. My work for 20 of these past 35 years has been with young children at UC Berkeley.</p> <p>I'm very concerned about children developing asthma and having asthma attacks. In our program, we had a few episodes where a child had to be rushed to Children's Hospital for an asthma attack. It was horrible to see a child panicking as they struggled to breathe. Please stop open air burning.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
20	Gen.	Please deny the open burning of hazardous wastes at LANL. LANL has plenty of money to produce nuclear bomb death machines, but seems to have no money to protect the public from their deadly poisons. A for-profit weapons manufacturing facility should not be allowed to poison the public with our tax dollars.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
21	Gen.	<p>I applaud the New Mexico Environment Department for taking responsibility for trying to regulate this monster on the hill that has been poisoning New Mexicans ever since the early '40s, about the time I was born. I don't believe that any argument for national security has any sway in this defense that LANL has that they want to do open pit burning for national security. It just seems ridiculous to me that they would make that argument.</p> <p>This is an industry that has been poisoning Americans downwind in just about every facility all over the country. It has been injecting people experimentally with plutonium. It has been forcing military people to be in close proximity to nuclear tests in specific. And it probably has been responsible for the deaths of more Americans than ever was killed in any terrorist attack.</p> <p>I want to encourage the New Mexico Environment to stick by its guns and to regulate open pit burning. It is not justifiable to continue to poison the environment in the -- in the spurious name of national security.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
22	Gen.	I'm a one-time career Marine Corps officer and a member of the Joan Duffy Chapter for Veterans for Peace in Santa Fe. I'm here today to address specifically one of the rationales that Los Alamos National Laboratories offers in support of their application	Comment noted. See the Department's response regarding open burning in the document	Yes

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		<p>for the ten-year open burn permit, to wit: "Without open burning, the lab's research on detecting explosives, defeating improvised bombs, and creating stronger armor would be jeopardized." Or as expressed more emotionally by LANL employee John Gustafson, "The New Mexico Environment Department is considering an action that will put at greater risk the lives of our military personnel in Iraq and Afghanistan."</p> <p>As a former active duty Marine, I naturally resonate with proclaimed efforts to protect our troops. However, this resonance is greatly attenuated when I reflect on the fact that protection of the troops as a screen for less admirable motives has been associated with the work and products of our Defense Department, in general, and LANL, in particular, from 1945 onward. In the first instance, that claim was offered as the reason for the atomic bombing of Japan, even though there is ample evidence that the Japanese were earnestly seeking to surrender weeks before the bombing.</p> <p>More recently, between 1961 and 1971, American forces sprayed nearly 20 million gallons of Agent Orange and other herbicides on Vietnam to protect the troops, who were assured by the government that there was no risk -- excuse me, that the substance posed no human health risks, to quote the terms used by LANL about open burning on their website. By the close of the century, more than 300,000 troops had filed for disability as a result of their exposure to Agent Orange. One of the victims among those troops was John Duffy, in whose honor our chapter for Veterans of Peace has been named.</p> <p>Just a few days ago, I returned from Vietnam as a member of a delegation of veterans who spent ten days traveling throughout the countryside to document the continuing impact of Agent Orange; or, more specifically, the dioxin contamination on the land and people of that country. It's estimated by prominent researchers in the United States academic community that as many as three million Vietnamese are suffering the effects of the dioxin that we have left there. The impact includes astronomical incidence levels of prenatal and neonatal anomalies, now into the third generation. Lest one argument that the Agent Orange is not relevant here, I hasten to point that dioxin contamination is among the legacy wastes subject to the proposed open burning.</p> <p>To bring the argument closer to home in both temporal and geographical terms, the use of depleted uranium in contemporary armaments is also argued on the basis of protecting the troops. There is mounting evidence that depleted uranium used in the</p>	<p>titled General Response to Comments.</p>	

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		<p>Gulf Wars and the Balkans has caused more casualties among US troops that their use could possibly have saved, not to mention the continuing massive impact on the civilian populations in the areas served.</p> <p>From this history, as well as direct personal experience and witness, I am skeptical of the claim that the open burn poses no risk to human health. But beyond this, I believe that as a scientific enterprise, LANL has an obligation to embrace strongly the precautionary principle that if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is not harmful, the burden of proof that it is not harmful falls on those who advocate taking the action.</p> <p>I return to LANL employee John Gustafson's argument that "The greatest risk currently to our armed forces in these areas is from improvised explosive devices, or IEDs, and that cancelling this permit would have a tremendous impact on the ability of LANL researchers to respond quickly and effectively when new threats come into play." My late father always told me that there are two reasons for everything: the good reason and the real reason, and you usually are only told the good reason. Protecting the troops is a good reason for supporting the open burn. I would suggest that the real reason is to avoid the tough political work that would be necessary to obtain the funding necessary to provide a safe means for disposing of this legacy waste.</p> <p>Safe, proven means of waste disposal, notably confined burning, have been available for years and must be required of the labs. The disposing of waste is a largely unrecognized cost of the lab's programs. As long as we allow the labs to externalize these costs, they will continue to be paid in a variety of painful ways by New Mexicans for generations to come. I urge the New Mexico Environment Department to live up to its responsibility by denying the open burn permit.</p>		
23	Gen.	<p>I live here in the valley, and to give you a bit of background, I'm board certified in family medicine and occupational medicine. I've been -- I don't actively practice clinical medicine currently, but I am an advocate and authorized representative for many LANL workers under the federal compensation program. In addition, I'm the founder of New Mexico Alliance of Nuclear Worker Advocates. I've worked with LANL folks on various levels, from top administration down to and including workers and community</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to</p>	Yes

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		<p>members in several counties over the last five years, and on issues such as open burning of toxic wastes at the lab.</p> <p>I'd like to make some informal comments regarding this process. I have experience with assisting folks who have become ill with cancers, lung diseases, and other illnesses that were a direct result of burning of toxic wastes, chemicals, heavy metals, and radioactive materials at the lab. In addition, I've done a lot of research on the Cerro Grande fire of 2000, of which we're all familiar. Some nearly 70,000 acres burned and 14 buildings on Los Alamos National Lab grounds burned, as well as hundreds of homes. There were firemen and others who assisted in that calamity, a cost equaling one million dollars back in 2000. I've seen some of the fallout of that in terms of illnesses.</p> <p>In addition, it was commonly -- it is commonly done, where various weapons testing called shots are fired, and many times results in fires on lab grounds, which have to be controlled urgently by the county fire department members and others. As a result of some of these open burns, there have been direct documented and proven illnesses as a result of that type of exposure, and I've seen that firsthand and have assisted in trying to help some of these folks via compensation through the federal government.</p> <p>So I feel I have some knowledge of the open burning process, and I understand that was discussed earlier. So I'd like my comments to go on record that I believe that it is important to consider a closed burn system for the lab, in order to reduce the incidence of toxic exposure not only to the workers but to the communities.</p>	Comments.	
24	Gen.	<p>I'm the lead organizer for the Embudo Valley Environmental Monitoring Group.</p> <p>One of the things I want to point out is the over 1,400 signatures that were collected about open burning at Los Alamos, and the petition is called "The Petition for Confined Burning at Los Alamos National Laboratory."</p> <p>It reads like this,</p> <p style="padding-left: 40px;">We, the undersigned, state:</p> <ol style="list-style-type: none"> 1. All people, plants and animals are intrinsically tied to the health of our air. 2. Historic and ongoing operations at Los Alamos National Laboratory threaten our cultural, spiritual, and ecological survival. 	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

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		<p>3. Our local, state and federal government agencies have a duty to protect the public health and welfare by setting and enforcing laws and regulation that protect our air.</p> <p>4. Healthy communities and ecosystems require clean, innovative and life-affirming science and technology that will benefit the economy, the future, and the health of all.</p> <p>5. We recognize and respect that air does not seek or uphold political, social, cultural, or economic boundaries.</p> <p>To ensure the good health of our air, we demand that in 2009, Los Alamos National Laboratory stop all open burning of hazardous waste and install confined burn facilities that will limit hazardous air emissions.</p> <p>We're not saying to transport materials off site. We're not asking Los Alamos National Laboratory to curtail any of the operations that they are doing. We're asking that a confined burn facility be installed at Los Alamos National Laboratory. We've been requesting this since 2005. Our nongovernmental organizations have done our own research and have come up with viable alternatives with international companies that can help Los Alamos National Laboratory confine burning to an area where it's not harming anything.</p> <p>I think we forget that we live in a network. I mean, we, as humans -- just because it only affects an earthworm or a deer mouse, it doesn't mean that it doesn't affect everything else around. We live in a network of biology, and any time one thing is affected, there is a ripple-out effect that affects everything. Everyone here is affected by the operations at Los Alamos National Laboratory. We're seeking to protect everyone here, our environment, and to protect our environment is to protect our future.</p> <p>I want to talk a little bit about -- or tell you a little bit about the process of collecting the signatures, because I think that that's something that everyone can really benefit by hearing about.</p> <p>You know, I said that we've collected over 1,400 signatures, and that's through the collective. Our organization has probably collected maybe 200, 250 signatures, and every one of those signatures goes with a story, and that's why we probably haven't collected as many signatures, but what we do is we go -- we sit in front of our local co-op in Dixon, which we have a local co-op for the afternoon, and we maybe collect five</p>		

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		<p>or ten signatures, but every single person wants to understand the impacts to them personally, because every single one of those people, either their family or their friends or somebody works at the lab, and, you know, we are 32 miles downwind, but, you know, we -- so many people work at the lab, and they are very concerned about their health.</p> <p>People -- people want to understand the relationship between their health and what's going on at the lab. And in talking with them, it really gives an opportunity for people to have a more intimate understanding and to see how much they are really affected by this work at the lab. And so far, I think after talking to many people, I don't -- I can't remember anybody who would not sign the petition to support a confined burn facility, and that's after talking to the people and explaining to them, you know, what it means to them, what it means to the environment.</p> <p>The people where I live are land based. You know, before they went to work at the lab, 65 years ago, everybody was farmers, and, you know, that goes back generations and generations and generations. And if you look at Los Alamos, it's like -- it was all ranching and farming up here, and there were indigenous people living up here, and they depended on the land. And so I think 65 years is a relatively short time in history that people have been diverted from -- from their own cultural activities, but in those 65 years, operations at the lab have had really severe impacts on people, and what we're really trying to do is limit the impacts to the people and to the land that they love.</p>		
25	Gen.	<p>I wanted to make three quick points. First of all, I wanted to take this opportunity to thank Representative Jeanette Wallace for supporting HB-45 -- or it was a memorial that we passed in 2009 asking our congressional leaders to support stimulus money for cleanup at Los Alamos, and we're grateful to you for that.</p> <p>Second of all, I want to clarify why the New Mexico Conference of Churches, which represents Protestants and Roman Catholics across the state, supports the NMED's decision to deny a permit for the open air burning. It is motivated by concern about LANL's track record on safety and health violations and the impact on surrounding communities. We do not support transporting the hazardous waste. We support contained burning.</p> <p>And then sort of off of that, I would like to congratulate our watchdog groups that are here today for obviously changing the minds of many people in this room who at one</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>time supported the transportation of hazardous waste, which CCNS and others opposed. We are hopeful that if we have changed your mind about transporting hazardous waste, we still have hope that we will change your mind about the dangers of open burning.</p>		
26	Gen.	<p>And I'm a Franciscan sister, and I work on concerns of water and climate change in -- in the State of New Mexico. And I'm very concerned about the health of the people of the state and of the earth. And that combined with -- my concern combined with the moral perspective that I carry, I'm very concerned about the future.</p> <p>And around this proposed permit, I think that responsible stewardship must include a variety of points. And I have a longer written piece that I'm going to give to you. But in regard to the hazardous waste permit for Los Alamos National Lab, I'm just going to speak particularly about the concern for the air. And I support the NMED's denial of LANL's permit application for open air burning of hazardous wastes.</p> <p>And I think that we live in an enlightened time, when we realize that there is no out there, and there is no -- you know, everything that we do affects everything else within our biological system, within our system of creation and also every other person. And so we are all connected, and air is one of those elements that connects us very intimately. We can't even be standing here or sitting here without air. We need that to -- to breathe. And I think that indigenous peoples, children, women and mystics have known all along the interconnectedness and the importance of ruah, or wind, the air. And St. Francis of Assisi says in his Canticle of Creation -- he has one comment about Brother Wind, and the air that is cloudy and serene in every kind of weather through which the wind gives sustenance to creatures.</p> <p>Now, I believe that if our air is polluted and there's hazardous wastes in the air, that there's no way that it's going to be giving sustenance. Instead it's causing more and more health problems. So that's my concern. So intentionally polluting and tainting the air does not offer sustenance, but rather increases the already existing health hazards of the people of New Mexico.</p> <p>LANL has been on notice for more than 21 years that the public does not want them to use our air for the disposal of hazardous wastes. And if DOE and LANL need to continue to burn hazardous wastes, there are alternatives, including confined burn facilities that are designed to capture those emissions. And so I believe that any permit that there might be would be for that and that that confined burn facilities needs to be</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		made possible before the permit is finalized, that that would be part of it, as an alternative to open -- open burning. And there must be limits as to the type and the amount of waste and the frequency of those burns in regard to that.		
27	Gen.	<p>One of the things that really grabbed me is the fact that LANL is saying that the Department of Defense really wants LANL to have this open burning. I have a nephew that is in a supply line and driving trucks in Afghanistan. So I assure you I am very, very concerned about his safety and the safety of all our young men and women and older men and women serving our country. But the study of improvised explosive devices, the IEDs, should not be at the expense of contaminating our air and contaminating our water.</p> <p>I am very concerned about open burning. We might get rid of some waste by the burning process, but we have contaminants. And I'm concerned about the forever contaminants that are coming into our lifeblood of the Rio Grande and contaminating our regional aquifers. If you don't think that's national security, what is? If we do not have clean water, drinkable water and clean air, that is national security, and, therefore, I am against the open burning because of the contaminants, and I ask that you really look very seriously at all the ramifications of all the toxic, radioactive, et cetera, waste at LANL. Before we go any further, get the stuff cleaned up. Then come back and see if we'll expand a permit.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
28	Gen.	<p>I'm a co-coordinator for Citizens for Alternatives to Radioactive Dumping, as well as a member of the organizations Protect Our Air and Water and Agua es Vida Action Team. Plus, my family has a farm downwind from Los Alamos, and that's where my oldest son, his wife, his three-year-old daughter live. My daughter-in-law's also pregnant, and they'll have another baby in September. I have a lot of concerns in regard to Los Alamos, but I'd like to speak especially to open burning.</p> <p>We all, I believe, accept -- the groups, independent community groups who work on Los Alamos, Los Alamos itself and the New Mexico Environment accept the fact that those who are downwind from Los Alamos have been contaminated, both with toxins and radionuclides. Just as an example of that, I was at this little meeting in Ojo Sarco a few years ago, after the Cerro Grande fire, with the New Mexico Environment Department and Los Alamos representatives and some citizens from Ojo Sarco. We were all in this</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

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		<p>tiny, little, old building. I guess it's a community building. And the wind was howling outside. I remember it was night. And they -- I remember Los Alamos saying, "Yes, there is americium in this broccoli here in Ojo Sarco, but it's below regulatory concern, because as we look at Americans, they only eat this much broccoli per week, and so they are only exposed this much and so on and so forth. And the people from Ojo Sarco were just amazed, because this -- this study doesn't take into account that when you live in the country, you eat whatever is ripe in your garden. So you don't eat like a 1.525 or whatever it is cups of broccoli per week. You eat broccoli and eggs in the morning and broccoli cheese pie in the evening and so on and so forth.</p> <p>So that's just a small example of how people in these rural areas do get contaminated, and there's really very little regulatory help for them. I mean, we found cobalt in the plumes in Dixon, and the next valley over there is radionuclides in the fuzz of the peaches and the apricots after the Los Alamos fire. And there's a lot of cesium at the borders of the Trampas Lake, which is the headwaters of the Embudo Valley, where my family lives, which is one of the breadbaskets of New Mexico. Lots of farms there, including a lot of organic farms. So we know that the people in the Embudo Valley, Penasco, Ojo Sarco, Picuris Pueblo, et cetera, Chimayo, are downwind from Los Alamos and that they've been contaminated in the past. And we know that when the prevailing wind blows, that they get whatever is coming off of the open burns at Los Alamos, also.</p> <p>Recently, I and my mother and my husband went to Mexico, and we were x-rayed, we were searched. And we have a boat so we were searched on the way in twice, and we were searched on the way out twice. But we accept that, because we understand it's a matter of national security, and we accept the inconvenience of it. But when it comes to sacrificing the health of my granddaughter, I will not accept that as a matter of national security. And I'd like you to know that I will fight this tooth and nail the rest of my life, as long as I live. To say that the government has a right to pollute a certain segment of the population due to national security is very backwards from my point of view, very backwards.</p> <p>So I just want to say that I'm very opposed to open burning at LANL, and I think that if LANL took the wise course, they would realize that this is really a PR nightmare for them, because we are teaching our children now about what is happening to them and</p>		

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		<p>what is happening at Los Alamos. So it isn't just going to be us speaking. These voices have -- are going to have a long run here. And I would ask Los Alamos to withdraw their intention to open -- continue open burning at Los Alamos.</p>		
29	Gen.	<p>I'm the coordinator of Agua es Vida Action Team, and I represent about 300 members of my group. And my comment is to support the New Mexico Environment Department in their intent to deny a permit for LANL to continue burning hazardous waste in the open air. And I'm very concerned about our groundwater, our surface water and our air. And I'd like to be on record to support the NMED.</p> <p>I'm wearing three hats today, one as a citizen, one as coordinator of Agua es Vida Action Team, or AVAT. It's a citizen watchdog group concerned regarding emerging contaminants in Albuquerque's tap water since our tap is now coming from the Rio Grande. And one hat as a physician assistant, PA.</p> <p>I've practiced medicine since 1974. As the coordinator of Agua es Vida Action Team, I have lab reports from the Albuquerque/Bernalillo water utility authority showing that in our tap water now we have plutonium, americium, radium, tritium and -- among other radionuclides and chemicals. The water authority believes that these toxins in the river are -- coming from Los Alamos, are in our tap. Since I live downriver and I'm environmentally sensitive and I'm -- and I've been concerned about public health issues, I'm very concerned about these chemicals in our tap.</p> <p>I'd like to see NMED be more timely and diligent and deny LANL the permit to continue burning hazardous waste in the open air. This is because LANL has been a blatant polluter of our air, water and earth. Fining LANL does not seem to be effective for their neglect of environmental stewardship. Denying the permit is one way to protect us.</p> <p>Wearing my personal and physician's assistant hats, I also support what Richard Moore said earlier today regarding environmental justice and the physical repository. Poor people cannot afford to move out of toxic environments or buy expensive air and water filters. In fact, none of us should have to buy these filters.</p> <p>As a health care provider, I am very concerned about public health. As you may know, there is an epidemic of cancer and diseases such as asthma and other immune system disorders. Real prevention of disease involves not producing these toxic chemicals in</p>	<p>Comment noted. See the Department's response regarding open burning, environmental justice, and the information repository in the document titled General Response to Comments.</p>	Yes

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		the first place. If they do exist, they need to be safely and carefully contained. The precautionary principle should be applied.		
30	Gen.	<p>And I would like to just speak from my heart for Albuquerque. It's a beautiful place. I thought I was coming back to this wonderful place where my ancestors have been from. I've been away from Albuquerque. Right now I'm very close to the center of the town, close to the Big I. And I've just been horrified at the facts I see about all of the hazardous materials in Albuquerque itself, and in the aquifers, what has been coming down to us. And, of course, our aquifers were supposed to take care of Albuquerque forever, but we know that they are already polluted. And we're -- it's a very sad thing to hear that the laws are not being followed in carefully monitoring that.</p> <p>I want to tell you of an experience I had coming back from Denver. I was going through the Jemez Mountains with a group of people, and I saw this huge, huge, huge, red glow in the mountain, over the mountain. And that was the open burning, which is very terrifying. So I ask you please to observe the laws, to monitor carefully, and not let up on the monitoring of the purity of our water and of our airs.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
31	Gen.	<p>I'm going to speak from my heart about what I'm concerned about as a school psychologist. I perhaps serve some of your children or grandchildren. And I'm concerned for their health.</p> <p>I know some of my colleagues have talked to me about increases in asthma, and certainly I work with children who have autism, and I do believe that LANL's waste that we receive here, that goes all over our state contributes to that. And I'm concerned about it.</p> <p>And I ask you to uphold and support the New Mexico Environment Department's intent to deny a permit to LANL unless they -- for the continued burning of hazardous waste. You know, there's lots of money in this country. I've worked for the government before. I've worked overseas and been close to the military. And I want to see some of that money here at home, taking care of our own. Make LANL purchase and install the equipment to protect our people, the people you represent, please.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p> <p>Regarding the suggestion that LANL's waste is causing an increase in the incidence of asthma, the Department has no evidence of this and if it did the Department would respond appropriately.</p>	Yes
32	Gen.	I arrived in New Mexico in 1974, a Nixon administration refugee from Washington, DC. I fell in love with the beauty of the people and the land here in New Mexico, but much too soon learned the dark side of the nuclear and military contempt for both. I was	Comment noted. See the Department's response regarding open burning, environmental	Yes

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		<p>just in time to begin again antinuclear work against, this time, WIPP and participated in several organizations at that time. I can only say that the damage to land, water and to health of the people became clearer and has, in my, I think, informed opinion, worsened the already bad air in Albuquerque, has become more toxic with time, and, of course, the burning, the open burning, and things we don't even know about. But you're knowledgeable about all of that.</p> <p>I was very saddened to learn in a recent hearing how the New Mexico Environment Department does not really know because the military doesn't have to tell what is burned and what is detonated. That was quite shocking. And I think as a "don't ask, don't tell" policy, that's one that's very important to get repealed. For the sake of the future generations, because it -- the possible contaminants are affecting certainly children. We know that from the statistics here in Albuquerque. And they're also affecting the fetuses, of course, right now, today. So it's our future.</p> <p>Many important points have already been covered, and with great clarity and, I think, eloquence, especially the environmental justice facts and concerns. And I certainly support the repository, because it's very hard for the citizens to track down the information, get access to what might be out there for us to find. I think that would be a great assistance.</p> <p>I lived and worked for 12 years on the Eastern Dine land, Eastern Agency Dine land, and was very moved by the legacy of uranium mining and coal processing.</p> <p>Birth defects and respiratory ailments were devastating, as well as the loss of the clean water. It's very hard to even conceive of the devastation to those families.</p> <p>I believe we deserve to do better, to take action against the accumulating effects to the soil, to the groundwater, and to the very life of New Mexico. The population perhaps can recover health very slowly if we stop. But the land and the water -- and I'm from a farming background -- that doesn't recover quickly, and may never. We know that there's no remediation for radionuclides in the water, at least that I know of that might make it useful again for using for food growing. And we're going to need our food.</p> <p>The many hearings demanded by an aware public are costing the taxpayers dollars. Lawsuits cost taxpayers dollars. Taxpayers cover most if not all the costs of the health effects of nuclear contamination in New Mexico. The salaries of the New Mexico</p>	<p>justice, the information repository, and groundwater in the document titled General Response to Comments.</p> <p>Regarding the Department not knowing what is burned and detonated, New Mexico's hazardous waste regulations require a permit applicant to describe in detail the chemical composition of wastes burned and detonated. Furthermore, the Department has on numerous occasions inspected LANL to ensure that the wastes burned and detonated are consistent with the Permittees application.</p> <p>Regarding the accumulating effects of multiple sources of contamination, the Department's risk evaluation process strives to protect both humans and the environment from the cumulative effect of multiple contaminates</p>	

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		<p>Environment Department are taxpayer money. And the resources and the time that goes into citizens trying to find out the truth and do something about it is really a great drain on time and our resources, also.</p> <p>Would New Mexico be getting more and more nuclear-related installations if regulations were really being enforced and compliance demanded? If compliance is not demanded or demonstrated in a timely and competent way, then the public is put increasingly at risk, including -- excuse me -- including, as I said, future generations. And I know that everybody in this room knows how much more nuclear has come in, and is coming, is on its way. So we need our Environment Department to really protect us. And that will keep some of this, I think, from rolling in here. I know it's a political decision. I know all of that stuff. But we have to really stand up.</p> <p>I also think the precautionary principles should be in place. I'm sure all of you are familiar with this public policy, because it's been used for many years in many countries. I have repeatedly heard today that the New Mexico Environment Department has no confidence in the direction of the groundwater flow or that there is no data to assure accurate statements that monitoring wells -- I think maybe the labs have perfected the art of placing monitor wells -- monitoring wells where they don't get the right data. I can't think anything else at this point.</p> <p>But this is not a facetious thing, because if we get a permit -- and I strongly resent -- I strongly suggest denying the permit, but if we should get a permit that would be granted after meaningless delay and that -- and a lot more damage, and then if that permit turns out to be much less than what we really need, then we're really in a bad shape. And that's what I'm concerned about. We need to protect the public from, you know, what is in that open burning. And let's stop that. If we don't know what's in it, let's stop it. If we don't know about what's in those detonations, well, stop them. Make something else happen.</p> <p>And for the -- they have to be held responsible for the accuracy of what's in landfills and what's in dumps. And -- I don't know. I think more courageous action must be taken. Deny the permits, let the public know. And I have certainly -- I know that careers and pensions and all of that sometimes get in the way. Having been in a bureaucracy in Washington for a few years, I know some things about how those things work.</p> <p>But the public, I think, is really ready to stand behind decisions that help us protect us</p>	<p>associated with both waste management and remedial actions.</p> <p>Regarding new industries coming to New Mexico, particularly nuclear-related installation, the subject is beyond the scope of the Renewal Permit. However, it is important to note that the Department has a competent enforcement program enforcing the State's environmental regulations and permits.</p>	

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		and take back our future. So that's my statement for today. And I know this kind of a statement isn't considered proper public comment, and usually doesn't get included as such, because it's very personal, it's not full of the facts and figures, but I think there's been a very adequate job done today of presenting that.		
33	Gen.	What I want to do today is read into the record the receipts for signatures that we've collected so that we make sure that they get into the administrative record for this hearing. But the first thing I want to do is, with great pleasure, I want to show you, these are 400 – or 749 signature cards that we collected in 2005. [This illustrates] that this is not the first time we have come before NMED and LANL asking that they research alternatives to open burning, because our communities are tired of being exposed to the contamination coming into our downwind communities, and I just really -- I want everybody to know that we've been working on this for half a decade, there are millions of dollars of resources probably that have gone into the opposition for a confined burn facility, and I really want this in the record that we have 1,400 signatures that we collected in the fall, we have 750 that we collected in 2005, and we have an additional 200 that we're adding today to the record that are – that are asking for a confined burn facility and requesting a public information repository.	Comment noted. See the Department's response regarding open burning and the information repository in the document titled General Response to Comments.	Yes
34	Gen.	<p>I also represent La Comunidad, a group of -- of other residents from Penasco who couldn't be here, but I'm speaking for them, as well. Several years ago, the accumulated dust in my home tested too high in strontium-90. This could only have come from emissions from Los Alamos Lab. I live in Llano, approximately 40 miles directly downwind from the lab. I live a healthy lifestyle, which involves growing a garden, working and walking outside and hiking in the mountains.</p> <p>My yearly spiritual pilgrimage is to the top of Jicarita, much as others walk to the santuario. Studies have shown even higher levels of radiation in the soil at about 11,000 feet, obviously, where the air comes directly over from LANL and then collects and settles into our valleys below. No longer can I hike in the mountains with the same sense of health and peace as I had before I knew the dangers.</p> <p>I have been -- I have just been diagnosed with breast cancer, and I join the growing number of cancer cases among my friends and neighbors in the Penasco area. Surely, the incidents are too high, and while we may not be able to prove that they are caused by</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p> <p>Regarding high strontium-90 levels measured in dust in communities surrounding LANL, the Department has no regulatory authority over radionuclides. Furthermore, the Department has no evidence that radionuclides</p>	Yes

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		<p>emissions from the lab, we all know that this is a large contributing factor.</p> <p>Furans and dioxins are part of the emissions from the open air burning and are endocrine disruptors that interfere with our hormonal systems. Long-term low-level exposure impairs the immune system and accumulates in the fatty tissues, particularly breast tissues in women. Like PCBs, they are complex chlorines.</p> <p>I came to Llano because it was beautiful, agricultural and rural. I did not at first know the invisible dangers of our westward neighbor, so close as the crows fly. It is my home, and I am not going to move. And while I have been there only 40 years, my neighbors and friends' families have lived there for 400 or 4,000 years. We are unwilling victims of a system that is dangerous and irresponsible.</p> <p>Open air burning should not be allowed to continue. Hazardous work and hazardous waste should not be allowed unless it can be contained onsite, which, of course, it can't. We all share air and water, our most precious resource. If LANL and the government choose to emit toxins into the air and water, then they need to be responsible and willing or required to test the gardens, herbs and fruits that we raise and use to support our health. And they need to give health insurance to all downwinders within a 50-mile radius.</p> <p>In my treatment, I just filled in a risk assessment survey, and one of the questions that added significant risk was living within 50 miles of a nuclear waste site. We have suffered contamination for way too long. I have requested comprehensive health studies from all the clinics and doctors to determine how high and widespread are breast cancers, thyroid problems, brain tumors and other diseases that are the result of work at the lab, touted as being for our national security.</p> <p>Instead of making us secure, the lab has made the world a much more dangerous place. Our innocent farmlands are just part of the casualties. The oil spill in the Gulf and other current events should show us that our technologies are out of control and on the wrong path. If we have not figured out how to deal with the waste, accidents, et cetera, then we should not be creating it. In the case of oil, at least we are partly responsible for our greed to use massive energy in our everyday lives, to drive and consume.</p> <p>If all the radioactive emissions at the lab were from work with nuclear medicine, it might be a risk that we should have to bear. It is unconscionable that we are being</p>	<p>exist in the hazardous wastes that in the past have undergone open burning.</p> <p>Regarding comprehensive health studies, the comment is noted however such studies are beyond the scope of the Renewal Permit.</p>	

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		<p>poisoned because of the development of weapons of mass destruction, something that at this point in history should be banned, and, I believe, are internationally.</p> <p>The NMED is supposed to protect our environment, not work with the labs to dilute safety standards and cover up laxity with technical jargon and bureaucratic red tape. We need to return to common sense and work for the common good of humanity before it is too late. It is time to listen to native elders and bring them to the table in decision making, to chart a course that may allow future generations to survive.</p> <p>LANL and the government and all the decision-makers, you included, are acting like petulant children, playing with toys with no regard to the consequences of its actions. If decision-making was conducted with a circle of native elders and women involved, much like families used to do around the dinner table, we would look to long-term consequences and responsible action as part of the process. It is time that we grow up.</p>	<p>Regarding diluted safety standards and a cover up using technical jargon and bureaucratic red tape, the Department is unaware of any safety standards that have been ignored and has striven to communicate clearly and comprehensively with the public.</p>	
35	Gen.	<p>First, I went to your website to see what was there. It seems like an intentional obfuscation of information, or at least that is the impact. I'm guessing that most visitors to the site would be the feel overwhelmed by sheer volume and possibly give up providing any opinion or response.</p> <p>So I'm just going to tell you my lay person's opinion without referring to all that overwhelming data online:</p> <ol style="list-style-type: none"> 1. Proposed hazardous waste facility for LANL: <ol style="list-style-type: none"> a. I would only be in favor of this if there were safe storage and/or disposal of hazardous waste. Not the way it is now; not in shallow unlined pits and not in deep shafts. b. If burning is allowed, only in an incinerator with a filter to keep particles out of the air. c. Transuranic waste should be taken to a more secure site. <p>Intent to deny permit for open burn units – Yes, I agree. No permit for open burn.</p> <p>Closure plans for open burn units – Yes, close the open burn units now operating illegally.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p> <p>Regarding the Bureau's web site, the Bureau places documents on the site considering the relevance of those documents and public requests. Furthermore, the site contains only a small fraction of the approximately 20,000 documents in the Bureau's LANL Administrative Record.</p>	Yes
36	Gen.	James K. Baird, Jr. - I wish to speak out in opposition to awarding Los Alamos National	Comment noted. See the	Yes

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		<p>Labs a waste permit for the open air burning of dangerous wastes and the continued systematic spoilage of our land, water, and air in this ancient and beautiful land.</p> <p>For 17 years I worked with the Ghost Ranch National Conference Center. From 2000 through 2009 I served as the Director of Program and was charged with planning and staffing more than 300 educational programs each year. Before Ghost Ranch was given to the church it was owned by Arthur and Phoebe Pack. Arthur was an environmentalist who helped repopulate the high desert with several species of animals and who worked tirelessly for clean air and water. During the early 1940s, families would arrive from the "mountain" (Los Alamos) to stay at the dude ranch, and it was only after the war that Arthur discovered that during that time the Lab was conducting dangerous tests on what would later be called the atom bomb. Therefore, when Arthur Pack made a gift of his beloved Ranch, he also gave a mission: this land must be a land of peace and justice, not war and destruction. This land is God's creation and we must be its stewards not its destroyers.</p> <p>That was the mission under which I made programming decisions. It was my privilege to work with our neighbors including TEWA Women United. Through this dedicated group of native women, I discovered the extent of the tragic history of waste from the "mountain"; the contamination of the waters that has killed the fish, created unsafe drinking water; spoiled the canyons, and made inaccessible the ancient, sacred places.</p> <p>As I learned more about the Los Alamos legacy, I discovered that Arthur Pack was only beginning to see that legacy. He witnessed the immediate destruction caused by the powerful bombs that destroyed Hiroshima and Nagasaki. He did not live long enough to see the long term destruction, every bit as powerful and destructive as the ball of fire over a city - the slow and insidious destruction by contamination of our land, water, and air.</p> <p>Approximately 21,000,000 cubic feet of hazardous, mixed hazardous, and radioactive waste generated from nuclear weapons production has been buried at LANL legacy waste dumps all across the Los Alamos mesas. Now a permit is being sought to continue open burning that has been proven to release dioxins into the air.</p> <p>Although New Mexico citizens continued to call for LANL to cease using our air and our water to dispose of these dangerous chemicals, their voices have gone unheeded by an agency that continues to act with impunity and privilege. The time to stop this</p>	<p>Department's response regarding open burning in the document titled General Response to Comments.</p>	

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		<p>process is now.</p> <p>As an organization representing more than 600,000 Citizen Christians in this State, it is often called upon to voice the concerns and the needs of the voiceless. In this case many voices (beginning with those of our Native American sisters and brothers) have been raised eloquently through the years. What is missing is the will to act -- to step forward as a State and not permit these activities to continue. I urge you to deny LANL's permit applications, and to strongly monitor their future activities.</p>		
37	Gen.	<p>Please approve the requested permit for open burning of wastes from the ongoing national security research program. Los Alamos National Lab has been tasked to do the mission related with EIDs and it is time-critical. Please do not cause delays in the research by denying the permit.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
38	Gen.	<p>Thank you for the opportunity to comment on the NMED notice of intent to deny a portion of the LANL open burning permit application. As a United States citizen and New Mexico resident, I fully support the scientific and technical programs, which the Los Alamos National Laboratory performs for the <i>NNSA/DOE</i> in support of our mutual national safety and security. I further applaud those efforts undertaken jointly by NNSA/DOE, NMED, and LANL to ensure continued program activities in a manner that protects New Mexico residents and our beautiful environment.</p> <p>I object to the proposed denial of the open burning portion of the LANL permit and encourage NMED to continue its important efforts with NNSA/DOE/LANL to clarify the uncertainty associated with the ecological risk estimate. NMED should do this in the short term by renewing the LANL interim permit status in concert and in cooperation with NNSA/DOE/LANL technical efforts to improve the effectiveness of the open burning process, as well as by managing and reducing, where possible, the applicable waste streams. In the long term, each party in the permitting process shares responsibility for outcomes that are mutually beneficial to all New Mexicans and service to the nation.</p> <p>There is one item of interest for which I was unable to find an answer. The nature of the LANL open burn process is controlled with respect to parameters such as operating temperature, visible plume, treatment of residual ash, process knowledge of open burn</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p> <p>Regarding other agencies in New Mexico performing activities using significant quantities of</p>	Yes

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		<p>waste constituents, site monitoring, and its relatively isolated location. Other agencies in New Mexico, both federal and state, perform activities using significant quantities of energetic materials under far less controlled conditions.</p> <p>Question: Given the level of concern for open burn risk assessment and permitting, why does LANL appear to be the only agency posted on the NMED permitting website?</p> <p>With respect to the Notice:</p> <p>The Department conclusions are not supported by the facts presented in the Notice. Given the contents of the Notice, a decision to deny open burning of non-radioactive wastes is unnecessarily restrictive to LANL non-nuclear programs. Among other impacts, such a decision will disrupt or deny the ability to provide crucial technical skills to members of the Armed Forces engaged in operations to detect, interdict, and disarm roadside bombs and improvised explosive devices (IEDs). These devices are responsible for a significant fraction of American service member casualties and devastating injuries in Iraq and Afghanistan. Further, such technical skills are also desirable for U.S. law enforcement and emergency response agencies. A decision to deny open burning also stands to increase certain occupational risks associated with transportation as well as public proximity to the vehicles needed to perform those activities.</p> <p>The Notice states in part that the "Department has determined that it is required to deny the permit applied for as to Open Burning (OB) treatment operations at TA-16." However, the subsequent narrative fails to clarify the nature of the <i>requirement</i> underlying the basis for denial. The Department should make fully clear to all New Mexicans the regulatory foundation that supports such decision-making processes.</p> <p>The NMED evaluation of the LANL risk assessment documents lacks clarity with respect to the "potential for actual risk" and "what level of risk is deemed acceptable." Like the regulatory foundation discussed above, these items should be fully clarified in order to ensure that all of our citizens are fully informed open government participants.</p> <p>I offer comments with respect to the three items, which appear to constitute the basis for the Department's conclusions to deny:</p> <p><u>Uncertainty.</u> The Department clearly agrees with the LANL risk assessment regarding human risk. As a result, the residual issue appears to center largely on <i>uncertainty</i> of</p>	<p>energetic materials under far less controlled conditions, the Department's duty in association with the Renewal Permit it to address the open burning of hazardous waste and the LANL sites are the only sites in New Mexico performing this process. The other activities referenced by the commenter are subject to municipalities' or New Mexico's environmental regulations, principally New Mexico's Air Quality Regulations.</p>	

No.	Loc.	Comment	NMED Response	Δ
		<p>the LANL risk estimate to the deer mouse at the same time that the Notice characterizes the risk estimate as "elevated risk (low) to the deer mouse based on the use of NOAEL based TRVs " .. " The deer mouse carries the sin nombre virus (hantavirus), which is responsible each year for illness and death to residents of New Mexico and the Four Corners area in general. NMED is encouraged to continue working with the Permittees to ensure that the risk to this population is acceptable with respect to the benefit of continued LANL programmatic activities.</p> <p><u>Public Opposition.</u> The Notice also acknowledges public opposition to LANL open burning operations, and echoes concerns regarding "the health risks to wildlife, public health, and the environment" as well as being " ... particularly objectionable to persons with allergies or other sensitivities to airborne pollutants." The role of public opposition in the Department's intent to deny is puzzling given the NMED evaluation that " ... additional analysis of human health risk was not required." NMED is encouraged to ensure that all New Mexicans are fully informed not only of their right to participate in the permitting process, but the extent to which the weight of that input affects the outcome of the agency decision.</p> <p><u>Alternatives.</u> Finally, the Department states its "belief that there may be preferable and viable alternatives to burning the HE waste." This statement carries a great deal of uncertainty itself, and is not substantiated by the contents of the Notice. Under the circumstances, and considering the long timeframe in which this interim permit process has taken place, it is rational to proceed with disposal processes that work reasonably well, reduce risk to humans, and for which the nature of the risk estimate disagreement is at the extreme end of the scientific evaluation process.</p>		
39	Gen.	<p>I would like to make my voice heard regarding the hazardous waste permit that is being threatened. I believe in the open burning policy regarding hazardous waste. I feel that burning this waste that would otherwise be transported and stored in drums is the best and most efficient way of getting rid of the waste. Not only does burning this waste have no human health risk, I would rather it be completely wasted (by burning it) than stored in drums across New Mexico. There is more risk in transporting the waste across New Mexico than burning it. By burning it, there is no evidence that it existed and therefore does not pose a risk to society. Also, burning it is less risk than burning a fire in a stove in our household. I would rather the burning of the waste take place in a</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		controlled environment that is meant to do just that thing-burn hazardous wastes.		
40	Gen.	<p>I support the Los Alamos National Laboratory hazardous waste permit application. LANL's work with US Service men and woman providing training in improvised explosive device detection and recognition is saving lives today. In addition, work with the Department of Homeland Security is critical to the defense of the nation. LANL must be able to dispose of high explosive waste in the safest and most environmentally friendly way. This is gas fired open burning of explosive residue.</p> <p>Furthermore, transporting these waste or excess materials through my neighborhood and on the public roads raises other hazards that can easily be handled on the LANL property.</p> <p>I support the LANL Hazardous Waste Facility Permit application for disposal of explosive waste and residue! I vote and will exercise my right and obligation.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
41	Gen.	<p>I just read that NMED will probably deny permission for LANL to use open burning to dispose of high explosives waste or items containing residue from that waste.</p> <p>Since DOT forbids moving that waste on public roads, what is the alternative to open burning?</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
42	Gen.	Please reconsider renewing the hazardous waste permit so New Mexicans do not have to deal with it later at taxpayer's expense. Open burning in remote Lab locations has been proven a safe way to destroy it in the past and nothing has changed. Important national security work now conducted at LANL may be sacrificed and in this time of terrorism threats, that would be a mistake. The Lab provides unique training and other services to our fighting armed forces that should not be jeopardized by limiting its ability to conduct such work because of waste reduction procedures that will end up having the waste transported to other locations on our public highways.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
43	Gen.	<p>I am writing as a citizen of New Mexico and a resident of Los Alamos to express my opposition to the draft Los Alamos National Laboratory (LANL) Hazardous Waste Permit Renewal released earlier this month by the New Mexico Environment Department (NMED) that will prevent LANL from open burning of high explosive (HE) waste that do NOT come from nuclear weapons manufacturing.</p> <p>This decision by the NMED must be reversed because: 1) Burning HE and HE-</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>containing items in a controlled, remote part of LANL is far safer than requiring additional handling and shipping of these materials to another site. In fact, it creates a new more dangerous problem: the transport of potentially unstable explosive waste on public roads which is prohibited by the U.S. Department of Transportation regulations.</p> <p>2) Obviously a small amount of air pollution and combustion residues are created, but these are insignificant in my opinion and should poses no significant danger to the public, LANL workers, or the environment.</p> <p>3) This decision would prevent or curtail most important defense and national security missions involving HE, such as research into weapons and munitions, counter-terrorism, explosives detection, and improvised explosive device counter-measures.</p> <p>4) This method of waste disposal is not new and has been safely used for many years in accordance with applicable regulatory requirements.</p> <p>I am currently an employee of LANL and I have many years of experience researching the mechanical properties high explosives; however I am expressing my own views and I am NOT representing the Laboratory.</p> <p>In summary, explosive residues are too dangerous to transport and are far safer to burn onsite. A simple consideration of environmental risks compared to the benefits to national security is clear in this approach.</p>		
44	Gen.	<p>I am very concerned about the unintended consequences of denying the Los Alamos National Laboratory (LANL) the permit to dispose of explosives by open burning. This decision will do <i>no</i> significant good for New Mexico but <i>will</i> do significant harm to this Nation.</p> <p>LANL has been protecting the Nation from potential harm for more than 60 years. The potential harm originally came from the external forces of the German Third Reich and the Japanese military but now our Nation is threatened by terrorist elements both overseas and at home. The Laboratory employs some of the finest minds in the world to do cutting edge research to defeat those terrorist threats. It is no exaggeration to say that the denial of an open burning permit will bring that <i>vital</i> research to a halt. This will be a serious loss for our Nation and it will put our Nation at risk.</p> <p>As an example, part of the LANL research is to acquire or replicate dangerous and</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>unstable terrorist explosives. (Yes, all explosives are potentially dangerous, but explosives made by NATO forces for example are safe to ship and handle until correctly initiated.) These terrorist explosives are tested to determine how dangerous they are and how they may be rendered harmless. In other words, the Laboratory determines how to protect our troops in the field from these explosives. The problem is that after these explosives have been tested they may not have detonated and must be <i>safely</i> disposed of.</p> <p>The <i>only</i> safe way to dispose of unstable explosives is to use the open burning process. The laboratory cannot and should not ship them out. This is because: shipment requires a permit from the Federal Department of Transportation (DOT), as these explosives are unsafe and unstable the DOT will rightly not grant permission to ship them on public roads to other sites; the explosives are unsafe to handle, packaging them for shipment puts LANL workers at risk. If the Laboratory cannot safely dispose of these explosives then the only responsible recourse is to stop performing research on them.</p> <p>It is not well known by the public that explosive emissions from open burning are relatively harmless and their volume is a tiny fraction compared to other sources. Explosives are CHNO molecules, in other words hydrocarbons, much the same as gasoline. In fact, pound for pound there is more energy and waste in gasoline than there is an explosive. I take good care of my car and I am pleased to say it gets 33 miles to the gallon. As I drive 25,000 miles a year I consume 758 gallons or over 2 tons of gasoline a year. <i>So, my car probably produces more waste than that produced by all the open explosive burning done each year at LANL.</i> Of course, there are hundreds of thousands of vehicles in the state of New Mexico producing comparable or more waste than mine. Clearly, if you took one of those vehicles off the road you would not notice the difference in pollution.</p> <p>No one New Mexico can possibly notice the improvement to the environment if the permit for open burn of explosives is denied. <i>The whole Nation will notice if the Laboratory cannot protect it!</i></p> <p>I strongly urge the New Mexico Environment Department to reconsider the denial of a permit to dispose of explosives by open burning and let the Los Alamos National Laboratory do s job.</p>		

No.	Loc.	Comment	NMED Response	Δ
45	Gen.	<p>It has come to my attention that NMED has denied LANL's permit to treat experimental High Explosives on laboratory property and has opted instead to require that LANL ship these wastes untreated over the New Mexico public highways to off-site disposal facilities.</p> <p>If this is true, can I ask why? It seems unreasonable when LANL engineering personnel have been burning the waste on-site, rendering it inert in a remote area of New Mexico under controlled conditions with documented air monitoring that shows no ill effect to the environment or community of Los Alamos county.</p> <p>What is the rationale for deciding now to put unstable, experimental explosives on the public highways where they are at risk of being involved in traffic accidents or spills?</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
46	Gen.	<p>I ask that your team please reconsider your proposed ban on burning high-explosive residues associated with LANL counter-terrorism work. To the best of my knowledge, the real risk that this poses is insignificant, while getting in the way of anti-terrorism work is clearly not in the state's or the nation's best interests. The real risks associated with transporting HE ... well, now you're talking real dangers!</p> <p>Your comments or, better, your concurrence would be most appreciated.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
47	Gen.	<p>I am I favor of keeping the open burn permit at the Los Alamos National Laboratory.</p> <p>Existence of the open burn ground facilities allow us to provide critical, cost effective, and timely support to the nation in reducing injuries to our servicemen through the understanding of the homemade explosives encountered. Existence of the open burn ground facilities also allows us to provide critical and cost effective support the war on terror.</p> <p>Please reconsider the intent to deny the open burn t at Los Alamos.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
48	Gen.	<p>I write to you today as a citizen of Los Alamos County. I am employed at the Los Alamos National Laboratory; however, my main interest in this communication is as a nearby resident of LANL.</p> <p>I understand that the NMED desires under the current renewal of LANL's hazardous waste permit for the storage and treatment of waste to exclude the burning of high explosive waste on site. As you know, with LANL being a weapons laboratory the ability to handle high explosives, before and after testing, is integral to its operation.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>The high explosive wastes currently generated cannot be shipped off site per U.S. Dept. of Transportation regulations, by my understanding. This would leave LANL in a position to either store these wastes long term, awaiting a solution, or to stop testing activities that generate high explosive wastes. Neither alternative is beneficial to the immediate community, or the United States.</p> <p>LANL, like any other large industrial installation, has had its share of environmental problems to deal with. I, as a citizen in a nearby community, have enough confidence in LANL and NNSA officials to maintain an environmental program that is reasonably safe for the general public. If I did not believe that sincerely, I would not have my family living approximately two miles, straight aerial distance, from LANL's TA-54 site.</p> <p>LANL needs to maintain its ability to treat on site its high explosive wastes.</p>		
49	Gen.	<p>I disagrees with the decision to remove open burning from the Los Alamos National Laboratory (LANL) draft hazardous waste renewal permit.</p> <p>Burning in LANL's secure, controlled, remote setting is far safer than transporting the material on public roadways to another facility. In fact, the U. S. Department of Transportation prohibits the transport of potentially unstable explosive waste on public roads.</p> <p>Without open burning, this "orphaned" waste remains dangerous with no proper disposition path. Years of publicly available, air monitoring data show that LANL's burning poses no risk to human health. Open burning is primarily done with high temperature propane burners, which produce no visible or harmful plume of smoke.</p> <p>Please consider changing this proposed policy.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
50	Gen.	Support LANL Waste Permit at Explosives Site. Much better to burn in place than to transport through neighborhoods! Stop the foolishness, grant the permit.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
51	Gen.	Los Alamos National Laboratory's work for the nation's security generates waste materials and items that must be disposed safely. These include high explosives (HE) or	Comment noted. See the Department's response regarding	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>items containing HE residue. For years they have been safely treated by open burning in remote laboratory locations in accordance with applicable regulatory requirements.</p> <p>Some 75 percent of this waste currently comes from research in counterterrorism, explosives detection, and improvised explosive device countermeasures. The remainder comes from stockpile research or from the decommissioning and demolition of buildings where explosive residues are too dangerous to transport. None of the HE waste treated by open burning at Los Alamos comes from the manufacture of nuclear weapons.</p> <p>Burning in the Laboratory's secure, controlled, remote setting is far safer than transporting the material on public roadways to another facility. In fact, the U.S. Department of Transportation prohibits the transport of potentially unstable explosive waste on public roads.</p> <p>Without open burning, this "orphaned" waste would remain dangerous and have no proper disposition path. Years of publicly available air monitoring data show that the Laboratory's burning poses no risk to human health. Open burning is primarily done with high-temperature propane burners, which produce no visible or harmful plume of smoke.</p> <p>I respectfully disagree with the decision to remove open burning from the draft hazardous waste renewal permit. Vital national security work would be sacrificed with no appreciable benefits to human health or the environment.</p>	open burning in the document titled General Response to Comments.	
52	Gen.	As a citizen of New Mexico I am appalled at your department's decision not to permit open burning of hazardous materials at Los Alamos National Laboratory. Our government (including the state government) has the responsibility of keeping their citizens safe from acts of terrorism and maintaining our national security. By your failure to permit burning hazardous materials you have put Los Alamos National Laboratories ability to help maintain our national security at risk. You, like all the other liberals in this nation, are destroying our society. I strongly oppose your action and will do everything I can to see that you are removed as department head.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
53	Gen.	<p>As a private citizen of Los Alamos County, I am writing in support of a Burn Permit for Open Burning at the Los Alamos National Laboratory for the following reasons:</p> <ul style="list-style-type: none"> • Burning is safer than transporting the unstable material on public roads for 	Comment noted. See the Department's response regarding open burning in the document	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>treatment elsewhere,</p> <ul style="list-style-type: none"> • Without a proper disposal path, the counter-terrorism and national security research (i.e. improved explosive device (IED) countermeasures, explosives detection, methods to defeat buried mines or other explosives), cannot continue, • None of this waste comes from manufacture of nuclear weapons, and • Years of publicly available data show that the burning poses no human health risk and emits no harmful plume and is rarely even visible. <p>While I respect that some citizens are concerned about risk to the public and environment, the above information serves as a reminder to all of us that this hazardous waste permit not only protects the people and the environment, it also supports the national security missions for our great State and Nation.</p>	titled General Response to Comments.	
54	Gen.	<p>I've become aware that the state intends to deny the open-burn portion of LANL's RCRA permit. As a citizen (Santa Fe County resident) and taxpayer, this is difficult to understand, since:</p> <ul style="list-style-type: none"> • disposal of explosives wastes is necessary to continue important homeland security research on explosives detection and strategies, such as IED countermeasures, that can help protect US troops; • the state acknowledges that open burning poses no public health hazard; • on-site burning presents minimal hazard to the trained personnel responsible for it; • transport of waste on public roads to an offsite disposal location is more hazardous than burning at LANL; and • the explosives wastes in question are not related to nuclear weapons programs. <p>It's disappointing that the state appears to be motivated by political rather than technical factors in this case. Please reconsider.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
55	Gen.	I was dismayed to hear that the current draft of the NMED hazardous waste permit seeks to exclude open burning of LANL's energetic materials. As you are aware, LANL burns explosive debris or residue at only a few remote Laboratory locations. Years of data	Comment noted. See the Department's response regarding open burning in the document	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>collected during the burning has consistently shown that the activity poses no human health risks and emits no hazardous waste. The plume itself is rarely visible.</p> <p>The other alternative to disposing of explosives debris is transporting the material on public roads for disposal elsewhere. This seems fundamentally wrong to me for three reasons. First, it exposes the public unnecessarily to detonation or contamination hazards in the event of a crash. The statistical likelihood of an event happening on this country's congested roads would seem to be far greater than the potential to endanger the public through the current method of disposal. Second, the risk for explosive material being diverted into the wrong hands increases whenever it is shipped for treatment off-site rather than being maintained and treated within the Lab's secure boundaries. And third, shifting the burden of disposal to another site only transfers the arguments against open burning at LANL to another physical space whose citizens may hold similar beliefs. In other words, the "problem" doesn't go away; it just becomes someone else's "problem".</p> <p>Los Alamos National Laboratory has always played a critical role in this nation's national security and, in recent years, in counter-terrorism which may now be our biggest threat. Much of the research done at LANL requires the use of explosive material to understand and defeat explosive threats. If the Laboratory cannot continue to burn its explosive residue, mission-critical capabilities could be lost.</p> <p>It seems to me that the people who support the removal of the open burn permit do not have a comprehensive understanding of exactly what they are supporting. As is often the case, people take this opportunity of voice their opinion against LANL without truly understanding the ramification of their decisions.</p> <p>Please allow the Laboratory to continue open burning of explosive material.</p>	<p>titled General Response to Comments.</p>	
56	Gen.	<p>I understand that you are objecting to LANL's use of the time-honored technique of open burning to dispose of explosives.</p> <p>What better way is there? If you heap them in a pile and detonate them, you get only partial removal as bits are blown away without being burned or detonated.</p> <p>Your logic would also require you to ban fireworks, firearms, ordnance disposal, and strip mining.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		I do not represent LANL, I am only a taxpayer that is disgusted with the petty way the NM Environment Department treats LANL on every issue. This again smacks of "the revenge of the C student" mentality so often displayed by your department.		
57	Gen.	<p>It is my understanding that a series of hearings is scheduled starting April 5 to discuss the hazardous waste permit for Los Alamos National Laboratory and that are gathering public comments prior to those hearing. It is also my understanding that a portion of that permit pertaining to "Open Burn" is quite contentious. While I don't claim to be an environmental specialist, I do know about the Lab's work that is dependent upon that permit and believe there is a misconception about that work. I believe many oppose the Open Burn permit because they believe it is a way to oppose nuclear weapons. Actually, loss of the Open Burn permit would not impact the nuclear weapons program at Los Alamos. The impact would be to shut down work done to understand improvised explosives devices-both the kinds used against troops in Iraq and Afghanistan and the kinds used to bring down commercial airliners. If that work is stopped at the Lab it could likely cost the lives of American and allied troops and may even result in terrorists successfully bringing down an aircraft and killing the passengers.</p> <p>I realize that the NMED has a vital responsibility to protect the environment of this state. But I also believe it is important that NMED fully understand the implications of preventing LANL from evaluating the types of explosives that terrorists are trying to use against our military and our population here in the U.S. I hope you'll find a way to allow the Lab to continue this vital work, partly because of the importance to our country, but also partly because I fly commercially a few times per month.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
58	Gen.	<p>I am writing in support of retention of open burn as a part of the LANL hazardous waste permit.</p> <p>It is difficult to overstate the importance to national security the research conducted by LANL on explosives and propellants. These efforts have direct and important impacts on homeland security, aviation security, terrorism prevention and response, military effectiveness and safety, and nuclear weapons policy. Such work has been a core competency of the laboratory's mission since its inception.</p> <p>This research simply could not take place without a means to dispose of scrap and excess materials. Open burn procedures are by far the safest, most environmentally</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>responsible method to dispose of this waste.</p> <p>Weighing the enormous benefits against any risk, real or perceived, it would be a serious mistake to discontinue this operation by removing open burn operations from the new hazardous waste permit.</p>		
59	Gen.	<p>I'm writing in regards to the Los Alamos National Laboratory RCRA permit, specifically the NMED's proposal to disallow open burning. The main reason according to the fact sheet on your website is due to eco-risk modeling that showed elevated risk to earthworms and deer mice.</p> <p>There are Mexican spotted owls that are federally protected nearby, and they are not at risk, but you're prepared to stop millions of dollars of money coming into New Mexico and cause the loss of possibly hundreds of well paid positions over two species that have no legal protections? The deer mouse and the earthworm are ubiquitous across the landscape from coast to coast here in the USA. Hundreds, possibly thousands of deer mice are routinely trapped annually by LANL pest control in buildings around the site. The deer mouse is also the primary carrier of the "sin nombre" virus which causes hantavirus in humans, a lethal zoonotic disease.</p> <p>Why would you choose to disallow this permit for protecting a non-listed species that is certainly not in trouble? I am a strong environmentalist and I work in the field of ecology and I think the NMED is picking the wrong fight. You are hurting the New Mexico economy for the wrong reason. I am asking that you allow the open burning to continue and choose more important fights.</p> <p>If you are looking for a bigger bang for your buck with protecting New Mexico, why don't you travel along the Rio Grande in Espanola and look at all of the businesses with various waste streams right into the river itself or into its floodplain where there are various federally protected species being impacted, not to mention the water supply for our citizens. Or better yet, why don't you drive around southeastern New Mexico and see how many of the thousands of oil wells are leaking and not up to standards? I have been there and the numbers are staggering. Have you ever been to Loco Hills NM? I suggest that you check it out.</p> <p>Los Alamos National Laboratory is an industrial site and the open burning is well within industrial site standards.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p> <p>Regarding the protection of a non-listed species, the Department's 2008 <i>Guidance for Assessing Ecological Risks Posed by Chemicals: Screening Level Ecological Risk Assessments</i> suggests similar protection of listed and non-listed species though an area supporting listed species and listed species are to be identified for consideration in "risk management decisions."</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
60	Gen.	<p>As it seems NMED permitting policy is tied strongly to public opinion, I would like to add my voice to the many that should be protesting the notice of intent issued by the NMED to deny LANL's permit for open burning. We have been informed that the "overwhelming majority" of 1400 comments submitted for the hearing scheduled for April 5th, 2010 express opposition to the renewal of this burn capability for the laboratory. I find it difficult to believe that this permitting decision, which would have far reaching effects on both national security and the economic stability of New Mexico, is being driven by the unsubstantiated opinions of such a quixotic, overzealous minority.</p> <p>If this issue is not strongly tied to public opinion, then I would propose that the decision to renew the permit or not be based on more than uncertainty in the conclusions of the ecological risk assessment.</p> <p>I quote two statements issued by the laboratory:</p> <p style="padding-left: 40px;">"Years of publicly-available data show that the burning poses no human health risk and emits no harmful plume and is rarely even visible."</p> <p style="padding-left: 40px;">"A denial of open burning would harm national security, with no appreciable benefit to people or the environment."</p> <p>Please consider carefully the fact of the technical, economical, and security-related impacts associated with this permit decision. If this permit is denied to LANL because of uncertainties and negative bias, then must they not also be denied everyone else ... SNL, Emertech, drivers of automobiles in New Mexico, etc.?</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
61	Gen.	<p>It has come to my attention that the New Mexico Environmental Dept. (NMED) has denied a portion of the Resource Conservation and Recovery Act (RCRA) permit for Los Alamos National Laboratory (LANL). The denied portion is associated with 'open burns' of waste material associated with research and development (R&D) aimed at defeating improvised explosive devices (IEDs), explosive detection, and methods to defeat mines. Burning of these conventional materials has been deemed safer than clean-up and transport to a waste repository. Publicly available data collected over the years indicates that this burning activity poses minimum if any human health threat. This activity has been previously permitted by NMED and has been going on for years but now NMED wishes to withdraw this permit. If the permit is withdrawn, the R&D will have to be stopped.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p> <p>Regarding the statement "this activity has been previously permitted by NMED," the activity has not previously been permitted</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>A few years ago, the party then in power experienced scathing rebukes in the press for having sent our troops into harms way without the best equipment possible (though it initially was not available) to protect them from IEDs. Now NMED is considering shutting down R&D that will ultimately protect our troops, who are our children and our neighbors' children, from these insidious devices. Our enemies recognize the psychological and physical effectiveness of IEDs. It was just reported that Iran is training the Afghan Taliban in the use of roadside bombs against our military - particularly sequenced IEDs. Initially a single device detonates and after a short period of time a second one detonates to kill and maim the rescuers. As a veteran, I find it grossly irresponsible that NMED would consider jeopardizing this important work, particularly when the work is undertaken with minimal risk to the public.</p> <p>Now consider the impact on New Mexico. LANL is the economic powerhouse of Northern New Mexico. There is no other significant industry in that portion of our state. In addition to employing 9,000 people, a large percentage of the lab's procurements are placed locally. The trickle-down effect is immense. Also, with the decision to give the LANL contract to a Limited Liability Corp., around \$60 million of gross receipts taxes flow into county and state coffers. We are in a recession! If NMED doesn't recognize the importance of this work, the Dept. of Energy (DOE) does. Deny the permit and DOE will move the activity to another state. This means lost jobs for our citizens in Northern New Mexico. Additionally, if one looks at the recent activities of the NMED and its associate, the Environmental Improvement Board, one sees the implementation of the most draconian pit rules in the nation, one sees attempts to put into place egregious carbon-emission regulations, despite recent revelations of a conspiracy of deception by environmental scientists. Ultimately, in New Mexico one sees nothing but a hostile attitude towards any business except that relating to the service industry. Does the NMED want the people of New Mexico to be subservient to everyone else? A wise manager at DOE will eventually see the handwriting on the wall and start to look at what else might be targeted by NMED and give serious thought to moving those activities to other states. I know that I would. This means lost jobs and revenue for New Mexico!</p> <p>It can't happen in New Mexico? Let's look at some consequences of over-regulation. Why are so many men out of work today (check the recently issued Dept. of Labor statistics)? Why do we produce 50% of our electricity with coal? It is because of over-</p>	<p>by the Department and has instead been occurring under what RCRA terms "interim status." Interim status means that the operations were ongoing when RCRA came into effect, LANL appropriately submitted its permit applications, and the Department has not issued a permit for the activity. The rules governing interim status can be found at 40 CFR Part 265.</p>	

No.	Loc.	Comment	NMED Response	Δ
		<p>regulation! A vast number of men were employed by heavy industry. Environmental over-regulation and a not in my back yard attitude drove the cost of doing business up so much that the industries were moved overseas or just shut down, resulting in an horrendous loss of jobs. Just look at Detroit and the remainder of the rust belt today! With respect to Nuclear Power, over-regulation drove the cost of building a nuclear power plant up 400% and the cost of operations and maintenance up 80%. No nuclear plant, a plant that produces minimal if any carbon emissions, has been completed since the early '80s because of this cost impact. Instead, coal plants, carbon emitters that so concerns the NMED and the EIB, were built, which contribute significantly to the global-warming crisis (if it is a crisis and not a fraud). These are the consequences of environmental over-regulation and zealotry. It can happen here!</p> <p>Summarizing, the NMED proposal to withdraw LANL's RCRA permit pertaining to open burns:</p> <ul style="list-style-type: none"> • Will not lead to any significant reduction of risk to human health, one of RCRA's stated goals • Will inhibit our nation from introducing countermeasures to the tactics advanced by our enemies, thus putting our troops in more danger than necessary • Will lead to a loss of jobs and revenue in Northern New Mexico. <p>While fact-base regulation may be reasonable, over-regulation with little real evidence is not only grossly irresponsible, it is criminal. Issue the RCRA permit to allow responsible open burns at LANL!</p>		
62	Gen.	<p>As a citizen of Los Alamos County, I was extremely disappointed to learn about the New Mexico Environmental Department denying a portion of the hazardous waste permit for the Los Alamos National Laboratory.</p> <p>Environmental stewardship is at an all time high and it is evident that the Los Alamos National Laboratory is ready and willing to participate in this important endeavor. The burn permit will allow the Los Alamos National Laboratory to dispose of waste in a manner that is safer than transporting the material from state to state. Burning is also proven to have no impact on the environment and human health.</p> <p>This decision most assuredly will have negative effects on the environment, human</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>health, and national security. If there is no way to properly dispose of the waste, it will sit idle awaiting a path forward for its destruction which will affect the environment as it degrades, it will put human health in danger as it is a safety risk to have stored long-term waste, and it will put national security at risk as it will be nearly impossible to conduct counter-terrorism and explosive detection experiments.</p> <p>I respectfully ask that the New Mexico Environmental Department re-evaluate their decision regarding the hazardous waste permit for the Los Alamos National Laboratory.</p>		
63	Gen.	<p>We would like to encourage you to approve the open burning of HE materials at LANL for a couple of reasons:</p> <ol style="list-style-type: none"> 1) It is far safer to burn these materials on site: a remote, safe place where they have experience in dealing with these materials. We do not want these dangerous materials on a roadway where we may be driving with our kids. 2) The work the materials support is extremely important to national security, primarily counter-terrorism. If there is no reasonable path forward for the waste, the potential for the mission to be accomplished is comprised, and could result in job losses in a field which the nation needs LANL's expertise to lead for the safety of our country and that of our allies. <p>It would be reckless endangerment of our neighbors, children, and the environment if the state dictated that the waste be shipped elsewhere for treatment. The safest path forward, and the best path forward for our state and country is to permit the open burning of HE at LANL. Please keep the materials on site where they can be safely treated!</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
64	Gen.	<p>I am writing to support the open burn/open detonation permit the Los Alamos National Lab has through the New Mexico Environmental Department.</p> <p>The loss of this permit will have long term negative impacts on our state and the Nation. Below, I list the just a few of them:</p> <p>Economic: Loss of the permit will cause loss of R&D work at the lab and lead to loss of hundreds of jobs for the state. The remaining R&D will increase costs to customers because of increased disposal cost, thus worsening the impact to jobs in New Mexico. We can not afford to loose more jobs in these difficult economic times.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>National Security Impacts: LANL R&D has broad impacts on our nation's security. The elimination of the permit will have a direct impact on LANL to respond to national security threats in many areas including domestic and international terrorist threats with explosives, nuclear materials smuggling and proliferation. Additionally LANL missions contribute to the security of our troops in Iraq and Afghanistan. The loss of the permit would certainly have a negative effect on the nation to respond to national security emergencies and in addition will be detrimental to our nation's ability to be proactive when addressing global security threats.</p>		
65	Gen.	<p>I am writing in support of the New Mexico Environment Department approving Los Alamos National Laboratory's open burn permit. My understanding is that revoking this permit could require transport of hazardous materials over public roads or result in loss of employment for Laboratory workers. Denying this permit would also hinder activities at the Laboratory that support our national security and safety including critical programs for the Department of Homeland Security.</p> <p>Additionally, my personal impression is that the quantity of emissions (which are primarily water vapor, carbon dioxide, and soot) from LANL's open burn activities are negligible relative to the amount of pollution emitted by fireplaces and internal combustion engines in this state. A responsible decision by your department would quantitatively study this issue.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
66	Gen.	<p>I am writing in support of NMED permitting Los Alamos National Laboratory (LANL) to continue to conduct Open Burn activities. Specifically, this capability allows for LANL to support a number of energetic materials testing requirements in support of a wide range of Global Security mission requirements.</p> <p>In particular, I wish to highlight the support provided to the war fighter, e.g. through homemade explosives (HME) training courses that are conducted at LANL. Through this course work, our military colleagues are provided with training that helps them detect, and understand the characteristics and behaviors of different types of energetic materials, whether the hazard or concern occurs on foreign soil, or domestically.</p> <p>Without the burn capabilities, LANL is at potential risk for losing these vital energetic material test capabilities in support of our colleagues and Global Security mission needs. Additionally, other missions could be placed at risk, as many of these</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>capabilities are interlinked with other training capabilities; provided as a 1-stop shop for our colleagues training needs.</p> <p>With these capabilities, LANL is continuing to play a key role in the success of these critically important mission areas in service to our Nation and our Nation's personnel.</p>		
67	Gen.	<p>I want to oppose the Environment Department's decision to ban open burning at the Lab. I've lived in this town for fifteen years and have never been bothered by the burns, in fact, haven't even known about them until now. I trust the lab scientists to worry about environmental safety. It seems foolish to stop a procedure that enables the lab to conduct research vital to our national security. I hope the department will rethink this decision.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
68	Gen.	<p>I am writing to express my support for issuing LANL a Hazardous Waste Permit. I and my family live and work near the laboratory, and I am confident that the Laboratory conducts its national security work in a safe manner that protects the NM environment and citizens, while simultaneously enhancing our national security. Please don't let irrational fear and emotion rule the day when not issuing the permit has far reaching and negative consequences for our state and our nation.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
69	Gen.	<p>I strongly support the inclusion of the "Open Burn" capability for Los Alamos National Laboratory in the current NMED hazardous waste permit under discussion.</p> <p>LANL has world-class expertise in understanding and defeating explosive threats that place our nation at risk. An open burn permit is essential in order to carry out critical national security and counter-terrorism missions. These missions at risk include defeating IEDs that are killing our soldiers in the Middle East. The Nation has placed major national laboratories in our state and it is our turn to step up to our responsibility to support the nation.</p> <p>I am strongly in favor of approving "open burn" and urge you to decide in favor of it.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
70	Gen.	<p>I am writing to express my sincere personal support for the awarding of an open burn permit to Los Alamos National Laboratory. Granting this permit will not harm the environment, and is critical to the Lab's work to protect our soldiers and safeguard our nation. Please do what is right for New Mexico, the Lab, and our nation and grant this permit. You work every day to protect the environment of New Mexico. This is your</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		chance to also protect our uniformed personnel in harms' way.		
71	Gen.	I am writing to express my concern about the possible denial of an open-burn permit for Los Alamos National Laboratory. The open-burn procedure is essential for disposing of explosives, which, in turn, are essential for research on how to defeat improvised explosive devices. Of course, IEDs are responsible for most of the troop fatalities in Iraq and Afghanistan. Explosives research is also important for several other critical national-security problems. Please consider granting this permit.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
72		<p>I strongly support the inclusion of the "Open Burn" capability for the Los Alamos National Laboratory in the current NMED hazardous waste permit under discussion.</p> <p>LANL has world-class expertise in understanding and defeating explosive threats that place our nation at risk. An open burn permit is essential in order to carry out critical national security and counter-terrorism missions. These missions at risk include:</p> <ul style="list-style-type: none"> - Developing countermeasures against improvised explosive devices (IEDs) that are killing our soldiers on almost a daily basis in Iraq and Afghanistan, - Explosives detection to help prevent situations like the Christmas bomber where explosives are hidden under clothing - Methods to defeat buried mines and other explosives that kill military and civilians alike. - In addition, explosives and energetic materials provide the initial energy that powers United States' nuclear deterrence and also non-nuclear strike capabilities. <p>I have been a strong environmentalist for the past 40 years and feel very strongly about protecting the environment for future generations. However I also believe that national security is critically important and that the two must be balanced. The work being done at Los Alamos is helping our soldiers survive and in the longer term will help ensure that some day we won't have IEDs being detonated along I-25 or in our US cities. I also want to be confident that my children, now in their twenties, can travel abroad without the risk of their plane being brought down by a terrorist who could have been stopped if only we had "done our homework" as a nation and here in New Mexico.</p> <p>This choice to permit "open burn" should be a no-brainer. I strongly support "open</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		burn" and urge you to decide in favor of it.		
73	Gen.	<p>I am writing in support of the New Mexico Environment Department approving Los Alamos National Laboratory's open burn permit. My understanding is that revoking this permit could require transport of hazardous materials over public roads or result in loss of employment for Laboratory workers. Denying this permit would also hinder activities at the Laboratory that support our national security and safety including critical programs for the Department of Homeland Security.</p> <p>Additionally, I feel that the emissions (which are primarily water vapor, carbon dioxide, and soot) from such a site are negligible relative to the amount of pollution emitted by fireplaces and internal combustion engines in this state. The comments that you have received against issuing the open burn permit do not seem to consider this point. A responsible decision by your department would quantitatively study this issue.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
74	Gen.	<p>As a private citizen living in Eldorado south of Santa Fe, I would like to express my opinion regarding the intended denial of the permit for Open Burn Units TA 16-388 and TA 16-399 as well as the intent to approve closure plans for said units.</p> <p>I know that Los Alamos National Laboratory is extensively involved in US counter-terrorism and national security missions whose continuation depends on a proper explosives disposal path. Burning of explosives wastes at the Open Burn Units on LANL property is far safer than transporting unsafe material on public roads for treatment elsewhere. None of the waste originates from manufacture of nuclear weapons, but rather from experiments on improvised explosive device countermeasures and explosives detection enhancements for aviation security and battlefield application, both of which are necessary to keep both aviation passengers and soldiers safe from terrorists and insurgents. Experiments are also to develop methods to defeat buried mines or other explosives (e.g., roadside bombs).</p> <p>As a private citizen who appreciates the efforts of Los Alamos scientists to help provide our soldiers in theater with the ability to find and render safe IEDs intended to kill or maim them, or to provide DHS and TSA with enhanced capabilities to allow air passengers safe and secure passage from home to destination and back, I would appreciate your reconsideration of the need for the open burn units. They are not an environmental hazard to the citizens of northern New Mexico, but rather provide a</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

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		<p>service critical for the continuation of such vital national security missions. I would hate to blame the next soldier's death or the next airplane bombing on a misguided New Mexico effort to close the open burn units at Los Alamos, but that would be the ultimate effect.</p>		
75		<p>I understand that NMED has indicated an initial desire to deny the long-standing burn permit capabilities at Los Alamos National Laboratory.</p> <p>As a private citizen of the State of New Mexico, I'd like to submit a public comment on this proposed action. First, let me state that I've lived and worked in New Mexico for more than 40 years. I am very familiar with both the activities, the work involved, the benefits obtained for our Nation, and the scientific merit of work with explosives. I also have some professional background having served in Iraq in the search for WMD, studied at the New Mexico Institute of Mining and technology in explosive's engineering, and having worked as a scientific staff member in several of LANL's explosive testing groups since 1986.</p> <p>The benefits of explosives work is widely underestimated by the general public and may not be apparent to regulators and State agencies. Even as our Nation struggles through two armed conflicts replete with IEDs and terrorist attacks where explosives are commonly used, it is easy to disregard the subtle nature of these chemicals and the fact that they are increasingly common. Even conceptually simple tasks, like explosive detection at airports, are replete with subtle details and scientific and technological challenges. Nonetheless, for commercial air-traffic to continue, we must remain one step ahead of our enemies or accept the unacceptable consequences in lives lost.</p> <p>Los Alamos scientists have genuinely world-class talents in the areas of explosive development, characterization, detection, and diagnostics. Many of these individuals have devoted their lives to understanding this complex phenomenon for the benefit of our society. Nonetheless, the nature of their work entails some element of risk, some waste streams and some political compromises with Government agents such as you. In the area of burning high-explosive waste, the cost is small and the direct benefit is large. Furthermore, these same scientists are fully aware of the environment we share and the consequences of mismanagement of environmental issues. I myself have participated in the remediation and cleanup of several firing sites. The Los Alamos scientific community is constantly searching for ways to make explosive tests smaller, with less</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>impact on the environment. Significant advances have been made in the diagnosis of such tests where more information is gathered on a given test thereby reducing the number of tests required. Other advances have been made in the use of containment vessels and blast-proof structures to prevent or mitigate the spread of debris. Recently, Los Alamos scientists developed "green" primary explosives dramatically reducing the amount of lead and mercury used in things like bullet primers. In short we are doing a good job at managing the risks associated with our work while returning enormous benefits to society. Those who will claim otherwise simply have not done their homework.</p> <p>I urge you to carefully consider both the costs and the benefits before changing the NMED burn permit.</p>		
76	Gen.	<p>I'm writing in support of Los Alamos National Laboratory obtaining and maintaining a hazardous waste disposal permit for open burning. After hearing of the possible decision to not allowing LANL to obtain a disposal permit for open burning, I investigated the ecological risk assessment for the decision.</p> <p>As a wildlife toxicologist I understand the technical aspects and complexities of ecological risk assessment. However, I have not come across denial of permits for open burning based impacts to deer mice and earthworms. While they are commonly used as surrogate species to extrapolate to humans, it appears that in this case they are the ecological endpoint of concern. In this case, I think that the environmentally responsible thing is to allow the open burning for the diverse and important work that is being done for the Nation. The carbon footprint alone for transporting and managing the waste elsewhere is large.</p> <p>Deer mice and earthworms are neither threatened nor endangered. The environmentally responsible reduction in this waste would not impact large populations. I hope that the New Mexico Environment: Department will reconsider the disposal permit for open burning.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
77	Gen.	The New Mexico Environmental Department has waged a campaign of open burn permit denial to LANL for the past 15 years. The expense to taxpayers has been incredible and their reasons empty. Those that support the NMED's denial make a lot of illogical noise using faulty data and arguments while their home fire places produce	Comment noted. See the Department's response regarding open burning in the document titled General Response to	Yes

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		<p>more environmental damage in one night than the burn ground at LANL would produce in a number of years. Some groups have only one purpose, to close LANL. They actually pay people to attend hearings to oppose any progress on the assumption that anything LANL does has a nuclear component. LANL is not burning radioactive materials.</p> <p>To what end do they deny a permit? The concise answer to this question is unknown, but maybe their game is</p> <ul style="list-style-type: none"> - Cave into a few paranoid conspiracy theory supporters in an effort to close LANL and cause economic devastation on Northern New Mexico. - Invite civilian casualties along an egress route transporting energetic materials to another site that allows burning. (To justify this NMED sights inappropriate burn models with inappropriate waste. The dioxins and furan they keep referring to don't exist at the temperature used at the LANL burn ground. Also, the chlorine content of the waste being burned that is necessary to produce a measurable amount of either compound is too low.) - Save a Hantavirus ridden mouse using data on soils that was contaminated 40 years ago saying the burn techniques presently used caused it. (Actually, populations of the deer mice in the canyons immediately adjacent to the burn ground are perfectly healthy.) - Block efforts to provide security for military personnel overseas and homeland security by limiting or eliminating research into terrorist explosives. <p>NMED has kept moving the target on LANL so that each time they comply with NMED's requests; NMED comes up with another task. It appears that they are either trying to cave to the irrational whims of the opposition to the permit or they hope that they can come up with a test that will show LANL is producing air, soil, or water contaminants greater than some arbitrary level they make up. When LANL has done tests that fall within reasonable environmental standards, NMED changes the tolerances. This is not, nor has it ever been, the case using the burn protocols presently used. At one point NMED told LANL to use an incinerator. Problem is they won't permit one. LANL was instructed another time to put the HE in a wooden box during incineration. This would be extremely dangerous and indicates a lack of understanding of the</p>	<p>Comments.</p> <p>Regarding the assertion that the Department has “waged a campaign of open burn permit denial to LANL for the past 15 years,” the Department does not understand the assertion nor has it seen any basis for the assertion. The Department has for many years been working constructively with the Permittees to obtain all necessary permit application information and to draft an appropriate permit.</p>	

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		<p>materials being burned.</p> <p>As a citizen who lives downwind from LANL, I support their efforts and believe a permit should be granted, post haste without further waste of time or money.</p>		
78	Gen.	<p>I am submitting comments to the Hearing Administrator for the Los Alamos National Laboratory (LANL) Hazardous Waste Permit Hearing beginning April 5th.</p> <p>I am writing as a private citizen, a resident of Los Alamos, a career environmental scientist, and a nearly 25-year employee of Los Alamos National Laboratory (LANL). First, let me say that, in my experience, the vast majority of employees at Los Alamos National Laboratory share a commitment to protect human health and the environment from our operations. The nature of the LANL national security and science missions necessitates work with virtually every substance in the periodic table, including some of the most persistent toxic substances known to man. It is critical that the Laboratory and the New Mexico Environment Department implement a hazardous waste operating permit for operations that simultaneously enables important national security and science missions while achieving protection of human health and the environment.</p> <p>In my opinion, the current draft permit is overly restrictive of Laboratory operations while adding no new value in protecting the environment. Further, the increasingly restrictive and prescriptive conditions of the draft permit fail to recognize the progress that the Laboratory has made over the past decade in improving environmental performance. NMED and I have very different views of the Laboratory.</p> <p>I see hundreds of Lab employees working very hard to clean up the legacy of World War II and Cold War operations that did contaminate the environment. However, this legacy contamination does not accurately reflect the current commitment of the Laboratory to operate safely and compliantly.</p> <p>I also see an institutional commitment to continuously improve environmental performance. In 2005, the Laboratory committed to developing and implementing an ISO 1400 I-compliant Environmental Management System (EMS). Rather than implementing an EMS on paper, the development team reached out to workers across the institution and asked them to develop help a system that would work at the local level and create honest, measurable improvements. The LANL EMS was certified by an independent third-party registrar in April of 2006 and has been subject to over 80 days</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>of independent assessment since then. Local projects have completed over a thousand environmental improvement activities and all IS LANL Directorates have just finished developing a new set of Environmental Action Plans for 2010-20 II. Senior management has set institutional objectives and targets for improved compliance, excess materials and equipment disposition, energy and fuel conservation, eliminating liquid industrial waste outfalls, and implementing strong preventive measures for operations.</p> <p>I see tremendous returns from these efforts. Waste volumes are a fraction of what was generated when our current operating permit was last issued. LANL has closed over 125 NPDES outfalls and is working on the final 15. NMED hazardous waste management inspections indicate vastly improved RCRA performance. EPA inspections of construction storm water and air quality programs indicate strong protective systems are in place and are being continuously improved.</p> <p>At LANL, I see the strongest commitment to pollution prevention of any of the DOE National Laboratories. Over the past five years, LANL has received more DOE and NNSA pollution prevention awards than any other facility. LANL management has continued a commitment to pollution prevention projects with funding that dwarfs that of any other national Lab. Taxes on waste volumes both discourage waste generation and fund projects that improve upstream safety and compliance by eliminating waste sources. Such projects are proposed and executed by the scientists and workers that actually own the work processes.</p> <p>Nowhere in the Lab have I seen a greater commitment to continuously improving environmental protection than in our high explosives (HE) programs. Deployed environmental staff have worked closely with scientists, programs and waste managers to steadily reduce waste volumes, improve upstream processes and effectively treat highly sensitive HE residues. Thus, I view with great irony the intent to deny the open burn portion of LANL's permit application. The willingness of the NMED to sacrifice a mission activity critical to the safety of U.S. troops at war and civilians at home in return for no appreciable human health or environmental benefit cannot be rationally defended. While I fully appreciate the opposition of anti-nuclear activist groups to Los Alamos national security missions, such political opposition should not be the deciding factor in setting safe operating conditions for these operations.</p> <p>My over-riding point is that LANL needs an operating permit that is based on sound</p>		

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		<p>science, empirical evidence and fair oversight. I urge the Hearing Administrator to assure that this is the case.</p>		
79	Gen.	<p>The purpose of LANL requesting a permit for these units was to provide the flexibility to destroy reactive HE wastes that could not be sent safely off-site for treatment. LANL is currently sending more and more waste off site for treatment as can be seen by its records. The issue at hand is that LANL knows that there are waste streams that are being or will be generated that it will not have the ability to send off site for treatment. Another issue is that the only off site treatment site may cease its operations. This would leave LANL without a path forward for HE waste treatment. LANL is a R&D facility. As such it has the potential to work with new and unique HE materials and energetics. It must have the ability to treat the waste residues if there is no commercial capacity available.</p> <p>The removal by NMED of the Open Burning portion of the permit (Chapter 6 and its related attachment) was based on sampling data, and the modeling conducted by both NMED and LANL. The modeling was done first and utilized a waste dictated by NMED that is not burned by LANL (ammonia perchlorate). This substance is a know generator of furans when burned. LANL does not have a perchlorate waste stream that goes to the bum ground. The site is currently a "brown field". It is an old industrial site where a myriad of activities have been carried out over its life span (~50-60 years). There is little doubt that activities prior to being regulated by RCRA generated furans. Those activities are reflected in the soil samples that were taken as a result of the modeling done on the perchlorate waste stream. If this operation had been proposed as a new operation on a "virgin" mesa top at the laboratory the permit would have likely been granted and more of the environment would have been utilized for industrial purposes. Industrial activities over its life span have, without doubt, contributed to any contamination that is present at this site currently.</p> <p>Additionally, operating temperatures at the bum tray reach -1,800 to 2,000 degrees F within 10 seconds of commencement of a waste bum. Dioxins and furans are formed in the 400 to 800 degree F range as products of incomplete combustion. Therefore, it is not logical to assume that the presence of furans in the nearby soil was generated by this operation.</p> <p>This site is part of the facility's corrective action plan for the future. Once activities are</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p> <p>Regarding there being "little doubt that activities prior to being regulated by RCRA generated furans," this has not been demonstrated to the Department.</p> <p>Regarding the assertion that the site could "clean close" as it is,</p>	Yes

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		<p>completed at this location, RCRA closure will be implemented then the entire site will undergo corrective action. As it stands today, this site would pass the test of being clean to residential standards. This would allow LANL to clean close it as is. No impact to human health or the environment is present. The concern over the potential impact to small mammals is exaggerated. LANL is planning on doing population studies on the deer mouse and other small mammals to show that they are not impacted. No Threatened and Endangered Species are present on the mesa and the current residents enjoy a full and productive life across the laboratory.</p> <p>LANL was surprised when it was announced that these units would be denied their permit. The site has taken many positive steps to improve the operations at TA-16. There has been a huge reduction in the volume and type of wastes that are sent there for burning. Safety is the biggest concern. Each waste stream is reviewed and considered for treatment there or shipment elsewhere for treatment. If the material is safe and meets DOT requirements for transportation, that waste will go off site. If not it must be treated at LANL or stored until some other option becomes available.</p> <p>The treatment units are designed so that they burn hot and clean. A recent video clip provided by LANL clearly shows that during a waste burn there are no visible emissions other than heat waves. Open Burning is clearly recognized as a viable option for the treatment of reactive wastes.</p> <p>NMED has adopted the EPA regulations dealing with open burning and should therefore utilize them to permit this unit. The previous drafts of the permit contained a provision for soil sampling so that any added contamination by the burn units could be trended and the permit withdrawn if the trend was upward. I believe that the permit should be issued for the Open Burn activities at LANL with this provision included to ensure that the unit functions without posing a threat to the environment or the public.</p>	<p>the Department would not allow a clean closure of the site for the same ecological risk concerns causing the Department to deny the permit. In fact, when the associated investigations and risk assessments are completed, if the ecological risk calculations remain the same the Department will be requiring a remedial action.</p>	
80	Gen.	<p>As a private citizen living and farming downwind of LANL near Velarde, New Mexico, I'd like to submit my opinion regarding the intended denial of the permit for Open Burn Units at Technical Area 16 at LANL. I have several concerns on this decision that involve both our country and our community.</p> <p>I am intimately familiar with the work performed at the Open Burn Units at TA-16. I have managed them for the past five years. In that time, my team has received 3 Pollution Prevention Awards that are all related to the minimization of explosive waste</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>generation and treatment. We treat no waste that is radioactive or any waste that is generated from the production of nuclear weapons. Over 80% of the waste we treat is from the manufacture of high explosive components used in research and development experiments. These experiments are performed to learn more about the behavior of our explosives and those used by terrorists, how to detect explosives, how to disable weapons with explosives, how materials react to rapid deformation, and several other purposes that are not weapons-related.</p> <p>We are constantly looking for better ways in which to manage our explosive wastes. We have considered shipping such wastes offsite. Much of our explosive-contaminated waste already is shipped offsite. I have costed this option for other waste that can be transported on public roads and it would save us a considerable amount of money. The reason we haven't is that it goes against the basic principal of explosives safety: expose the minimum number of people to the minimum amount of explosives for the minimum amount of time. This cardinal rule would be violated by shipping our waste hundreds of miles on public roads through densely- populated areas to a facility that knows much less than we do about how to handle it. In my mind it would be irresponsible.</p> <p>It also does not solve the problem of waste streams that cannot be shipped on public roads. I believe this list will be ever-growing as terrorist activities become more sophisticated. The explosives we work with are some of the most powerful explosives in the world. They must be placarded when transported so emergency response personnel can intelligently act in case of an emergency. This placard tells the world that that vehicle is carrying explosives, an easy target for any terrorist.</p> <p>We also had an incinerator installed some years back, but had to remove it because the State would not permit it. It also does not solve the problem of decontaminating large pieces of equipment and other debris from decommissioned buildings. Being unable to treat such waste will cause buildings that have been deemed "cold and dark" to just sit there with explosive residue sitting in rotting pipes and drains indefinitely.</p> <p>As far as my community, closure of these Open Burn Units could result in LANL losing valuable programs in global security, as we cannot produce waste that does not have a disposition pathway established. I heard one member of LANL state at a</p>		

No.	Loc.	Comment	NMED Response	Δ
		<p>Chamber of Commerce meeting that this could result in the loss of tens or possibly hundreds of millions of dollars to LANL. Approximately half of LANL's budget is spent on employee wages. LANL does a wonderful job in placing personnel in other positions when programs are lost, but an impact of this size could not be absorbed. I believe it would mean the lay-off of hundreds of employees. Some of these people would be scientists and engineers that only exist here in northern New Mexico. These folks would likely follow the work, where ever it may go. Loss of programs also means closing of buildings and capabilities. This loss would most significantly affect maintenance personnel, custodial workers, facility personnel, administrative personnel, laboratory technicians, and other support staff, all of whom live in northern New Mexico.</p> <p>As a farmer I am intimately aware of our environment and the consequences of mismanaging our resources. I would never live where I do if I thought that my family's health was in any danger from what was "on the hill." It is true that past practices caused contamination at LANL. These practices were allowed to be performed because of ignorance of the consequences, different national priorities, changes in regulations and LANL policy, and an inability to predict the future. All of the area where these Open Burn Units are located has been used to burn high explosives and contaminated waste since at least 1951. We are learning the extent of that contamination from soil samples that we have recently taken. Part of the area has been cleaned. We are continuing our operations in the safest, most environmentally responsible manner that we believe possible, and would welcome constructive guidance from NMED on improving these practices.</p> <p>I urge you to carefully consider the consequences of denying this open burn permit.</p>		
81	Gen.	<p>I am writing to support continuation of the NMED permit to allow open burning of explosives waste at Los Alamos National Laboratory.</p> <p>It is clear from the technical evidence made available that burning is a safe option for treatment of this material. The proposed limited operation causes no risk to humans and has negligible impact on the environment. The concern of ecological risk seems based on exaggerated factors, such as the assumption of 100% bioavailability of dioxins and furans, and is based on historical rather than current proposed operations. The area affected by historical use is extremely limited and could be cleaned or capped to make it</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>less available to deer mice, earthworms, and shrews (if their health remains an issue). Concerns of any impact to allergy-sufferers in Santa Fe seem highly implausible.</p> <p>LANL (along with Sandia National Laboratories) has been commissioned by the US government to develop methods to detect, identify, and defeat explosives threats. The research and training is essential for national security and for the safety of military personnel, civilian EOD teams, and all citizens. This work unavoidably produces wastes that must be disposed. Much of this work would become prohibitively expensive, or even impossible, if on-site burning of explosives is disallowed.</p> <p>If burning is disallowed, then environmental cleanup of legacy wastes would also become much more expensive, and may require shipment of uncertain explosives on public roadways, which is a greater risk.</p> <p>I encourage NMED to make a decision that is based on the technical merits and conscious of the important role New Mexico laboratories play in making the world a safer place. Good practices such as waste reduction should be encouraged; however, please allow the burning operations to continue as needed. The benefits greatly outweigh the risks.</p>		
82	Gen.	<p>Recently the New Mexico Environment Department denied a portion of a Los Alamos National Laboratory hazardous waste permit (EPA ID No. NM0890010515). The Rio Arriba County Commission disagrees with the partial denial of the permit and urges the Secretary of the New Mexico Environment Department to grant the complete hazardous waste permit for a full 10-year extension.</p> <p>At issue is the necessity of open burning of residues from non-nuclear counterterrorism and national security research. Without this capability, the impact to the security and safety of our armed forces and nation in general will be felt. The Laboratory must be able to continue its research on detecting explosives, defeating improvised bombs, and creating stronger armor. These unique research capabilities exist only at Los Alamos and thus should be protected for the good of the nation.</p> <p>The Commission finds no reasonable rationale base on health, safety, or environmental concern has been presented by the New Mexico Environment Department or any other party for denial of the Los Alamos permit for open burning. As a close neighbor of the Laboratory, we feel that open burning is safer than transporting unstable, explosive</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>wastes through our communities.</p> <p>Protecting the public's health and safety is best assured by approving the referenced permit that includes open burning permission.</p>		
83	Gen.	<p>I would like to provide my input, as a citizen of New Mexico, regarding the potential denial of the LANL Open Burn permit.</p> <p>While there have been numerous environmental issues associated with LANL waste activities in the first 30-40 years of the Laboratory's existence, in my judgment, the current Laboratory approach towards environmental compliance is remarkably improved.</p> <p>The ability to burn explosive residues on site vs. having to transport them offsite (which in the case of some materials is not permitted), is programmatically important to the United States and I fully support it. The current open relationship between NMED and the Laboratory will permit an appropriate level of oversight to ensure minimal impact on the environment.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
84	Gen.	<p>In support of efforts similar to the movie ""The Hurt Locker", I am writing as a concerned citizen to request a 10-year extension to the existing hazardous waste permit issued to the Los Alamos National Laboratory. It is my belief that he laboratory has made significant strides in supporting environmental issues since the end of the cold war and the associated national priorities. I am convinced that the laboratory is both knowledgeable and will perform with all due diligence in the handling and disposal of those traditional or exotic explosives associated with those programs supporting our national interest, especially those dealing with explosives detection and armor improvement.</p> <p>In the absence of such an approval, I am particularly concerned about the alternative, that is moving such activities to another state. This is analogous to the citizen being in favor of building more prisons but being against locations anywhere near their neighborhood. The laboratory has the people, technology, space and history to safely support such activities.</p> <p>The fact that your department is actively involved in monitoring the laboratory's activities provides further assurance to me that all such activities will be performed in a</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		safe and environmental friendly manner to the extent practical.		
85	Gen.	<p>I am writing to support the LANL request to approve open burning of a very limited amount of high explosive residue from non-nuclear national security programs. Certainly the environmental impact of this open burning is miniscule compared to non-LANL open burning all over New Mexico, or even the incineration of medical wastes.</p> <p>The real issue here is whether a relatively small group of local anti-LANL activists should be allowed to negatively impact valuable national security programs. Most of these activists are absolutely not interested in environmental impact or any pertinent data for this open burning. They routinely seize any possible issue with expressed intent to damage LANL. It should be evident that these programs, and the unrelated nuclear weapons mission as well, have been supported by Congress and a long line of US presidents as important to our country.</p> <p>There are very limited alternatives for disposal of these unconventional explosives from antiterrorist work and for decomposing explosives contamination on/in processing equipment. All are very expensive, would likely create much more realistically hazardous waste such as contaminated solvents or acids and might create personnel safety problems. Shipping these materials out-of-state on public highways is not an option for a host of reasons.</p> <p>When NMED forces absurd and costly measures on LANL, it must surely deteriorate relations with NNSA. Since NNSA is a major player in these issues, including LANL funding, it would seem that a sensible, cooperative relationship would benefit all. I very much favor application of common sense!</p> <p>Certainly most of these programs could be transferred elsewhere, Pantex in Amarillo, TX for instance. Such a transfer would sacrifice the facilities and expertise existing at LANL, increase the cost to the government and reduce LANL funding resulting in fewer jobs in northern NM. However, the people of Amarillo are firm supports of national security programs including the nuclear mission of the Pantex Plant.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
86	Gen.	I am writing to support the retention of open burning as part of the LANL hazardous waste permit. Removal of the Open Burning Part 6 is not justified. Open burning is important for our national security, military effectiveness, safety and protection of human health and the environment. There seems to be confusion that open burning is	Comment noted. See the Department's response regarding open burning in the document titled General Response to	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>part of the nuclear weapons program. Open burning is related to explosives research. The permit for the open burn units was requested to destroy reactive high explosives from research activities. That research is related to homeland security, terrorism prevention, etc. Due to the nature of these materials, it is often not safe to transport them. Waste sent to these sites is reviewed and sent off site if possible. In other words, the waste treated by open burning is minimized as much as possible. Previous drafts of the permit contained provisions for soil sampling with a caveat that the permit could be withdrawn if soil samples indicated an increase in contaminants. Additionally, these sites will be subject to RCRA closure requirements. In summary, LANL should be permitted for these operations for national security and safety with the caveat for RCRA closure with the cessation of operations.</p>	Comments.	
87	Gen.	<p>I am submitting these comments about the intent to deny the permit for the open burn units TA-16-388 and TA-16-399 at Los Alamos National Laboratory.</p> <p>I oppose denying the open burn permit for LANL. The open burn units serve a unique and irreplaceable function in ensuring the safe disposal of high explosives residues. These residues are an integral part of the national defense mission of LANL, and closing this waste disposal path would either stop completely or greatly increase the taxpayer cost of both important training and research operations and of decontamination, decommissioning, and demolition of old and unsafe structures at LANL.</p> <p>In my opinion, NMED's justification for closing the units is inadequate and not defensible. Even the US Environmental Protection Agency, in their permit comments, only recommended suspension of the open burning units if the soils around the units were grossly contaminated. NMED's own analysis shows NO risk to public or worker safety from the continued operation of these units, and no gross contamination of the soil.</p> <p>LANL has made extensive and ongoing efforts to reduce the quantity of waste that needs to be treated. The models and screening levels used for ecological risk estimation have not been validated in any real-world situation. There is no evidence presented by NMED of any actual harm to wildlife populations or individual animals. The area impacted by the open burn units is very small. Unless further evidence is presented that the open burn units are actually harming animals, further monitoring, and not closure of the units, is the appropriate response.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
88	Gen.	I am writing to express my support for inclusion of open burning in the renewal of the LANL Hazardous Waste Permit.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
89	Gen.	<p>I am submitting comments to the Hearing Administrator for the Los Alamos National Laboratory (LANL) Hazardous Waste Permit Hearing, specifically the NMED Hazardous Waste Bureaus intent to deny a hazardous waste facility permit for the open burning units at Technical Area (TA) 16.</p> <p>I am writing as a private citizen, a twenty-three year resident of Los Alamos, who is an environmentalist and an environmental scientist. I am in support of a hazardous waste facility permit for the open burning units at TA-16.</p> <p>While finalizing LANL's hazardous waste facility permit is a positive measure, it is questionable why after allowing the TA-16 open burn (OB) units to operate under interim status since 1980, and following LANL's implementation of numerous Best Management Practices, waste reduction and minimization measures and engineering improvements to the TA-16 OB unit operation, that the NMED-HWB would, at this late date, determine that the TA-16 OB units pose an ecological risk and thereby deny the hazardous waste facility permit application. Perhaps NMED's concerns with this operation were appeased by the monitoring results provided to them and the public in the annual Environmental Surveillance Reports, annual Toxic Chemical Release Inventory Reports, annual Emission Inventory reports and the Title V Semi-Annual Monitoring reports required by NMED Air Quality Bureau or the waste treatment data provide in the Biennial Hazardous Waste Reports.</p> <p>I am in agreement with NMED HWB's determination that based upon the risk assessment conducted by LANL; the TA-16 OB units pose no human health risk, but disagree with NMED-HWB's determination that the operation poses an ecological risk. NMED-HWB has based their intent to deny the permit upon their interpretation of an ecological risk assessment performed by LANL, according to NMED-HWB the risk assessment identified a slightly elevated hazard (1.9) for the deer mouse but acceptable hazard for the Montane shrew. Yet LANL's ecological risk assessment concluded; The ecological risk screening assessment found that no COPECs are retained for this area.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>Therefore, no potential unacceptable risks to human and ecological receptors are present. LANL prepared a subsequent risk assessment which further concluded, The ecological risk screening assessment found that no COPECs are retained for this area. The HIs calculated based on literature derived ESLs are conservative and overestimate the potential risk to receptors. Field observations and published studies indicate that the slightly elevated HIs do not reflect actual adverse ecological impacts to receptors at the site. Therefore, no potential unacceptable risks to human and ecological receptors are present. Perhaps NMED-HWB should have followed the recommendation the EPA provided in their comments on the permit: Section 6, Treatment by Open Burning: EPA recommends a condition be placed in the permit stating that if the baseline soil sampling report for the open burning units indicates grossly contaminated soils, then operation of the units may be suspended or modified as required. There was no determination made whether the slightly elevated soil detections were due to historic operations or present TA-16 OB operations. LANL performed extensive air modeling of the TA-16 OB operations using actual operating scenarios with an EPA approved application and. LANL's air modeling report found no emission above screening limits, the report provided and presented to NMED. NMED-HWB's intent to deny the permit was made prematurely and without full consideration of the scientific data available.</p> <p>The small area that could potentially be adversely impacted by the TA-16 OB units needs to be put in perspective in comparison to air emissions for other local sources such as the Four Corners Power Plant, one of the largest coal-fired generating stations in the United States, and the adverse environmental impacts caused by uncontrolled releases from various small shops and operations along the Rio Grande Corridor. From an environmental compliance stand point, LANL is the most heavily scrutinized and monitored facility in the state.</p> <p>It should also be noted that empirical evidence provides minimal evidence of adverse ecological impacts by the TA-16 OB units. The canyons adjacent to the treatment units provide habitat to a healthy and growing population of Mexican Spotted Owls and other raptors that prey on deer mice.</p> <p>LANL's high explosive mission has evolved as the state of the world has changed, the importance of LANL's ability to rapidly development solutions to explosive threats has significantly increased in the past decade, and the necessity of high explosive research is</p>		

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		<p>not going away. The research performed by LANL's high explosive researchers that depend upon the TA-16 OB units has reduced adverse environmental impacts of high explosives, improved high explosive safety and significantly decreased the publics and military personnel's risk due to improvised explosive devices. Ironically, individuals opposing the hazardous waste permit for the TA-16 OB units are benefactors of LANL's research every time they or a loved one board an airplane, possibly enter a subway, or attend a large heavily populated event.</p> <p>The TA-16 OB units provide a safe and environmentally responsible method for the treatment of waste high explosive material in a controlled, sparsely populated location. Transporting waste high explosives to another location for treatment only relocates the perceived environmental risk while significantly increasing the risk to human populations due to increased handling and transportation through populated areas.</p>		
90	Gen.	I support LANL's ability to conduct open burning for their explosives testing purposes. It is vital to protecting our troops overseas and has minimal impact on the environment.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
91	Gen.	<p>I am submitting comments to the Hearing Administrator for the Los Alamos National Laboratory (LANL) Hazardous Waste Permit Hearing beginning April 5th.</p> <p>I am writing as a private citizen residing in Santa Fe County who is employed as an Environmental Professional at Los Alamos National Laboratory. Being involved in the protection of human health, and environment is of utmost importance to me, especially being a father of a young daughter. It is critical that the Laboratory and the New Mexico Environment Department implement a Hazardous Waste Operating Permit for operations that simultaneously enables important national security and science missions while achieving protection of human health and the environment. These missions are crucial for a safer world for our children and their children in which terrorism is a constant threat. These terrorist continue to devise clever ways to impose fear and harm worldwide to whoever is not in the same mind set as them. I feel that the New Mexico Environment Department's denial of LANL's ability to treat waste from such research as explosives detection, armor improvement and open burn activities would be very, very detrimental to our country's counterterrorism efforts that LANL plays an invaluable role</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>in. If the New Mexico Environmental Department denies this portion of the operating permit, it will be of no added value to the protection of human health or the environment especially without any "concrete scientific" evidence that these activities are harmful to human health or the environment. These activities are closely monitored both by New Mexico Environment Department and LANL personnel and are actually safer to continue this research at LANL. Additional reasons for keeping this vital research at LANL is, burning is safer than transportation on public highways, none of these wastes come from nuclear research, without open burn capabilities "orphan/unknown waste" will have limited paths forward and most importantly, we owe it to our men and women in our military to have the best cutting edge technology to protect them around the world.</p> <p>As an employee in the environmental area at LANL, I have seen great strides with the Labs new management team with respect to all environmental aspects. RCRA wastes have been significantly reduced, findings and fines are very, very low, pollution prevention is in full gear, and our Environmental Management System is working towards continuous improvements.</p> <p>I respectfully ask that the hearing committee consider my opinion in that LANL needs an operating permit that is based on sound science, empirical evidence and fair oversight with respect to research that deals with explosives detection and armor and is not omitted from LANL's Hazardous Waste Operating Permit. I urge the Hearing Administrator to assure that this is the case.</p>		
92	Gen.	<p>I am writing as a concerned private citizen, conservationist, and degreed Environmental Scientist.</p> <p>While the vast majority of the Draft RCRA permit allows LANL to complete operations and research that protect our country, there is a significant percentage that is overly restrictive and appears to bow to the ill-informed views of extreme activist groups. The focus of my comments, however, is open burning at LANL.</p> <p>Per NMED's fact sheet on open burning: "The adjusted hazard quotients indicated acceptable risk for all receptors with the exception of the deer mouse, Montane Shrew, plant, and earthworm, which had hazards indicative of low to moderate risk." Understanding New Mexico's target levels for cancer risk and hazard (1E-5 and 1.0, respectively) this assertion does not provide justification for disallowing open burning</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>on the premise of a limited risk to non-protected species. Furthermore, NMED would be doing this country a huge disservice by stopping open burning; there is no just cause in jeopardizing the security of our troops and the stability of largest employer in Northern New Mexico. The effects of disallowing open burning at LANL would be far reaching and hard felt.</p> <p>On a personal note, my brother-in-law has served tours in Iraq and Afghanistan. He is scheduled to be deployed for a third tour in 2010. Having heard first-hand stories of friends lost to Improvised Explosive Devices (IEDs) and having seen photographs of the destruction they cause underlies the importance of the research completed at Los Alamos and enabled by open burning.</p> <p>A RCRA permit that regulates an institution like LANL needs to be based on sound science. Science that has already demonstrated that open burning and its residuals pose no significant threat to human life and the environment.</p> <p>From my experience, nowhere in this country is there an institution with a more comprehensive network of environmental surveillance, remediation, compliance, and dedicated professionals than at LANL. Despite having Environmental Programs that rival any in the world and serve to protect the people and environment of New Mexico, LANL is continually vilified in papers, on the news, and on radio for its perceived environmental shortcomings. Without allowing research institutions like LANL to operate, we risk the protections and freedoms we often take for granted. The time has come to tune out propaganda and fear-mongers and support science that protects America.</p>		
93	Gen.	<p>I am contacting you regarding renewal of the Los Alamos National Laboratory Hazardous Waste Permit. I am particularly concerned about open burn units TA-16-388 and TA-16-399. I am unaware of any health, safety, or environmental information from the Environmental Department or other parties that indicates there exists a credible threat to the public or to the ecological system from activities at these two units. However, transporting the hazardous wastes of concern to other locations on public highways would threaten health, safety, and the ecological system because of the undeniable possibility of breakdown of or accidental damage to the transporting vehicles along the route.</p> <p>LANL is recognized worldwide for its expertise in dealing with high explosives and has</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>been applying such expertise in national security areas such as IUD countermeasures, explosives detection, and location and defeat of buried mines. Denial of the open burn units would curtail or prevent continuation of such nationally important research but would have negligible effect on health, safety, or the ecological system.</p> <p>While it is important for you to listen to all parties regarding the LANL permit, I urge you to consider whether those addressing you are recognized technical experts in the areas of concern or are more emotional activists with limited applicable experience in the areas of concern.</p> <p>I urge you to retain the open burn units in the LANL Hazardous Waste Permit.</p>		
94	Gen.	<p>The following are my personal comments on the issues currently under public comment/review regarding LANL's application for renewal of its hazardous waste operating permit. I am an employee of LANL but my comments are my own and represent my personal opinions of the issues listed on NMED's website at the following address: (http://www.nmenv.state.nm.us/hwb/lanlperm.html).</p> <p>I've read the NMED fact sheets and some of the comments associated with open burning at TA16 and I believe I understand both the political and technical nature of your role in regulating this and other operations at LANL. Regarding the political nature of NMED's position, LANL is a resource for our nation for a variety of defense related subjects which results in a high degree of interest from parties that do not support the nation's defense posture. The disagreements range from US involvement in Iraq and Afghanistan to nuclear weapons research. The use of NMED's permitting authority as means to a political end is inappropriate and an abuse of you and your staff's technical expertise. Political discussions belong in a political arena and should be directed to elected officials. I encourage you and the NMED to focus only on the technical aspects of the benefits and risks posed by LANL operations. However, if political concerns are to be included in the decision making process, then I believe the benefits and risks discussion must also be expanded to include a larger set of issues. The impacts associated with the loss of work at LANL as funding moves to other facilities to perform these operations must be considered as it relates to personnel who have invested their careers here in Northern New Mexico. Additionally, the ripple effects of funding losses across the myriad of businesses that work for LANL must be included. I encourage you and the NMED to remain outside the political fray and focus</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>on information that relates solely to the environmental and legal impacts of LANL's operations the Pajarito Plateau.</p> <p>The ecological risk assessment and NMED's position regarding open burning of HE wastes and equipment contained in the fact sheets indicates there is little to no risk to any organisms other than earthworms and deer mice. I did not see any mention of the areal extent expected as a result of these impacts. Because I work at LANL I know the area associated with open burning is relatively small. LANL covers approximately 43 square miles of area and the buffer zones created to protect both the public from our operations and our security needs provide local wildlife large areas of undisturbed habitat with little to no interference. As a resident of an area adjacent to TA-16, I can assure you the bear, elk, deer, bobcat, mountain lion, coyote, bird and other wildlife populations enjoy an environment free from molestation. Additionally, there are certain times of the year that specific types of operations are not allowed because the spotted owl (a T&E species) is breeding. Please consider the larger benefit afforded the environment and wildlife that comes with LANL's need to maintain large buffer areas for our operations. A small area of low potential impact to non-threatened species such as the open burning area at TA-16 should be compared with the large areas of habitat protected from poaching, illegal wood cutting, unauthorized off-road vehicle access, etc. Essentially, LANL provides security to 43 square miles of premium habitat. While these considerations do not relate to contaminant levels or other numeric standards, they should be considered as part of the risk assessments that ultimately determine whether an operation or activity poses an acceptable risk.</p> <p>Risk assessments for humans discussed in the fact sheets indicate there are acceptable levels of risk posed by the chemicals that may result from open air burning. Alternative options such as offsite shipment and treatment are discussed to address the low levels of risk to wildlife. As a worker familiar with explosives, their use, and hazards I encourage consideration of the added hazards that will be experienced with the options discussed. High explosives are a necessary component of many research activities at LANL. A great deal of time and effort is expended to insure their use here is safe for the public and the work force. The current practice of eliminating residual explosive hazards by burning is by the far the safest method of treatment available to LANL. To state that additional handling, packaging, and shipping may be viable options to the</p>		

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		<p>open burning completely ignores the added hazards that workers will face if open burning operations are replaced by these alternatives. I believe a comparison of options that result in a reduction of risk from low to no risk for a relatively small group of organisms when compared to options that increase risk to workers is not a reasonable course of action.</p> <p>It is easy to lose focus on the larger environmental risks and benefits when focusing either on small scale comparisons or when political considerations fog the decision making process. I encourage you and your organization to look at the big picture and help LANL continue to provide safe and compliant operations to New Mexico and the nation.</p>		
95	Gen.	<p>After reading the article in the Albuquerque Journal North and then finding out that the state may ban the open firing of explosives at Los Alamos National Laboratory, I do not feel the ban is determined in the proper perspective. The area affected is one that is small and animals affected are deer mice and earth worms. I have a son who served two tours in Iraq and if we as a country have to sacrifice deer mice and earth worms in the immediate vicinity of open burning, I am willing to live with that if it could save the life of one of our military.</p> <p>I do not want the ban imposed on the open fire of explosives at the Los Alamos National Laboratory. Please continue the hazardous permit that allows use of open firing of explosives.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
96	Gen.	<p>I am a lifelong resident of Los Alamos and would like to submit my comments as a concerned citizen of Los Alamos. As a citizen of Los Alamos, I not only care about the environment of Los Alamos, I consider environmental stewardship to be one of my responsibilities. I enjoy the hiking and biking trails in Los Alamos County, in the canyons, on the mesas, and in the mountains. I have enjoyed these trails and the associated wildlife for the past 40 years. This is home, and I would hate to see the environment I grew up with disappear.</p> <p>I appreciate the job the New Mexico Environment Department (NMED) has done in requiring LANL to adhere to environmental laws and regulations. This is crucial in assuring that future generations get to appreciate the same beautiful and hazard free environment that I took for granted most of my younger life.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>I also appreciate the job of the Los Alamos National Laboratory. It is because of their successes that we, as Americans, get to enjoy our freedom like no other Country on Earth. The Laboratory's success is also crucial in assuring that future generations get to appreciate this same freedom. In the first few decades of its existence, and like so many organizations of that era, the Laboratory unknowingly committed many harmful acts against the environment. They are paying for that dearly now. They have to spend millions of dollars annually remediating sites, implementing environmental laws and regulations (e.g. the Resource Conservation and Recovery Act (RCRA)).</p> <p>Today's Laboratory is far more responsible and self aware. They cannot, and do not perform science in the same manner. I live with many of these scientists, I grew up with many of them, and I socialize with many of them on a daily basis. Every day I hear about the many successes of performing environmentally responsible science in Los Alamos. Scientists now look for waste minimization opportunities before starting their operations, they look for recycling opportunities, and they look for opportunities to substitute non-hazardous chemicals for hazardous chemicals. It has become a way of life at LANL.</p> <p>By choosing to live in Los Alamos, it stands to reason that I trust the Laboratory and its staff with my life, and with the lives of my family. LANL is not perfect, but I assure you they make an extremely honest effort to do the right thing. To do the right thing by their stakeholders, the American tax payers. As a tax payer, and as a resident of Los Alamos, it appears to me, that the current draft Hazardous Waste Permit is unjustly restrictive to LANL, and the American tax payer. The NMED intends to deny the open burn unit of LANL's permit application. Here are the pros and cons of this unit:</p> <p>Cons:</p> <ol style="list-style-type: none"> 1. There might be a slightly elevated risk to earthworms and deer mice, but no threat to their population in Los Alamos County. <p>Pros:</p> <ol style="list-style-type: none"> 1. This unit supports programs that provide life-saving tools to our U.S. Troops. 2. This unit brings hundreds of thousands of dollars t the economy of New Mexico. 		

No.	Loc.	Comment	NMED Response	Δ
		<p>3. Absolutely no risk to human health.</p> <p>4. This unit guarantees hundreds of jobs in New Mexico.</p> <p>5. Open burning is safer than transporting the explosive waste on New Mexico public roads.</p> <p>I do understand that environmental decisions should not be based solely on economic factors or impact to human populations (i.e., that the impact to other populations must be considered), however, it seems apparent that the advantages of operating LANL's open burn unit far exceed the possible risk. By operating this unit, we have the potential to save countless lives, strengthen our economy, and minimize risks associated with the transportation of explosive wastes with absolutely no risk to human health. Please approve LANL's Hazardous Waste Permit including the open burn unit.</p>		
97	Gen.	<p>I am writing in support of the open burn open detonation permit at LANL TA-16. I am expressing my views as a private citizen, a long time resident of New Mexico (35+ years), and an individual dedicated to the environment of our beautiful state. I am familiar with these activities at LANL. They represent very little risk to the environment. The materials burn so fast, and at such high temperature, that there is virtually no contamination of the environment. You are aware of the recent studies, endorsed by NMED, that support this conclusion.</p> <p>Further more, there is little or no risk to the public from these activities. They take place under strict controls, with very conservative standards for operation, regarding wind and potential fire conditions. The transportation of these surplus high explosives across New Mexico roadways carries a much higher potential for adverse impact to the public.</p> <p>The training and research done under these permits directly affects the lives and limbs of the members of our armed services stationed in Iraq and Afghanistan. By simulating IEDs, and demonstrating the proper methods for handling and disposing of these lethal weapons which are directed at our service men and women on a daily basis.</p> <p>In conclusion, the facts support that there is little risk to the environment from these activities and they directly contribute to the safety and well being of Americans who are in harm's way serving our country.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		Please support the permit to allow these activities to take place at the laboratory.		
98	Gen.	I find one part of the proposed LANL permit not to be acceptable as proposed. Banning open burning in ecological grounds must be allowed to continue. It is a safe way to dispose of the waste that cannot be shipped over the highways. As pointed out in the New Mexican this week, this testing helps National Security and must continue. Even NMED knows this is the best way to dispose of the waste and wanting LANL to continue clean-up all over the lab this is a bad idea. By not allowing safe cleanup of this waste it may stop this testing in New Mexico and could costs jobs. It is not NMED role to cause the potential loss of jobs and revenues to the state when the state has a large shortfall in tax revenues. This is a bad part of the permit and must be changed to allow the safe burning to continue.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
99	Gen.	<p>I am a LANS employee and conduct work for our counter-terrorism work and supervise the work of others in the area as well. I am aware of your current plans to deny important permits that are essential to our national security work. I am saddened that you have found no technical reasons to do so, but are responding to pressure from a narrow set of individuals that is not concerned with the facts of the matter, but is motivated by political factors.</p> <p>I am a resident of New Mexico, just like those making the complaints. However, unlike the majority of the complainants, I live in White Rock, which is much closer than Taos, or Santa Fe or many other places from which the complaints arise. I raised my four children here, beginning with kindergarten. I have a great deal of experience with the materials that need to be both detonated and burned. Just like your own studies and conclusions have stated, there is no technical reason to deny the permit, but doing so will irreparably harm our mission and the nation's security.</p> <p>Please do not bow to unwarranted public pressure from an extremist minority of NM residents.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
100	Gen.	I strongly support the Los Alamos National Laboratory (LANL) hazardous waste permit application. LANL's work with US service men, women, as well as allied troops in providing training on recognizing homemade explosive threats and developing tools for detecting and defeating IED threats is saving lives. LANL's work with the Department	Comment noted. See the Department's response regarding open burning in the document titled General Response to	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>of Homeland Security is critical to the defense of the nation. LANL must be able to dispose of explosive waste in the safest and most environmentally friendly way, which is open burning of explosive residues.</p> <p>Because of the sensitivity of these materials, transporting these materials over public roads raises other hazards for the public which can be easily addressed on LANL property. I strongly support the LANL hazardous waste permit application for disposal of explosives waste and residue.</p>	Comments.	
101	Gen.	<p>I am writing as a private citizen with regards to the LANL RCRA Hazardous Waste Permit.</p> <p>I am in support of the Open Burning (OB) operation in which NMED has issued a Notice of Intent to Deny. After reading numerous articles regarding OB operations, I am confident that the current operations at the LANL OB units do not impact human health and the environment. The risk assessment showed that that there is negligible effect to all species except a low hazard to deer mice and earthworms. Since dioxins and furans (the major point of contention) are bioaccumulation toxins, you would think that the endangered species of the Mexican Spotted Owl would have seen major impacts. This is not so, in fact within the last 5 years, there is a new nesting pair of Mexican Spotted Owls on LANL property. If the OB operations have not affected a federally protected species, why would NMED have concern for a deer mouse that spreads the hantavirus disease that sickens far more individuals than the OB operations have shown through the risk assessment to cause harm?</p> <p>The OB operations that are conducted at LANL have major impacts on our troops currently fighting in the Iraq and Afghanistan wars. I personally have family that are and have fought in both wars. The stories they tell regarding improvised explosive devices (IEDs) and how they have killed hundreds of their comrades is heartbreaking and has scarred their hearts and minds. The research and training at LANL that is being conducted in support of homeland security and counterterrorism is vital to the protection of our troops. More than half of the New Mexicans killed in the Iraq and Afghanistan wars have been casualties of IEDs. Why would NMED deny the OB research that has and is saving lives for the sake of a deer mouse? I am sure if you asked the families of our fallen soldiers which they would choose, the saving of a "potential low hazard" effect to deer mice, or research that is safe, compliant and could have positive impacts</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>regarding IEDs and terrorism, they would choose to implore you to keep the OB technology.</p> <p>LANL treatment processes at the OB units use clean burning propane as fuel. The temperature generated by the propane is more than sufficient to destroy the dioxins and furans that can be generated as a result of the presence of chlorine compounds that are present in some of the explosive wastes.</p> <p>The state of California, which has the strictest environmental Laws in the nation, has recently issued an OB permit to China Lake Naval Air Weapons Station. The amount of waste they are allowed to treat by OB is 5,475,000 pounds. LANL has significantly reduced their request for the amount they are allowed to treat and have conducted significant waste minimization activities regarding the missions that generate wastes in support of homeland security and counterterrorism. LANL is not asking to treat million of pounds of reactive wastes by OB, but thousands of pounds. I am attaching a copy of the Fact Sheet for China Lake for your perusal.</p> <p>NMED cites that LANL can ship off-site all wastes generated in support of the homeland security and counter terrorism programs to be treated elsewhere. This is not true. The wastes that can be treated off-site are shipped safely and compliantly to other facilities for treatment while protecting human health and the environment. DOT regulations specifically prohibit the shipping of certain explosives (reactive wastes) on public roadways. Those are the wastes that LANL safely and compliantly treats prior to further characterization and disposal.</p> <p>Although I know NMED takes public participation into account for issues regarding human health and the environment, 1400 signatures mostly in a form letter format does not seem to warrant as much attention as perhaps 1400 petition signatures individually written and submitted by each commenter.</p> <p>I ask that NMED rethink their decision to deny the OB permit for LANL. I am sure the families of our fallen soldiers, if made aware of this issue, would gather and support the LANL mission to research ways to protect our troops in time of war so no other families have to go through the heartache of losing a son or daughter because the mission at LANL was shut down due to concerns over saving a deer mouse.</p>		
102	Gen.	Why is it OK for the ABQ TV stations weather report to claim "Its OK to Bum" on their	Comment noted. See the	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>nightly reports?</p> <p>Limiting LANL testing will cost the state budget tax dollars big bucks if the state eliminates the laboratories work. Don't be stupid in your actions.</p> <p>Remember; use some COMMON sense in making decisions.</p>	<p>Department's response regarding open burning in the document titled General Response to Comments.</p>	
103	Gen.	<p>Please be advised that the City of Espanola is in full support of Los Alamos National Laboratory and its effort to obtain hazardous waste permit (EP ID No NM089001 0515) from your department. It is our understanding that a partial denial of the permit was based on the question of need for open burning of residue generated by the Laboratory's counterterrorism and national security research.</p> <p>The City of Espanola believes that issuance of a permit that allows for open burning of non-nuclear waste is essential to protecting our military and the nation's welfare. We trust that this method of disposal is preferable to other alternatives such as transporting through our city. Furthermore, arguments presented thus far do not convince the City of any significant negative impacts to the health and safety of our residents and to the environment in general of northern New Mexico.</p> <p>Please call me if you have any questions regarding this matter. Again, the City of Espanola is in full support of Los Alamos National Laboratory obtaining a permit from the New Mexico Environment Department for management of hazardous waste that includes open burning authorization.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
104	Gen.	<p>I am writing this letter to express my concern over the fact that the current draft of the NMED hazardous waste permit seeks to exclude open burning of LANL's energetic materials. As I hope that you are aware, LANL burns its excess explosive debris and residue at only a few remote Laboratory locations. Years of data, which has been collected and reviewed by your organization and other experts, has consistently shown this activity poses no human health risk and emits absolutely no hazardous waste.</p> <p>The proposed alternative to disposing of this explosive debris on-site is transporting to another location for disposal. This seems fundamentally wrong to me for multiple reasons. First, any off-site transportation of energetic materials would expose the general public to either contamination or explosion due to a traffic accident. The potential threat of accidental exposure seems to be much higher than any unproven harm using the current disposal sites. Secondly, the risk for a potential adversary to obtain</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>these energetic materials is greatly increased during in transportation. It would be very simple for a "bad guy" to observe shipments and merely intercept them on the roads, thus allowing the wrong people access to explosive materials. Disposal within the secure boundaries of LANL eliminates this concern. Lastly, by shifting the disposal of these materials to another site only transfer the problem and does not solve it. If you truly believe, against all scientific evidence, that the disposal process is somehow harmful, then why allow it to be done at another location?</p> <p>Los Alamos National Laboratory has always played a critical role in the national defense of this country. In recent years, the threats to this nation have evolved from Russia and a global superpower, to third world rogue states and the terrorist organizations they support. LANL has evolved with this changing threat and still continues to be a vital player in our nation's defense. The disposal of energetic materials is a critical support function for this mission. It also involves the jobs of many New Mexicans.</p> <p>The people who are pushing so hard for this decision against LANL are just that, against LANL. They are misinformed of the real scientific facts and do not consider the overall ramifications of their actions. I urge you to allow LANL to continue to conduct its national mission.</p>		
105	Gen.	<p>I live in Los Alamos and have worked as a scientist at Los Alamos National Laboratory (LANL) since 1986. I am not a spokesman for the Lab; this is a statement of my own personal knowledge and opinion. The work done for our national security at LANL over the past 65 years has resulted in undeniable damage to the environment of Los Alamos and surrounding areas, and this damage must be repaired. As a citizen of New Mexico and a candidate for New Mexico House of Representatives, District 43, I strongly support the New Mexico Environment Department's (NMED) responsibility to regulate the cleanup of past environmental damage, and to regulate present operations at LANL involving hazardous waste.</p> <p>As a citizen of the United States and a scientist at Los Alamos National Laboratory, I also support the work done there for our national security. Some of this work involves research into how to deal with emergency situations involving high explosives and high explosive residues, which can be extremely hazardous. Experts at LANL provide training to military personnel and first responders who have to deal with such situations.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>The safest way to dispose of the hazardous material produced in this research and training is to move it as little as possible and then burn it in the open with high temperature burners. NMED and LANL agree that this procedure produces almost no air pollution or additional health risk to humans, and little other environmental impact.</p> <p>The work at LANL that requires open burning can save the lives of people who are asked to deal with hazardous situations. One of my duties is emergency response involving high explosives. It would be irresponsible for NMED to place me and my fellow responders, military and civilian, at greater risk by denying the Lab permission to dispose of such waste in the safest and cleanest possible way. LANL personnel, such as myself, are ready and willing to do this work. The state of New Mexico should not tell the nation to find another place to perform this important mission.</p> <p>I urge the NMED to allow continued controlled open burning of the wastes produced in this work at LANL. The Lab has agreed to appropriate monitoring of any potential environmental impacts.</p>		
106	Gen.	<p>Your Fact Sheet, dated February 2, 2010, Intent to Deny a Hazardous Waste Facility Permit for the Open Burning Of Hazardous Waste At TA16 Under the New Mexico Hazardous Waste Act Los Alamos National Laboratory (LANL), Los Alamos County, New Mexico, states:</p> <p style="padding-left: 40px;">The July 6, 2009 Revised Draft Permit included a prohibition on treating wastes capable of generating dioxins and furans. This prohibition was based upon the Department's air modeling, subsequent soil sampling conducted by the Applicants, and an associated screening level risk assessment that identified furan concentrations in excess of Ecological Screening Limits (ESLs).</p> <p>You concluded:</p> <p style="padding-left: 40px;">Because the Applicants have not provided sufficient demonstration that continued operation of the burning units would not result in adverse risk to the environment, the extensive public opposition to open burning, and the Department's belief that there may be preferable and viable alternatives to burning the HE waste, the Department intends to deny a permit to the Applicants to open burn wastes at LANL's TA-16.</p> <p>The results of the ecological risk assessment indicated elevated risk (low) to the</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>deer mouse based on the use of NOAEL-based TRVs, but as a more refined analysis using a LOAEL was not provided by the Applicants, the assessment is considered incomplete, resulting in uncertainty.</p> <p>Improvised Explosive Devices (IEDs) in Iraq and Afghanistan: Effects and Countermeasures" (Order Code RS22330, Updated August 28,2007), prepared for the Congressional Research Service, states:</p> <p style="padding-left: 40px;">Improvised explosive devices, also known as IEDs, roadside bombs, and suicide car bombs, have caused over 60% of all American combat casualties in Iraq and 50% of combat casualties in Afghanistan, both killed and wounded.</p> <p>There have been a total of 1.8 M troops deployed for Operations Enduring Freedom or Iraqi Freedom (OEF/OIF). So the fatality rate for IEDs is 1.37×10^{-3}.</p> <p>When this is compared to a deer mouse fatality rate of 1×10^{-5} from exposure to dioxin/furans and we assume there are 500,000 Deer Mice in the surrounding area (a grossly exaggerated estimate), that would mean the continuing LANL operations might lead to 5 dead Deer Mice.</p> <p>So which is more important, saving 5 Deer Mice (that you would be hard pressed to find.), or trying to reduce the number of real casualties in the "War on Terrorism?" Better figures could be generated with better data, but you get the idea.</p> <p>DOD has established the Joint IED Defeat Organization (JIEDDO) to investigate countermeasures along with various national laboratories (LANL included), the Department of Energy, contractors, and academia.</p> <p>I strongly urge you NOT to deny in whole or part a hazardous waste permit (Permit) applied for by the U.S. Department of Energy and the operators (Los Alamos National Security, L.L.C., or LANS) of Los Alamos National Laboratory to treat hazardous waste. This will allow all LANL researchers and staff involved to continue to perform research and experiments that contribute to the saving of the lives of our service members in Iraq and Iran. Let's focus on saving GIs, not mice. Your continued insistence on cancellation of the burning units would not result in adverse risk to the environment that outweighs the importance of the lives of those who serve.</p>		

No.	Loc.	Comment	NMED Response	Δ
107	Gen.	<p>I am concerned about the possibility that NMED may deny LANL's open burning permit. I am a resident of Los Alamos county. In reading about the environmental impact potentially caused by open burning, it appears very minor. Denial of the open burn permit will significantly impact LANL's ability to train soldiers to defend themselves against improvised explosive devices in other countries. A coworker of mine has a son serving in Afghanistan. He is concerned that his son be given the best tools and training to defend against the forces fighting against the U.S. We are at war against these forces. I ask that you make the right decision for the country and approve the open burn permit. This will allow LANL to continue with this training which supports our national security.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
108	Gen.	<p>As a resident of NM, I am disappointed with your agency's issuance of a notice of intent to deny a hazardous waste treatment permit to LANL for burning off explosive scraps and residue that are generated as part of the Lab's important national security work. This is an especially surprising action for our NMED especially in light of the technical facts around the issue. Not only is the burning of explosive residues a much safer action for lab workers, but the alternative, if the laboratory can in fact continue its work, would require these hazardous and unstable wastes to be transported over miles of public roadway, putting many more citizens of NM and neighboring states at potential risk. There does not seem to be a technically-based thought process behind the NMED notice.</p> <p>Perhaps the most grievous effect of the denial of this permit, especially if lab programs were cancelled, would be the irreparable harm to the lab's emerging and successful support to our nation in the area of counterterrorism, nuclear nonproliferation, support to our war fighters in Iraq and especially Afghanistan, and in the demolition and clean-up of old, Cold War buildings. One little known program which could be negatively affected is a Home Made Explosives class that Los Alamos provides for soldiers being deployed to Iraq and Afghanistan. Deployed soldiers who have taken this course have stated to the US Military that these courses have and continue to save US lives, by providing unique classroom and practical training in IED identification, use, and defeat. This course would be one of many in jeopardy if the permit is not issued.</p> <p>It is technically well understood that burning off these small quantities of explosive waste is far safer than transporting these materials on public roads, and the burning of</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>these materials poses no health or ecological danger. Yet, your agency, in contradiction of these facts, has filed intent to act not only to obstruct important national security work, but without any real technical justification.</p> <p>It is not too late for your agency to drop this ill-advised action. The residents of the State of NM need ethical and technically sound service from its Environmental Department. We need your support.</p>		
109	Gen.	I am writing to express my support for issuing LANL a Hazardous Waste Permit. I believe the laboratory can conduct its national security work and protect the NM environment and citizens, and that it is vital that it be allowed to do so.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
110	Gen.	I support the New Mexico Environment Department approving the Los Alamos National Laboratory open burning permit. Denying this permit would seriously stop important work at LANL. The amount of material burned at LANL is a very small fraction of combustion products from other sources. Revoking the permit would cause damage to Los Alamos and its residents by removing work opportunities in the city. I am a retiree from LANL, and have no interest in LANL other than its effects on the city.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
111	Gen.	<p>Just a note, as a citizen of the state, to request you favorably act upon LANL's permit relative to open burning. The controls, volume, and long-term effects of this are minor compared to many other activities in this state, and it would support a critical defense mission of the US.</p> <p>Your approval of continued open burning is encouraged</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
112	Gen.	There has been a fair amount of information put forth on the open burning permit Los Alamos National Laboratory has been pursuing with the State recently. As a local county citizen, I feel the need to write and encourage you to ALLOW the permit to go through. I have studied much of the public information and believe some has been false and blown out of proportion. This work is vital to the nation's interests, and is not a danger to the environment to the degree some would like you to believe. I support this permit, and so should you.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
113	Gen.	As a concerned citizen supporting the National Laboratories in New Mexico, I have heard something very disturbing. It is my understanding that NMED wants to prohibit	Comment noted. See the Department's response regarding	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>open burning at Los Alamos National Laboratory. This is intolerable. Los Alamos does critical national security work that requires this ability to help protect our country. Please stand up for Los Alamos so it does not fall into the same crippled position as Sandia National Lab. The information provided in the NMENV website appears terribly erroneous. It also appears that the exact same letter has been submitted repeatedly by different individuals.</p>	<p>open burning in the document titled General Response to Comments.</p>	
114	Gen.	<p>I am a PhD Organic chemist who worked for many years in the area of high explosives. High explosives are by there very design "oxygen balanced." This means that they contain both fuel and an oxidizer (oxygen source) in nearly balanced proportions. In practical terms, this means they burn very (very) cleanly. Much more cleanly, for instance, than the natural gas we use to heat our homes, or the gasoline we put in our cars. With nearly 11,000 people commuting to LANL daily, the output of hazardous gases to the environment from high explosives is simply insignificant in comparison to the output from the cars used to commute to LANL every day. Stating that the reason for denying an open-burn permit to LANL for high explosives pertains to "protecting the environment" is either disingenuous, or ignorant.</p> <p>Further, LANL's work in high explosive science, which requires an avenue for disposing of associated waste, is essential to national security. LANL's work in this area contributes not only towards maintaining a nuclear deterrent, but also towards battling the proliferation of improvised nuclear explosives and supporting the war fighter by understanding the threat form improvised explosive devices encountered every day in Iraq, Afghanistan, and around the globe (including metros and airliners). The work done at LANL in the high explosive science arena keeps us all safer and must be facilitated.</p> <p>In closing, I strongly urge you to support renewal of LANL's open-burn permit for high explosives and high explosive waste. To do otherwise is not based on any sound technical or environmental concern, but rather on a misinformed anti-LANL agenda</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
115	Gen.	<p>I am writing to input our support for allowing LANL to continue treating its explosive wastes by open burning. These wastes are an unavoidable result of the Lab's support of the Nation's security and defense requirements. This important work must continue. Open burning is far safer and less expensive than any alternative. Please allow this</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		activity to continue.	Comments.	
116	Gen.	From all that I can read/judge, it is essential that LANL be granted its open burn permit (renewal) for high explosive waste. The granting of this permit is essential to the research being done at the lab, and the end results will benefit an entire society.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
117	Gen.	<p>It has been brought to my attention that you are in the process of arbitrating the issue of open burning of the high explosive waste at the lab. Having worked with experts in the field I strongly support the open burning. By the nature of the materials they burn very, very cleanly, much more cleanly than automobile combustion. Open burning is the safest, cleanest and most cost-effective way to dispose of the waste. It does not pose an environmental hazard.</p> <p>It is understandable how some individuals who may not understand the science may be legitimately concerned about how the burning of anything might impact the environment. But their concerns are misplaced in this circumstance. It is also understandable how some who may have anti-military stances might react to the materials. But this is a vital part of our national defense and needs to be managed in the best possible way.</p> <p>I do not live in New Mexico but I greatly enjoy visiting the state. And I hope that you do not mind my "butting" into local issues. I am just a concerned citizen of the USA and hope that you will find this information useful to your deliberations.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
118	Gen.	<p>Open burning is a necessary process at LANL to operate. People are spreading misinformation about what this really is and the consequences. The environmental effects are minimal.</p> <p>LANL must have the capability to test and destroy high explosives. Otherwise the work must be sent out of state.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
119	Gen.	<p>I beseech you to support the renewal of the open-burn for high explosive waste permit at Los Alamos National Laboratory.</p> <p>I know you have received correspondence detailing the value, and safety, of this</p>	Comment noted. See the Department's response regarding open burning in the document	Yes

No.	Loc.	Comment	NMED Response	Δ
		process. Please take this information to heart, and allow the people there to continue their good work.	titled General Response to Comments.	
120	Gen.	<p>The cries to deny open burning at LANL are a misguided case of "Not in My Backyard" mentality. If we do not allow the open burning permit, we will need to ship the waste out to somewhere else - to be burned!! Sending the waste elsewhere consequently hampers research at LANL, causes undue expense which would be better used expended on research, heightens the possibility for accidents (a safety risk), and does nothing to protect the environment (it only shifts the handling of the waste elsewhere, and leaves a carbon footprint in the process of shipping it!).</p> <p>Please move to approve the LANL Open Burning permit.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
121	Gen.	<p>Presented scientific report as evidence that shows no conclusive adverse effects on living organic tissue and no conclusive effects on ecosystems, may they be biotic or abiotic in nature.</p> <p>Environmental Health Perspectives, Volume 59, pp. 121-128, 1985, Mechanisms of Action of "Toxic" Halogenated Aromatics, Biometry and Risk Assessment Program, National Institute of Environmental Health Sciences - National Institute of Health, Allison E.M. Vickers, Tracy C. Sloop, George W. Lucier</p> <p>US Environmental Protection Agency, Health Effects Research Laboratory, N Carolina, The Mechanism of Dioxin Toxicity: Relationship to Risk Assessment, Linda S. Birnbaum</p> <p>On mechanisms of action of TCDD, and related congeners, as possible unimportance in tissue toxicity and influence on cellular equilibrium and negative function in living tissues of organisms. Also the enzymatic induction of Dioxin metabolism and secretion points to the innate function of cellular of tissue. And on the use of TEF and TEQ as referencing questionable toxicity levels.</p> <p>In vivo studies, TCDD is considered 3-MC type inducer. It induces or activates cytochrome PI-450 and AHH activity; the two PI-450 and AHH are involved in metabolism and excretion of Dioxin, whether it is considered naturally occurring or not all living tissue. The study further states that these little known but innate abilities of tissue (living cells) are activated with higher concentrations of Dioxin like compounds</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>and other compounds as well. These bio-transformational processes (Dioxin metabolism) seem to be inherent function in cellular structures. In addition, the additive measurements and approaches for toxicity might not apply as are defined in logical systematic approaches that TEF and TEQ systems are based on. Also the notion of toxicity might also be in question for Dioxin due to Dioxin being an important compound in the ecological and biological processes of ecosystems and living tissues.</p> <p>The role of Ah and Ah receptor as being significant is incorrect in the process of cellular wall transmission of TCDD into the cytoplasm of the cell. Although there are many nuclear and non-nuclear receptors inherent to the cellular structure and many might be participatory in various metabolic, synergetic and energetic processes native to living tissues, it's misleading to come to any conclusive interpretation that supports the toxic role of Dioxin and like compounds on having negative or detrimental effects on cellular function or on having or being responsible for disequilibrium in cellular function when referring to Dioxin and radiation.</p> <p>Evidence of a fully biased stance by the New Mexico State Environment Department which is based on opinions and not validity of scientific proof. Also, NMED inability and choice not to fully understand and correctly interpret federal and state regulations to fully support this permit for LANL. Also the inability of the NMED to fully comply with their own local policies and regulatory duties in all of their oversight locally in public and private sector. In addition, NMED has historically abused their own policies and procedures for their own benefit as it comes to dealing with public (civic) regulatory requirements in areas of public, personal, private waste regulation, disposal monitoring.</p> <p>Evidence of non-compliance by the public and private sectors with environmental regulations and laws in their daily lives and the unwillingness of NMED to inspect and inform the public of their responsibility to comply with laws of environmental standard as they apply to the public and private sectors.</p> <p>Proof listed below is the non-compliance of regulatory oversight by NMED to contain the biggest source and cause of pollution of the environment and public health which is caused by the public and small businesses.</p> <ol style="list-style-type: none"> 1. NMED has been summoned to a hearing on April 13th, 2010 to take their responsibility for inability and unwillingness to monitor and secure NM Large Scale Dairy Facilities CAFOs, private farmers, from contaminating ground 		

No.	Loc.	Comment	NMED Response	Δ
		<p>water aquifers and the environment in this state.</p> <p>2. Recent case in Taos, New Mexico - Improper management and monitoring of Public Landfill in New Mexico and unwillingness to direct and monitor the publics' and private use of Public Landfills, Taos, New Mexico.</p> <p>Case of needed regulation of oil and gas drilling and storing by NMED for New Mexico and out of state private companies, working in conjunction with Native Tribes on tribal lands to exploit the environment for mining operation granted by tribal governance in New Mexico, for tribal profiteering in mining here in New Mexico. Due to their toxic nature of these Chlorides producing mining processes used in mining, for extruding natural resources from earth for public use many tribal leader freely allow mining operations to take place disregarding the environment on their own accord on their lands for the sole purpose of profiteering and profit.</p>		
122	Gen.	<p>In the Thursday, April 1, 2010, Journal Santa Fe, there was an article about Los Alamos National Laboratory. This article described the important work that LANL is doing to educate our soldiers on explosively formed projectiles. I fully support this work and congratulate the lab on expanding its mission beyond nuclear weapons. The article stated that this work is in jeopardy because NMED wants to deny LANL a permit to burn the explosive residue. The article also stated that one reason that NMED wanted to deny the permit is that public comment has been against allowing the permit. The article in the paper was the first time that I had heard of the issue. Obviously, someone has mounted a campaign against the lab and you will now hear other opinions. The information presented indicates that there is no risk to humans and small or insignificant risk to wildlife. I believe NMED should grant the permit to LANL to continue the existing process of burning explosive residue.</p> <p>The article also states that certain members of NMED believe that the lab should consider alternatives. I believe that transporting explosive residue is more a danger that burning. I also disagree with trying to make the issue "someone else's problem." Transporting and disposing of waste is also an expensive alternative, which would take money away from the training program itself.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
123	Gen.	It is my understanding that LANL's Open Air Burn Permit for energetic materials is due to expire and that there is some thought being given to terminating this permit. I	Comment noted. See the Department's response regarding	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>worked at LANL for 25 years and was the Explosives Review Committee Chairman for a few years during that time. Explosive safety was a big part of my professional life at the Laboratory. Among the operations we authorized were the disposal operations of excess energetic materials, of course, within the limits of our permits. As I am certain you are aware, explosives are generally fuels and oxidizers mixed on molecular levels although some are just physical mixtures such as black powder and ANFO. Generally, nitrogen atoms play the role of the "gas can" if you will separate the fuel - carbon and hydrogen - from the oxidizer oxygen - thus the term CHNO explosive. As you can imagine, when the gas can gets that small, it becomes possible to get very rapid decomposition of the material since the fuels and oxidizers are so intimately mixed - only a nitrogen atom or two away on average. The reason these materials are so useful to civilization (99.8% of all explosives are used to reshape the planet for roads, dams, buildings, mining, etc.) is that they all carry their own fuel and oxidizer on each molecule, great energy density. As a direct consequence of this physical nicety, these materials also burn in open air cleaner than any other organic materials, period.</p> <p>I am, thus, somewhat concerned about the possibility that LANL's Open Air Burn Permit is in question. I have been informed that public input is running somewhat opposed to the renewal but I think that you as a science based enterprise are you not? I hope that it is your job to take correct actions environmentally and scientifically despite public outcry to the contrary. If not, then simply putting these matters to a public vote would be sufficient and the state would not need the NMED.</p> <p>Los Alamos does a great deal of work in energetic materials that positively impacts our military success and the maintenance of our technological lead in military and nuclear technology. The opinions of a few thousand antinuclear protestors may not be as helpful in controlling worldwide terrorism as facilitating LANL's mission will be. Prosperity in peace and success in war; may we have an abundance of the former and be well prepared for the latter.</p>	open burning in the document titled General Response to Comments.	
124	Gen.	The Los Alamos National Laboratory ("LANL") is seeking an open burn permit to continue to allow for the open burning of various products generated at LANL, including live ordnance that has been fired but which did not detonate upon impact. The Incorporated County of Los Alamos ("County") does not oppose the LANL Open Burning Permit at Technical Area-16 based upon the information provided to the	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>County from LANL and the New Mexico Environment Department ("NMED"). However, the County does not support any plan that would result in unexploded ordnance being transported onto local roads.</p> <p>According to the February 2, 2010 notice of intent to deny the requested open burning permit at TA-16 to LANL, the NMED opined that open burning posed a risk of generating furans and dioxins. According to this notice, the results of the human health risk assessment demonstrated that additional analysis is not required and evaluation of soil data indicates that there are no adverse impacts from exposure to either residential or industrial receptors. The notice also indicates that air modeling demonstrates that risk above target levels to human receptors is not likely. The basis for permit denial appears to be focused on two factors: public opposition and the uncertainty of ecological risk to the deer mouse.</p> <p>The County is not part of the public opposition to open burning. However, the County is opposed to one of the alternatives set forth in the NMED notice of intent to deny - transporting the unexploded ordnance for disposal.</p> <p>The County does not support any plan that would result in unexploded ordnance, some containing High Explosives, being transported beyond the boundaries of LANL onto County and State roads. Shipping the applicable waste off-site is not a viable alternative to open burning due to the inherent human health and safety risks associated with such shipments. Such ordnance has the potential of being unstable and its transport on public roads introduces an unnecessary and unacceptable hazard into the community. NMED identifies in its letter that the ecological risk of furans and dioxin is characterized as low to moderate, with only a slightly elevated hazard to the deer mouse (which is neither an endangered or threatened species) and is in fact a rodent that is regularly used for laboratory tests. Further, the proposed permit denial does not address the risk to human health posed by the deer mouse. The deer mouse has been identified as a carrier of Hantavirus, a deadly virus which is present in Los Alamos County.</p> <p style="padding-left: 40px;">See: http://www.cdc.gov/ncidod/diseases/hanta/hps/noframes/physIvirology.htm and http://www.bernco.gov/upload/images/eh_1st-Hanyta2005.pdf.</p> <p>Under these circumstances, it would be appropriate to consider the risk of the deer mouse to human health compared to the risk of transporting unexploded ordnance through the community. Comparing the relatively low risk (which seems to be currently</p>		

No.	Loc.	Comment	NMED Response	Δ
		unknown) to the deer mouse from on-site open burning, with the risk to humans associated with transporting live, potentially unstable ordnance outside of the Laboratory, on-site disposal appears to be appropriate. Further, such a balance of risk considerations would be expected to alter at least some of the opposition to the permit that influenced NMED's position.		
125	Gen.	There has been no documented significant risk or inconvenience caused by this safe way of disposing of energetic hydrocarbons. On the contrary, there has been documented harm from fireplace smoke, forest service and national park needless "controlled?" burns. If you do not approve LANL's permit, I believe that you are shameless politicians if you continue to permit thousands of smoky fireplaces, spring irrigation ditch weed burning (that recently got out of control in San Juan) and allow the forest service or national park service to create frequent days-long-smoldering burns that certainly pose a significant risk to the health of nearby residents.	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
126	Gen.	<p>I would like to be counted in support of the Open-Burn Permit for Explosives at Los Alamos National Laboratory (LANL). I know from experience working with the Defense Threat Reduction Agency (DTRA) during testing at the White Sands Missile Range (WSMR), that it is nearly impossible to acquire the exact amount of explosives necessary for a given series of tests. We typically ended up with some excess, and the fastest, easiest, cheapest, and safest means of disposal was open air burning. It was also the cleanest because the chemical makeup of the explosives yields very few contaminants that will damage or pollute the environment.</p> <p>Most people will react negatively when you mention "Open Air Burning" of anything, particularly explosives, with no knowledge of the pros and cons of the application.</p> <p>I think that the advantages of open air burning as a means of disposal of excess explosives at LANL has been demonstrated over a period of several years, and the permit should remain in effect.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
127	Gen.	<p>Please permit open burning at LANL! Allow them to continue operating under their current permit.</p> <p>Open burning is a necessary process at LANL to operate. People are spreading misinformation about what this really is and the consequences. The environmental</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>effects are minimal.</p> <p>LANL must have the capability to test and destroy high explosives. Otherwise the work must be sent out of state.</p>	Comments.	
128	Gen.	<p>I am in support of approval of renewing Los Alamos National Laboratory's permit for open burning of high explosive waste.</p> <p>LANL's work in high explosive science is essential to national security, and contributes towards maintaining a nuclear deterrent as well as battling proliferation of improvised nuclear explosives. We need this!</p> <p>I understand there is a campaign by a group claiming to want to "protect the environment", though these burns at LANL are much cleaner and are insignificant compared to the use of gas furnaces in homes or gasoline in cars used daily in the area. And why should such ignorant claims from uninformed local groups be considered in the operation of a National laboratory?</p> <p>I trust you will support continuing open burning permit.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
129	Gen.	<p>I am writing to let you know that as a New Mexico resident and a U.S. citizen that I am in favor of LANL's NMED open burn permit.</p> <p>I believe that relative to other sources of atmospheric pollutants, the amount of material produced by LANL is miniscule. Compared to auto emissions, forest fires, prescribed burns, and other industry outputs, the relative amount of material entering our atmosphere directly from LANL open burning can probably scarcely be measured and therefore is not the most direct culprit to loss of air or health concerns.</p> <p>Additionally, by hampering on-going operations or making them more costly the loss of the permit reduces income through the lab to New Mexico and ultimately endangers lives of those that serve us in combat theaters or responding to our federal governments needs in time so of crisis.</p> <p>Please extend and renew the LANL open burn permit.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
130	Gen.	I am writing to support open burning of high-explosives at Los Alamos National Laboratory. I believe that the form letters/emails against open burning contain factual	Comment noted. See the Department's response regarding	Yes

No.	Loc.	Comment	NMED Response	Δ
		errors and indicate a lack of understanding of the hazards of transporting high-explosives as an alternative.	open burning in the document titled General Response to Comments.	
131	Gen.	<p>I heartily support the LANL open burn permit. I would rather the material that is being burned at Los Alamos continue to be burned there rather than transported through our neighborhoods and towns across our roadways. I find it rather ironic, comical, and sad that those opposed to the permit have no issues over heating homes by burning wood. During the winter months, Santa Fe, Espanola, and Taos have a brown haze over them due to all of the wood being burn for heat. Such emissions are far more deleterious to the environment and human health than that produced by LANL. When will logic and reason ever get a fair voice?</p> <p>Please add my support to the "FOR" column.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
132	Gen.	<p>I am writing to urge renewal of the open burn permit for Los Alamos National Laboratory. Having read the NMED fact sheet concerning the plans to deny the permit, I find the credibility of the technical arguments particularly weak. One needs only consider that the burning of one cord of wood in the fireplaces of northern New Mexico releases between one and two milligrams of dioxins (see Yasuhara et al., Env. Sci. Tech., 2002)--and the paper and other refuse often thrown into fireplaces and stoves produce significantly more--to realize that the burning of explosive waste at the very high temperatures advertised by LANL adds a negligible amount of these chemicals to the environment compared to the many unregulated sources in the region. I realize that many residents in the area have a fundamental dislike of LANL, but the fact is that the Lab does a vital job for national security and the economy of the area is tied to the fate of the Lab. Any decision by the State of New Mexico that hinders LANL in the execution of its mission is, in my opinion, short-sighted.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
133	Gen.	<p>I am writing you at this time because of recent events involving your department and the Los Alamos National Laboratory (LANL). Specifically, my concerns deal with the continued ability of the Laboratory to dispose of its energetic waste materials on-site.</p> <p>I understand there are a number of related health and environmental considerations to be addressed within the framework of the permitting process, but I wanted to restrict my comments to the safety aspects because that is where my area of</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>expertise lies. For over forty years my career has directly involved me in work with explosives, munitions, and explosives safety for both the Department of Defense (DoD) and the Department of Energy (DOE.)</p> <p>The practice of packing and shipping energetic waste materials off-site for treatment that can be accomplished at their point of origin (i.e., LANL) flies in the face of the Cardinal Principal of Explosives Safety as accepted by DOE, DoD, and any agency handling explosives or energetic materials, to wit:</p> <p style="text-align: center;"><i>Expose the minimum number of people to the minimum amount of explosives for the minimum amount of time.</i></p> <p>Los Alamos is well positioned to safely and efficiently treat explosives waste materials generated on-site. Transporting these materials to an off-site location will involve additional packaging and handling operations as well as subjecting the energetic materials and those individuals sharing the highways and surrounding communities to the risk of exposure to an explosives accident. Such accidents can, and have, happened. (Reference: "Collision Between a Tractor-semitrailer Transporting Bombs and an Automobile, Resulting in Fire and Explosions. Checotah, Oklahoma, August 4, 1985" NTSB Number: SIR-B7-01. Note this accident was caused by the driver of the automobile, not the truck involved.)</p> <p>In addition to its traditional activities in support of Congressionally mandated national defense programs, Los Alamos has been assigned an increasingly significant role in support of the nation's homeland security and counter-terrorism programs. Many Laboratory activities in support of these programs generate explosives waste products and require the ability to treat this waste in a safe, efficient, and environmentally responsible manner. As noted above, transport of this waste to an off-site location may not always be feasible and is often not the safest alternative. The loss of the capability to accomplish this treatment at Los Alamos can place nationally important programs at risk, jeopardizing the future of the Laboratory and the economic vitality of Northern New Mexico.</p>		
134	Gen.	I believe that LANL does a responsible job with its open bums, and I am sure that the amount of pollution generated is insignificant in comparison with the amount coming out of cars and fires around the state. I support LANL continuing to have an open bum	Comment noted. See the Department's response regarding open burning in the document titled General Response to	Yes

No.	Loc.	Comment	NMED Response	Δ
		permit.	Comments.	
135	Gen.	<p>It is with great interest that we have read the proposed action to prohibit the burning of High Explosives (HE) and High Explosive contaminated articles at Los Alamos National Laboratory. We were particularly interested in understanding the issue at a technical level, so as to make our own assessment based on fact and not rhetoric or emotion. After reading the summary of the proposed action, we were quite puzzled by the State's position. We quote:</p> <p style="padding-left: 40px;">"Evaluation of the human health risk assessment and soil data indicates there are no adverse impacts from exposure to current levels of contamination to either residential or industrial receptors. The air modeling indicated elevated risk in close proximity to the burn units, but on a site wide basis, confirmed that risk above target levels to human receptors is not likely from continued operations of the burn units."</p> <p>From this we note that the technical argument was made that "risk above target levels to human receptors is <i>not likely</i> (emphasis is ours) from continued operations of the burn units." Yet the Department includes as a basis for their decision the following summary of some 1400 negative responses:</p> <p style="padding-left: 40px;">"The principal objection has been to the use of unconfined burning to treat high explosives and high-explosive contaminated waste, causing uncontrolled releases to the atmosphere. Citizens have cited the health risks to wildlife, public health, and the environment. Open burning is particularly objectionable to persons with allergies or other sensitivities to airborne pollutants."</p> <p>From our perspective, the states' position has been swayed by public opinion (not fact) and has turned the argument from one based on technical fact and informed by science, to an argument that is to be decided by belief and emotion. In fact, we would have liked to seen additional factual information about the total quantities of HE and HE contaminated articles that have been burned historically, and the expected quantities that the laboratory plans on burning over the next ten years (not proposed limits - rather, what the lab's plans actually are). By providing this summary and future plans, some information about current contamination measurements, and whether levels might go up or down, could be included in the analysis. It is not clear to us whether the state has</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p> <p>Regarding how the Department factored "future projections" of quantities of high explosive into its decision, the Permittees' proposed maximum annual weight of 12,500 lbs. for the units was factored into the Department's air</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>factored the historical basis and future projections into their conclusion.</p> <p>For example, historically (i.e. in the fifties and sixties) the laboratory was a very large manufacturer of high explosive components, with the entire plant operating with scores of people around the clock (three complete shifts). Currently, all of the explosive operations at S-Site have been reduced from tens of people in multiple facilities, to less than a dozen utilizing about half of one facility in a single shift.</p> <p>Further, the state itself writes as if it has moved from a factual basis to one of "belief (our comments in parentheses):</p> <p style="padding-left: 40px;">"Because the Applicants have not provided sufficient demonstration that continued operation of the burning units would not result in adverse risk to the environment (what happened to not likely?), the extensive public opposition to open burning, and the Department's <i>belief</i> (emphasis ours) that there may be preferable and viable alternatives to burning the HE waste, the Department intends to deny a permit to the Applicants to open burn wastes at LANL's TA-16."</p> <p>Finally, our analysis has attempted to rely on fact in determining whether or not there is increased risk to us and to our neighbors of health issues associated with open-burning (we live east of the laboratory and near the site boundary). We do not find that the state has made a technical argument that would indicate that we would be at greater risk of contamination-induced diseases, and we find that the laboratory has made the argument that the increased risk is "not likely".</p> <p>We now consider the benefits of allowing these operations to continue. From information provided by LANL and from our own experience, we acknowledge that High Explosives and High Explosive articles "provide the initial chemical energy that powers our Nation's nuclear and non-nuclear strike capabilities and are employed by adversaries in Improvised Nuclear and Explosive Devices (INDs and IEDs) and other threats." Thus, in addition to providing the basis for our nuclear deterrent (explosives enable our nuclear and thermonuclear stockpile), explosives power conventional munitions (for the Army, Navy, and Air Force), and unfortunately, explosives are utilized by terrorists and enemies of the United States in an attempt to disrupt and threaten our great country.</p>	<p>dispersion/deposition model. It was the results of that model that led to the collection of soil samples that confirmed the production of dioxins and furans. Regarding historical operations, the Department has not been provided with that information and has not seen evidence that that information exists in a form that would be considered definitive.</p>	

No.	Loc.	Comment	NMED Response	Δ
		<p>Maintaining the intellectual capability associated with high explosives and the science of nuclear weapons not only maintains a technical deterrent, it also enables the scientific discipline that will allow inventions and breakthroughs to be developed that will mitigate and defeat those that would do us harm through the use of IEDs and INDs. The risk of harm from open-burning of explosives to citizens of the United States is not likely - the risk of harm to citizens fighting on the front lines in Iraq and Afghanistan from IEDs is severe - approximately 40% of the casualties in Iraq are attributable to IEDs.</p> <p>And what about IEDs and INDs and their potential use on American soil? There are those that are concerned that it is only a matter of time before such devices are detonated on our soil. It is our opinion that we must invest in the science and tools that will allow us to make early discovery possible and to develop techniques that will disable and render such devices inert. "High Explosive" or "Energetic Material" Science will enable these breakthroughs, and in addition, this same science will eventually allow the development of methods that will allow us to destroy unwanted explosive materials using techniques other than open-burning. The Los Alamos National Laboratory, our Nation's Premier National Security Science Laboratory, has a mission element that requires High Explosive Science and is being looked to for solutions for the war-fighter and for the next generation of tools and technologies (e.g. Home-Made Explosive training; MagViz for detection of liquid explosives) to detect and defeat those that would do us harm.</p> <p>We look forward to the day in which our country has developed safe, cost-effective alternatives to open-burning, but until then, we respectfully request that the state allow open-burning to continue so as to not harm our Nation's deterrent and High Explosive Science capabilities.</p>		
136	Gen.	<p>I am writing to urge your department to continue allowing open burning at Los Alamos National Laboratory. The programs utilizing open burning are numerous and represent a significant National asset with respect to security and defense. Much of the work directly supports our armed services and Homeland Security through training, tool development, and cutting-edge research in novel detection systems.</p> <p>The arguments I have read against open burning have little or no merit and certainly have no scientific basis.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		Please continue to support high explosives work at Los Alamos by permitting open burning and open detonation.		
137	Gen.	<p>I am commenting as a private citizen and 18.5 year resident of Los Alamos. I have a bachelor's degree in Chemical Engineering from UC Berkeley. Prior to moving to Los Alamos, I worked for 10 years for Pacific Gas and Electric Company in California doing a variety of environmental compliance work, including air quality, water quality, and hazardous waste. I support approval of the hazardous waste permit along with open burning.</p> <p>I have raised 3 daughters in Los Alamos and am confident in LANL's dedication to protecting human health and the environment. All of the scientists I have met through my volunteer work in PTO, soccer, high school marching band and choirs, Girl Scouts, and other community activities have demonstrated a high level of commitment to environmental stewardship and confidence in LANL's environmental performance. This has been confirmed in the last 5 years that I have spent working for a LANL contractor.</p> <p>Based on my experience working for PG&E and LANL I am convinced that open burning is the safest way to handle specific lab waste streams handled at the open burn units. These waste streams result from research critical to protection of our armed forces and our citizens. I have not seen any evidence that this open burning poses a threat to human health or the environment. I strongly encourage the NMED to consider the scientific evidence and approve the RCRA permit with open burning. It is so important that this vital research done at LANL be allowed to continue.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
138	Gen.	I was born and raised in Northern New Mexico and currently reside and work in New Mexico. I am fully aware of the current conflicts surrounding LANL permits for hazardous waste disposal and treatment. I have read the files and fact sheets on the permits needed for open burning and I wanted to give my support as a member of the public for the inclusion of these two open burning treatment units in the permit. It is imperative that waste explosives be disposed of in a way that is environmentally safe and takes human life and health into consideration. This unit is the most logical and safe means of disposal and I fully support the inclusion of these permits. There are so many other activities of day-to-day life that human beings engage in that create much	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		more of a health hazard than these open burning sites do.		
139	Gen.	<p>Open burning isn't a bunch of men rounding up trash and waste and setting fire to them in their backyard every weekend. This entire thing is a process that is dealt with by professionals with safety in mind.</p> <p>The open burning process proposed by the hazardous waste permit is a logical solution, and a controlled burn done by experienced workers. It makes more sense to be rid of the waste at the site, rather than transporting it somewhere else and making it another issue at another location. And possibly a problem in route. All it would take is one truck accident in the middle of a snowy Los Alamos highway to see that transporting hazardous waste is a bad idea.</p> <p>Perhaps instead of calling it 'open burning', it needs a more official term so the people who do not understand the process will not fear it and oppose it.</p> <p>The Environmental Compliance people at the Los Alamos National Laboratory are smart people and have the best intentions for the environment in mind when they request these permits. Let's let them do their job.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
140	Gen.	<p>I'm writing to express my support of an open-burn permit for los Alamos National laboratory.</p> <p>The explosives testing enabled by this permit benefits U.S. troops and has minimal environmental impact.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
141	Gen.	<p>Denying Los Alamos National Laboratory (LANL) an open burn permit is inequitable, based on less-than-scientific evidence, inappropriate, and even dangerous.</p> <p>The New Mexico Environmental Department fact sheet on the permit states in conclusion that the basis for denial is:</p> <ul style="list-style-type: none"> ○ insufficient proof from LANL that the continued operation of the burning units would not result in an adverse risk to the environment, ○ Extensive public opposition to open burning, and ○ NMED's belief that there may be preferable and viable alternatives. 	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>Let me address these points, then close with a few costs of a denial.</p> <p>NMED needs to apply its standards equitably - It is ironic that the NMED allows the public to burn hundreds of tons of wood each winter without permit. Burning wood in a home fireplace has the same effect on the air as open burning since there is no filtration to the exhaust. Burning wood, driving a car, and running a diesel generator all produce dioxins and furans. Combustion temperature is important; at 1400 degrees the dioxins are destroyed. The burning of explosives at LANL is done at much higher temperatures than wood burning occurs. This already indicates LANL is doing better on grams of dioxin released per ton of material burned than the home fireplace. If one argues that LANL's volume of burned material is large, one quickly sees the frivolity of the argument: the permit allows LANL to burn about 6 tons per year; the public in the upper Rio Grande valley probably burn that quantity every day in winter. There is no doubt wood burning and car emissions in the area far exceed LANL's possible dioxin emission.</p> <p>In the fact sheet there is no evidence connecting current emission rates to soil concentrations. Denying the permit will not reduce the soil dioxin concentrations. I think LANL is prepared to admit operations were not as environmentally sensitive in decades past as they are now. Cleaning up from past operations is a different issue from stopping current operations.</p> <p>NMED plume modeling with the code OBODM suggests preferred depositions to the north and south/south-east. Day-time winds in Los Alamos are predominantly out of the south so how can one get a deposition to the south? My impression is that there are very restrictive wind conditions under which burning may occur. Would this not drive modeling plumes? One must seriously question the input data used for the modeling.</p> <p>The entire risk assessment discussion in the fact sheet uses soil data (an integral of past emissions), but not current emission rates. Surely, if the NMED wants to make scientific judgment on current operations it needs to base decisions on what is happening now. But even going with soil data, the risk for humans was considered acceptable even under conservative assumptions. This is not what one would expect from reading the opposition letters to the NMED. A commonly used form-letter used in protest says LANL's open burn activities "releases poisons into the air we breathe"</p>		

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		<p>(interestingly of the apparently 1400 letters of protest only about 10 - 20 (i.e. 1%) came from Los Alamos County residents, the people most likely to breathe this air). Canned protests claim a "direct threat to ... public health" without providing any substantiating evidence or cogent reasoning. This claim seems inflammatory and contradictory to the NMED-endorsed human risk calculation. Who is correct? I'm going with the NMED here.</p> <p>The NMED supports the claim of a "slightly elevated" risk to deer mice and acceptable or low risks to all other wildlife. The risk to deer mice is so slightly elevated that even assuming a substantial bio-availability of 50% instead of the conservative 100% would drop the risk to acceptable for deer mice. The NMED also says it wants LANL to do an evaluation based on "lowest observed" rather than "no observed" adverse effects levels. Is this not a simple inverse-linearity where NMED could recalculate the risk with the other numbers? Two minutes of work, folks! To save the two minutes, using the most conservative "lowest observed" level the risk is acceptable. (Aren't we daily trying to kill this hantavirus-carrying pest anyhow?).</p> <p>NMED cites extensive public opposition to the open burning. If one takes the time to look at the fourteen hundred expressions of opposition posted on the NMED website, we see that about 73% simply signed a petition and 24% submitted a form-letter which uses language and makes references which almost certainly are unfamiliar to most signatories. Ironically, the number of opponents that actually wrote their own opinion (the remaining 3%) is fewer than the number of people writing in support of the permit.</p> <p>further point to note is that the biggest risk of LANL's open burning is posed to the nearest residents. Only 1% of the opponents live in Los Alamos County (mostly a downwind population); a paucity in Espanola, the nearest large downwind town outside the county. The lion's share (about 80%) of those against the permit lives in Santa Fe, not downwind and over 20 miles away. I am curious as to why the NMED would be swayed by the opinion of more than 150 opponents who live outside New Mexico (70 from Kentucky alone!). The handful from Canada, Austria, Northern Ireland and Sweden add an irrelevant touch.</p> <p>I seriously contest the significance of the opposition to this permit. The population within a 50 mile radius of LANL is about 300,000 so 1,400 objections is under 0.5%. I am counting on the NMED not being influenced by anything else but defensible</p>		

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		<p>evidence and sound science.</p> <p>The NMED is hoping for "preferable and viable alternatives". This sounds like a reasonable goal - but not a reason for denying the permit. Unfortunately, under this umbrella comes a number of outstandingly irresponsible candidates, the most popular being transporting the high explosives elsewhere. I urge the proponents of this alternative to think hard about how much they want high explosives (possibly more unstable than new purchased material) going through their town. Does the NMED want to take on the liability for forcing the transport of unstable high explosives through urban areas? LANL has previously considered the cost and risk of doing so and opted for the more socially responsible burning in place. Another plan considered by LANL was use of an incinerator, but that was blocked by NMED a few years ago. For all alternatives one must always ask what is the cost incurred for the benefit gained.</p> <p>Speaking of costs and benefits, I hope the NMED realizes the costs of denying this permit. They are numerous. Much of the open burn and open detonation work at LANL supports defensive strategies relating to homeland security and protection of military personnel who are often from disadvantaged socio-economic backgrounds. This work is intended to save lives; this is not weapons manufacture. Does the NMED want to be known nationally years down the line for thwarting these efforts? If this work can't continue here, pressure to get it done will move it elsewhere, along with the federal dollars and the people who can do the work. Think trickle-down economics; think children losing a parent to an improvised explosive device.</p> <p>Another cost is the damage to NMED's reputation as a reliable and sensible enforcer of the law. The tardiness with which this permit has been handled over more than a decade is already a poor showing. The Department's making decisions based on unfounded public fears and preferences can only tarnish.</p> <p>Finally, are these opponents to the permit really interested in air quality or is there a broader agenda. The form letter addresses six other issues not related to burning. The petition is also a mixed bag, including a generic claim that LANL threatens "our cultural, spiritual and ecological survival". I postulate one could get millions of nationalists in other countries to sign such a petition if they understood the ultimate goal to be to stymie US arsenal maintenance. The anti-nuclear weapons agenda belongs elsewhere.</p>		

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		I conclude in pressing you to grant an open-burn and open-detonation permit to the Los Alamos National Laboratory and work with their staff in addressing scientifically-based concerns.		
142	Gen.	<p>I am writing in favor of the hazardous waste permit for the open burn units at LANL for high explosive waste treatment.</p> <p>I am submitting comments concerning the hazardous waste permit for Los Alamos National Laboratory. Specifically, my comments concern the ability for LANL to continue to dispose of high explosive waste by open burning; because:</p> <ol style="list-style-type: none"> 1. the burning of high explosive waste poses no risk to employee, public, nor environment; 2. the burning of high explosive waste is safer than their storage and transport, via public road offsite for treatment; 3. the high explosives research conducted by LANL provides life-saving knowledge that is imperative to our nation's missions to counter-terrorism, provide national security, and improve troop safety; and 4. the denial of open burning to dispose of high explosive waste, thereby making treatment too costly or difficult, may result in cessation of research conducted at LANL and subsequent job and revenue losses in an already volatile economy. <p>The mission of the New Mexico Environment Department is to provide the highest quality of life throughout the state by promoting a safe, clean and productive environment. Allowing the continuation of open burning of high explosive waste at LANL provides the safest treatment of the waste.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
143	Gen.	<p>NMED is threatening to deny open burning at LANL due to extensive public opposition, possible alternatives to HE waste disposal, and uncertainty of ecological risk to deer mice and earthworms.</p> <p>I believe the public opposition is heavily swaying NMED with their emotions. In public hearings and comments, the persons opposing the permit are blaming LANL for the state of the economy, school budget crisis, the Cerro Grande Fire, poor air quality, ground water contamination, etc. There is no indication that OB has adversely affected New Mexico. The persons making these comments clearly have an opposition to</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>LANL's mission. LANL would not be in operation if they were not meeting requirements and regulations set by the state to protect the public and environment.</p> <p>The amount of HE that is burned during open burning is a trivial amount compared to the risk associated with transporting HE for burning elsewhere. We have had three incidents in the past year where terrorists have planned attacks against our country using explosives. Transporting HE on a vehicle that is placarded as such can be seen as a CHANCE for these terrorists.</p> <p>Accidental and prescribed fires, burning wood for heat, and cars cause more pollution and create the same if not more of a risk to deer mice and earthworms than open burning of HE in a planned and controlled fashion. The heat and temperature during the OB burns destroys the dioxins and furans that could possibly hurt deer mice and earthworms.</p> <p>I hope the hearing officer can see past the emotion of the public opposition, understand the risk with transporting HE on public roadways, see that there is no clear evidence that there is risk to deer mice and earthworms, and allow the continuance of OB at LANL.</p>		
144	Gen.	<p>I am writing as a private citizen and resident of Los Alamos County. I have spent the last twenty years as an environment scientist specializing in environmental compliance. I have worked enforcing hazardous waste management regulatory requirements for the State of Arizona and have provided compliance guidance to LANL relative to hazardous and solid waste management and stormwater regulatory requirements. It is my opinion that there is no other entity that is required to do more monitoring of air, surface water, stormwater, groundwater, soil, biota, and animals than LANL does in the entire United States. Modeling of contaminants that may be generated from open burning of ignitable or reactive hazardous waste does not show harm to human health and the environment (other than to deer mice and earth worms) from this activity. I personally would rather have ignitable or reactive material managed at the LANL burn ground than have this material put into public transit, where it could be subject to an accident. DOE has strict controls on explosive safety. In addition, the hazardous waste management regulations also strictly control management and treatment of explosive waste. In my opinion, it is not worth potentially endangering the public by transporting explosives through public areas to save deer mice (which have been shown to carry hanta virus in Los Alamos County) and earth worms.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>I have lived in and around Los Alamos for 15 years and have not witnessed one incident of open burning operations that negatively affected the surrounding public. In addition, I am very concerned that the denial of open burning operations as part of LANL's Hazardous Waste Facility Permit could contribute to the loss of jobs in Northern New Mexico and negatively affect research and development of identified homeland security issues (like detecting explosives, defeating improvised bombs, and creating stronger armor). Thus, I support the continuance of open burning operations at LANL within the framework of environmental regulations and hope for fair oversight.</p>		
145	Gen.	<p>I want to go on record as supporting the open burn policy that LANL has been following. As long as the usual controls and monitoring is in place and no or in tolerance contaminants are found, we should support this practice. The benefits to the country out weigh the imagined catastrophic doomsday views being mass propagated.</p> <p>If monitoring shows a problem, I have every confidence the proper controls will go into effect at that time.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
146	Gen.	<p>I am very concerned about the possibility of LANL losing its open-burn permit for high explosive waste. To do so would deal a death blow to research in the area of energetic materials.</p> <p>Those objecting to the renewal of this permit are doing so from an uninformed or misinformed point of view, or, from a general anti-LANL agenda.</p> <p>Our country is quickly losing its position of leadership in scientific research.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
147	Gen.	<p>I would like to comment in favor of permitting Los Alamos National Laboratory to continue open burning. I am familiar with the work the Laboratory does in training military personnel to identify and deal with improvised explosive devices, and this is extremely valuable work that would be stopped in the absence of an open burning permit.</p> <p>I understand that those who dislike and distrust the Laboratory are using this permit renewal process to try and hinder the institution's activities. But in this case, they are doing so at the risk of causing the deaths of US military personnel who could otherwise have had essential training here.</p> <p>Open burning is NOT the problem -- Opponents are fighting LANL's existence as a</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		weapons laboratory -- and they're damaging a valuable, non-nuclear program while objecting to the site's mission and history. Don't let this happen.		
148	Gen.	<p>I am writing to voice my opinion regarding the possibility that NMED may revoke or discontinue the permit that allows LANL to store and treat certain wastes, particularly conventional explosives. I voice my concerns as a citizen of Los Alamos, raising 2 children here, and as a US taxpayer with an inherent interest in national security, and as a scientist conducting explosives research at LANL. In my personal opinion, the national security missions of LANL are important to every US citizen, and should be conducted as cost-effectively as possible and with a real eye towards protecting the environment. However, the burning/destruction of conventional explosives does not pose a significant environmental risk for those of us in and around Los Alamos, or for those in New Mexico, in general, and such waste-disposal practices have greatly facilitated the work being done. I am concerned that the shipping of such waste off-site will financially prohibit a great deal of the work being conducted in our nation's interest.</p> <p>I ask you to please consider extending the permit to LANL for local burning/destruction of conventional explosives. Otherwise, I do fear that important work will ultimately be stopped or relocated for no actual benefit to the community or the environment.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
149	Gen.	<p>My family and I live in Los Alamos and operate a small business here. I am here today in my capacity as Chairman of the Board of Directors of the Los Alamos Commerce and Development Corporation and Los Alamos Chamber of Commerce. Our Board represents about three hundred member businesses and organizations throughout our community and area that employ thousands of citizens in Northern New Mexico.</p> <p>We support approval of the proposed hazardous waste facility permit for Los Alamos National Laboratory (EPA ID No. NM0890010515);</p> <p><i>Furthermore,</i></p> <p>... we find that no reasonable rationale based on health, safety, or environmental concern has been presented by the NM Environment Department or any other party for denial of Los Alamos National Laboratory's permit for the open burn units at TA-16;</p> <p><i>that, ... the LANL operations and capabilities supported by the LANL open bum</i></p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

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		<p>capability are important to the security and safety of our armed forces and the nation in general;</p> <p><i>and that, ...</i> the LANL operations and capabilities supported by the open burn capability are important to the present and future economy of New Mexico.</p> <p>For these reasons, we respectfully request that the NM Environment approve the referenced permit to include the requested permission for the open bum units at TA16-388 and TA-16-399.</p> <p>In addition, our Chamber of Commerce made a petition available at our office over the past weeks so that people could come by and sign to indicate their agreement with our position. If appropriate, I would like to present to you today the signed petitions as additional input into your proceedings.</p>		
150	Gen.	<p>I am in the support of the Hazardous Waste Permit for Los Alamos National Laboratory to continue operations to continue to conduct cutting edge research and development for our nation.</p> <p>I am also in support of Open Burning activities in support of IED and counterterrorism training for our troops fighting wars in Afghanistan and Iraq.</p> <p>The denial of the Open Burning permit by the New Mexico Environment Department is based on a very conservative risk assessment that showed a low risk to deer mice and earthworms. This issue is not enough to derail the important mission that LANL conducts to protect our troops from further harm from IEDs or the necessary training conducted for the Department of Defense regarding field identification of IEDs.</p> <p>By my signature below, I am asking NMED to grant the Los Alamos National Laboratory a hazardous waste permit that includes the Open Burning provision.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
151	Gen.	<p>My comments today are entirely my own. I support the draft LANL HWFP issued by NMED with one important exception, that being the denial of permitted provisions for open burning units at TA-16-388 & 399. These units provide the long-standing, on-site means for safe, compliant, and effective means to dispose of certain kinds of HE waste and waste contaminated by HE. I, therefore, focus my comments on this one exception and provide justification for reinstating permit provisions for these open bum units.</p> <p>My comments are those of a New Mexico citizen and a resident of the incorporated</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

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		<p>County Municipality of Los Alamos for more than 38 years. These comments are also provided from an unusual blend of expertise and working knowledge. Four years ago, I retired as a member of the Los Alamos National Laboratory and an employee of the University of California following a career spanning some 35 years of national service. In the late 1980s, I served as deputy and subsequently the division leader for Dynamic Testing, which was the organization responsible for operations and facilities involving local testing with explosives, HE R&D, and emerging technologies employing explosives. I then spent several years as the deputy associate director for Nuclear Weapons Technology, the Laboratory's major mission program. That assignment provided broader context for the importance of HE R&D for stockpile stewardship and emerging programs involving HE. Then, in 1993, I served eight years as the director and institutional executive/manager for environment, safety, and health. In this capacity, I had responsibility for environmental protection, worker safety and health, and public safety and health. It is perhaps ironic that during my term as ES&H director, I was the Laboratory signatory on facility specific permit-renewal applications that are included in the draft Hazardous Waste permit. The irony is not that I signed the applications, but that I did so more than a decade ago in 1999/2000.</p> <p>Three Reasons for Reinstating Permit Provisions for the Open Bum Units</p> <ol style="list-style-type: none"> 1. I submit that responsible regulatory processes require an objective basis for denying existing and long-standing operations. Since there is no objective standards-based evidence as to the operational risk presented by the continued use of these units: to the safety & health of Laboratory workers, to the safety & health of the public beginning with the residents of Los Alamos County and moving out into the communities of Northern New Mexico, or to the safety & health of the environment, either on the Laboratory site or offsite, there would seem in this instance no quantifiable basis for NMED's intent to deny these permit provisions. 2. I submit that the loss of these bum units would unnecessarily and irresponsibly compromise an R&D capability critical to national security, that being LANL as an international center-of-excellence for HE R&D and for technology advances involving explosives. As the Laboratory has testified, certain mission-based efforts involving HE, including present efforts which focus on counterterrorism 		

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		<p>and proliferation, depend on the burn units for disposal of explosives waste. Whereas critics postulate that other means are available for explosives waste disposal assuming LANL's desire to continue such research, I commend to you a recent study that suggests otherwise. The study concerned the transfer or closure of Site 300 at LLNL [Lawrence Livermore National Laboratory].</p> <p>This study contains a comprehensive analysis as to the merits of options given an assumed closure of Site 300 burn units similar to those operated by LANL. The study was conducted by TechSource using a team in which I participated and chaired. TechSource is a small company employing retired national laboratory and NNSA experts. It is recognized by the federal government for its objective and comprehensive analyses of national security issues, especially those related to the weapons complex. The study, submitted to DOE/NNSA in September 2008, was done in the context of evaluating preferred alternatives in NNSA's draft Complex Transformation Supplemental Programmatic EIS. After assessing the full range of disposal options, the TechSource team concluded that desired continuation of LLNL's "HE R&D excellence depends on the retention of specific support capabilities at Site 300, especially those for HE waste treatment (i.e. disposal) and storage." Translating, closure of the Site 300 waste treatment capability would lead to a demise of the LLNL HE R&D capability in that there were no safer, effective, sustainable, affordable, or permitted options to on-site disposal of explosives waste. I submit that such would be the case for the LANL emerging mission programs if the permit provisions for the burn units were not to be reinstated.</p> <p>I further believe that this issue would become a moral dilemma for the State of New Mexico. Following through on the NMED intended action to deny operation of the open burn units would sideline LANL world-class researchers in the current national imperative to find technical means to detect and defeat IEDs at a safe distance. We all know that such devices continue to kill and maim American soldiers and those of our US allies. Denying participation in this quest to save lives and disabling injuries without objective reason is, in my judgment, unconscionable.</p> <p>3. Finally, I submit that denial of permit provisions for the open burn units at</p>		

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		<p>LANL on what appears to be a purely subjective and arbitrary basis would compromise New Mexico's regulatory responsibility and integrity. The lack of objectivity in this situation is dismaying and inconsistent with expectations for fair, defensible, and transparent regulation. Having served on loan from the Laboratory as Governor Richardson's science policy advisor early in his administration, I have great admiration for the Governor and his accomplishments. Following through on NMED's intent in this regard will, I am sad to contemplate, not be viewed as a positive accomplishment of this administration for the reasons I have stated and for many other reasons entered into the record by many others.</p> <p>Recommendation:</p> <p>Given the intent of NMED deny permitted provisions for the open burning units at TA16-388 & 399; and given the lack of objective-based and quantifiable risk to workers, the public, and the environment to support the intent; and given the consequential negative and unconscionable impact that such intent would have on near-term and long-term national means involving HE RD&T; and given the associated negative impact such intent if implemented would have on the need for fair and objective regulation in the State of New Mexico; I recommend reinstatement of said permit provisions in the draft LANL Hazardous Waste Facility Permit and further recommend upon reinstatement its speedy issuance to conclude 12 years of processing.</p>		
152	Gen.	<p>I am a chemical engineer retired from Los Alamos National Laboratory (LANL). For 41 years, I have also been a volunteer public advocate for a healthy environment. My years of volunteer work include testifying and cross-examining at numerous regulatory hearings, participating in public projects of the NMED and others, and writing a regular environmental column in the Los Alamos Monitor since 1971.</p> <p>From this background, I submit comments on the issue of open-burning of high explosives at LANL. The comments are consistent with my long-standing approach to making environmental progress. They apply equally to open-burning for disposing of high explosives and open-burning for training non-nuclear bomb technicians.</p> <p>The propositions I have used to help bring large and long-lasting environmental gains rest on certain principles. My criteria are: (1) apply the best technology to minimize pollution that is consistent with sound economics and (2) weigh the total degradation of</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>the environment that results from each alternative proposal. In short, the best solutions work from more than a piece.</p> <p>These principles raise two specific questions in the issue of open-burning at LANL:</p> <ul style="list-style-type: none"> • Is stopping the open-burning a sound use of pollution control expenditures? • How much total degradation of the environment results from each alternative proposed? <p>I assume "stopping" the open-burning will result in trucking the high explosives to another state to be burned or disposed of in some way, or will result in building a structure here of sufficient dimensions to continue the work here.</p> <p>I do not have the information required to sum up answers to the key questions. The NMED has much more of the relevant information.</p> <p>To my long-tested way of thinking, it is important to use the best available information that answers the questions. Not to do so weakens the fabric of regulation itself and diminishes the sum of public support for regulation. I believe in regulation and I actively support its effective and efficient use. In the long run, maintaining public support for sound regulation is vital.</p> <p>My comments are not answers, but guidance. My aim is to broaden the assessment enough to gain the best long-lasting results for the environment.</p>		
153	Gen.	<p>I have lived in Los Alamos for 31 years and hope to do so for many more. Hence, I have as much interest as anyone in the safety of the people and environment of this community and region.</p> <p>I am presently serving my eighth year on the Los Alamos County Council, the governing body of our community, and have worked on various health, economic, transportation, environmental, governmental, and other civic issues locally, in the North Central NM region, and throughout the state for nearly 20 years. The statement of the Council is being provided separately. I speak here as an individual.</p> <p>The mission of the Alamos National Laboratory (LANL) is to provide science to support national security needs as identified by the President and the Congress. Several of those pursuits result in explosive material wastes which must be treated.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>The largest present contributor to that waste stream results from the need to understand the constantly evolving Improvised Explosive Devices that maim and kill thousands of our troops in the Middle East and have and will in other theaters of modern warfare. LANL transfers what is learned at the Laboratory directly to soldiers who can put that science to immediate use reducing casualties on the battlefield. What is more important, a possible minor risk to common earthworms and mice in a small patch of LANL property or the lives and limbs of our military service personnel?</p> <p>Waste is also derived from research relevant to detection of explosive devices at airports and other transportation hubs, reducing the spread of nuclear weapons, and from cleaning up legacy laboratory facilities. All are worthy pursuits,</p> <p>These are just a few of the many, many areas of research providing technical solutions to national problems that are part of the ever more diverse missions of the Laboratory.</p> <p>Treating waste materials near their point of generation in space and time creates fewer risks to fewer people, and to the environment, than transporting the waste for treatment elsewhere.</p> <p>These components of the LANL mission are essential to the national interest. The risk associated with open burning of energetic waste, if it is significant at all which is questionable, is less than any other means of accomplishing this treatment. I urge you to issue the requested RCRA permit for open burning of energetic waste materials at LANL.</p>		
154	Gen.	<p>I'm a former 15-year employee of LANL and a resident of Los Alamos during that time period, total 40-year resident of New Mexico, but I wanted to make it clear that I'm speaking here in my own capacity, I'm no longer affiliated with the laboratory or the University in any way. So I'm just speaking on my own this morning, and I just have a couple of brief comments.</p> <p>I wanted to comment on two issues, the first issue being the open burn issue. I would like to make my request that that permit for open burn not be denied to the laboratory. I understand that there are risks associated with the open burn and there are risks associated with running the laboratory. There always has been. I think that the laboratory has done an amazing job over the years of reducing those risks, and I also believe that whatever risks there are in open burn at this point in time are far lower than</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

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		<p>the risks that are being faced by our young men and women who are serving in Iraq right now and in Afghanistan. My own daughter is serving her second – her second term in Iraq. It's a very, very frightening, very scary place to be. I think that LANL is uniquely qualified to perform the kinds of research that needs to be done to protect our national security, and I think the open burn is essential to the performance of that research. So I encourage that that permit be allowed to continue, that they be allowed to continue to open burn.</p> <p>The second issue is just a little bit more general, and it's about the final issue of the permit to the laboratory to continue their hazardous waste work. This has been an 11-year process that has involved tens of thousands, perhaps hundreds of thousands of pages of documents, and hundreds of millions of dollars have been spent, and as a taxpayer of the State of New Mexico and of the United States, I'm very frustrated with the fact that so much time and effort and money has gone into this process, and not as much work has been done as could have been done if that money had been redirected to the actual performance of the environmental restoration that it was intended for. To me, it seems like the bureaucracy has overtaken events here, and I would encourage the New Mexico Environmental Department to move forward, allow the laboratory to do the work that they need to do in order to get -- to get something accomplished in this area.</p>		
155	Gen.	<p>I think the chemicals in question that the people are worried about are the -- are, basically, part of the chlorine cycle, natural chlorine cycle of the earth processes, especially the chemical groups in question are the dioxins and the furans. Basically, those chemicals are naturally occurring chemicals in wood, in forests, and in other areas, natural burn processes of volcanoes and other naturally occurring gases, as well as manmade combustion engines and various others, and that is actually on the website of those groups who oppose the -- those kind of chemicals themselves. I found that on Wikipedia and basically on-line text.</p> <p>Well, those two chemicals -- chemicals fall into the two basic groups that comprise 75 and 140 some chemicals, exact chemical compounds, and I don't think -- I don't know if we have enough time to discuss it, but I just wanted to comment on all those things, that even the chemical structures are indicative of chemicals that occur naturally in the strata of the soil over many millions of years, even before the recent developments since the</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>1930s or '40s of the cold nuclear programs of the world.</p> <p>In addition, I can comment on that what everybody worries about is the effects on the biologic/ecological systems by those chemicals, if there are any. Still, it's inconclusive. Every finding that they have any effect at all is in terms of the history of the earth and formation of live biological systems on the earth. Those chemicals have been present in the living tissue throughout ages and generations for millions of years, or hundreds of thousands of years, at least.</p> <p>Also, I want to comment on what people call emitting radiation of chemical compounds, as discussed in this hearing. Those regulatory effects are actually present not only in areas on the surface, where there is no activity, any kind of nuclear or manmade activity, they are present as natural components of fields in the earth, what's called -- I remember a lady mentioned alpha radiation, all radiation. So I don't think I have enough time to go into all the specifics of that, and I don't think it's appropriate right now, but just an overview of that's how it actually is.</p>		
156	Gen.	<p>New Mexico citizens will be exposed to potential highway accidents involving high explosives if the New Mexico Environmental Department denies Los Alamos National Laboratories' permit to treat those explosives at Los Alamos.</p> <p>Each year, LANL, Los Alamos National Laboratory, safely burns many thousands of pounds of high explosive waste at temperatures sufficiently elevated to destroy all toxins and render them inert. If the permit is denied, these wastes will have to be transported on New Mexico's public highways to treatment facilities in distant states. Cost-wise, it is cheaper to ship these wastes; however, LANL made the choice decades ago to treat on site in order to eliminate public exposure. Ironically, the New Mexico Environmental Department is now attempting to force the laboratory to take the cheaper, but much less safe course. The role of the Environmental Department is to protect, not endanger, the public.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
157	Gen.	<p>The work done for our national security at LANL over the past 65 years has resulted in undeniable damage to the environment of Los Alamos and surrounding areas, and this damage must be repaired. As a citizen of New Mexico and a candidate for New Mexico House of Representatives, District 43, I strongly support the New Mexico Environment Department's responsibility to regulate the cleanup of past environmental damage and to</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>regulate present operations at LANL involving hazardous wastes.</p> <p>As a citizen of the United States and a scientist at Los Alamos National Laboratory, I also support the work done there for our national security. Some of this work involves research into how to deal with emergency situations involving high explosives and high explosive residues, which can be extremely hazardous. Experts at LANL provide training to military personnel and first responders who have to deal with such situations.</p> <p>The safest way to dispose of the hazardous material produced in this research and training is to move it as little as possible and then burn it in the open with high temperature burners. New Mexico Environment Department and Los Alamos National Laboratory agree that this procedure produces almost no air pollution or additional health risk to humans and little other environmental impact.</p> <p>The work at LANL that requires open burning can save the lives of people who are asked to deal with hazardous situations. One of my duties is emergency response involving high explosives. It would be irresponsible for NMED to place me and my fellow responders, military and civilian, at greater risk by denying the lab permission to dispose of such waste in the safest and cleanest possible way. Los Alamos National Laboratory personnel, such as myself, are ready and willing to do this work. The State of New Mexico should not tell the nation to find another place to perform this important mission.</p> <p>I urge the New Mexico Environment Department to allow continued controlled open burning of the wastes produced in this work at Los Alamos National Laboratory. The lab has agreed to appropriate monitoring of any potential environmental impacts.</p>		
158	Gen.	<p>My family and I live in Los Alamos, and I operate a small business here. I'm here today in my capacity as Chairman of the Board of Directors of Los Alamos Commerce and Development Corporation and Los Alamos Chamber of Commerce.</p> <p>Our Board represents about 300 members, member businesses and organizations throughout our community and area that employ thousands of citizens in Northern New Mexico. We support approval of the proposed hazardous waste facility permit for the Los Alamos National Lab. Furthermore, we find that no reasonable rationale, based on health, safety or environmental concern, has been presented by the New Mexico Environmental Department or any other party for denial of Los Alamos National</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>Laboratory's permit for the open burn units at TA-16; that the LANL operations and capabilities supported by the LANL open burn capability are important to the security and safety of our armed forces and the nation, in general; and that the LANL operations and capabilities supported by the open burn capability are important to the present and future economy of New Mexico.</p> <p>For these reasons, we respectfully request that the New Mexico Environment Department approve the referenced permit to include the requested permission for the open burn units at TA-16-388 and TA-16-399. In addition, our Chamber of Commerce has made a petition available at our office over the past weeks so that people could come by and sign to indicate their agreement with our position.</p>		
159	Gen.	<p>I worked at the lab for 38 years, and I've been retired and been involved in the community since 1990. I wanted to -- during my years at the lab, I worked in a number of the research programs, but included -- most of the years were involved with the weapons program, and ten of those years were with the GMX Division, which dealt with high explosives. So I have some concern about how these are used.</p> <p>I wanted to make just a few quick points. One is -- it's already been stated, but I'll state it again. The burning -- I support the permit. The burning is clean, and it's done with -- with a high temperature, with propane torches or butane torches, and it's done at a high enough temperature that the elements involved or the chemicals involved will be dissociated into their basic elements of hydrogen, carbon, and so forth, light elements, none of which will harm the atmosphere or harm anybody around -- beyond the immediate area.</p> <p>I wanted to say that -- and I think it's already been stated by a previous speaker -- that if you were forced to put this material -- put these small quantities of high explosives on a truck to ship somewhere else to be burned, that would be much more dangerous. Any trucking -- I'm sure the people of Santa Fe wouldn't want these trucks going through downtown Santa Fe with this explosive on them. It should be -- the disposition should be inside, where it's created, where it was used. Now, that has to do with the process itself.</p> <p>The second point I want to make, or major point I want to make, is that the HE capabilities, the ability to use high explosive at Los Alamos, has long been crucial. First, this -- it's my understanding that this particular permit is -- only involves this burning of</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>a small -- of small amounts of HE, and that that's what the permit is about, and that is required, and that's being requested. But these small amounts of HE are -- as was stated previously, are being used to do research to -- and again, for the roadside bombs, to learn how to handle roadside bombs, and all kinds of possible high explosive-induced harm that could come to our troops in Afghanistan, or other people in our situations, terrorist situations.</p> <p>So that -- and that's -- and this program is just a small spin-off of the major high explosive work that's long been done at Los Alamos. It's crucial that in considering the permit you also consider the value of the need for the work being done -- of the high explosives being done, and the high explosive work at Los Alamos is traditional, it's necessary for the understanding of nuclear weapons, and it's necessary -- for example, just if you want to get the -- if some of the people who are concerned about this, if they want to get a comprehensive test ban treaty ratified, they better let us keep on using high explosives at Los Alamos.</p> <p>I strongly support the permit.</p>		
160	Gen.	<p>My very interesting career at the lab makes me realize that the work that is being done there has -- has had worldwide impacts for years. I was interviewed by BBC several years ago, and they said, "Do you think you had anything to do with tearing down the Berlin Wall?" And most certainly, all you have to do is read the newspaper, and when the Russian scientists started coming in to Los Alamos to visit, and so forth, they realized real quick, "Hey, you know, this is a jewel in world peace and doing what's best for the -- for the world." As we're trying to do that, this seems like such a small petal. And by the way, my career went from everything from computers to human resources, and I ended up with a career in the Environmental Strip Chip Division, where I had the pleasure of working with the NMED, and they are very sharp people, so this is a path that we should be thinking about.</p> <p>This is just a finite problem that's going on, and it's not going to impact New Mexico. I was involved in a project about 20 years ago, when we were looking at having a high temperature incinerator, and some of our people in town said, "Well, hey, that's going to cause so much damage," and they would put out less contaminants -- and this was 20 years ago -- less contaminants than five wood stoves here in Taos. So our scientists here do know what they are doing and do know what they are getting us into and out of.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>My prop is a photograph of all of the New Mexico servicemen that have been killed in Afghanistan and then in Iraq. And when you look at that, it looks like a very nice high school graduation picture; all these young soldiers and military people are in there. So what we're trying to do here in Los Alamos is to make it safer for them. One of the servicemen that spent time over there as an officer shared with me that the last couple of years that -- when he was over there, they knew that the roadside bombs could get them and would get them. Well, what Los Alamos is doing now is trying to control that and make it safer for not only the servicemen, for world peace, but also for the citizens of the United States when they are traveling on the airlines.</p> <p>So, to me, it just seems a real simple deal, rather than trying to have more pictures of the graduating class of the American citizens in United States, of all of the states that are losing soldiers and losing citizens, but in New Mexico, and then I looked at that picture with all of those people, I thought of the families, and I thought that I'm so glad here in Los Alamos we're doing a little bit to help them.</p>		
161	Gen.	<p>I am here wearing two hats, sir. My first hat is I am the Chairman of the Los Alamos County Council, and I am here to represent the governing body's unanimous view of this potential permit. I also wish to speak to you, sir, as a former -- as a veteran, who has served 21 years in the service of our country, and a person who volunteered and worked in Baghdad, in the Green Zone, as the Iraqi parliament was standing up its first government after the overthrow of Saddam Hussein.</p> <p>So, first, sir, I'd like to speak to you about what the governing body's position is on this permit. The Los Alamos National Laboratory is seeking an open burn permit to continue to allow for the open burning of various products generated at LANL, including live ordnance that has been fired but which did not detonate upon impact. The incorporated County of Los Alamos does not oppose the LANL open burning permit at Technical Area 16 based upon the information provided to the county from LANL and the New Mexico Environment Department. However, the county does not support any plan that would result in unexploded ordnance being transported onto our local roads.</p> <p>According to the September -- excuse me, according to the February 2nd, 2010, notice of intent to deny the requested open burning permit at TA-16 to LANL, the NMED opined that open burning posed a risk of generating furans and dioxins. According to this notice, the results of the human health risk assessment demonstrated that additional</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>analysis is not required and evaluation of soil data indicates there are no adverse impacts from exposure to either residential or industrial receptors. The notice also indicates that air modeling demonstrates that risk above target levels to human receptors is not likely. The basis for permit denial appears to be focused on two factors: public opposition and the uncertainty of ecological risk to the deer mouse.</p> <p>The county is not part of the public opposition to open burning. However, the county is opposed to one of the alternatives set forth in the NMED notice of intent to deny - transporting the unexploded ordnance for disposal. The county does not support any plan that would result in unexploded ordnance, some containing high explosives, being transported beyond the boundaries of LANL onto county and state roads. Shipping the applicable waste off site is not a viable alternative to open burning due to the inherent human health and safety risks associated with such shipments. Such ordnance has the potential of being unstable and its transport on public roads introduces an unnecessary and unacceptable hazard into the community.</p> <p>NMED identifies in its letter that the ecological risk of furans and dioxins is characterized as low to moderate, with only a slightly elevated hazard to the deer mouse, which is neither an endangered or threatened species, and is, in fact, a rodent that is regularly used for laboratory tests. Further, the proposed permit denial does not address the risk to human health posed by the deer mouse. The deer mouse has been identified as a carrier of the hantavirus, a deadly virus which is present in Los Alamos County. Under these circumstances, it would be appropriate to consider the risk of the deer mouse to human health compared to the risk of transporting unexploded ordnance through the community. Comparing the relative low risk, which seems to be currently unknown, to the deer mouse from on-site burning, with the risk to humans associated with transporting live, potentially unstable ordnance outside of the laboratory, on-site disposal appears to be appropriate. Further, such a balance of risk considerations would be expected to alter at least some of the opposition to the permit that influenced -- and I hope to influence -- NMED's decision.</p> <p>I would also like to speak to you as a veteran and as a civilian who went into the war zone and lived in the Green Zone and worked with the Iraqi government.</p> <p>Every day, I watched our brave young men and women drive out on their combat patrols to escort dignitaries, to escort supplies, to fix infrastructure, and come back in,</p>		

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		<p>and go out prepared and trained for unexploded ordnance and vehicle incendiary devices, and every day the insurgents tried something different, from hiding explosives in dead animal carcasses, to bushes, to rocks, to anywhere that they could, to hiding them in vehicles, and not being able to stay one step ahead of the technology that the insurgents were using.</p> <p>The research done at the Los Alamos Laboratory is conducted primarily by a team of five of the seven chemists in the country that are familiar with the most detailed explosive experiments being conducted today, and this research is vital to the end user, which is our military troops on the ground trying to fight a war for the United States. I urge the NMED to consider the technical aspects of this and grant the permit requested by LANL.</p>		
162	Gen.	<p>I've lived in Los Alamos for 31 years and hope to do so for many more.</p> <p>Hence, I have as much interest as anyone in the safety of the people and environment of this community and region. I'm presently serving my eighth year on the Los Alamos County Council and have worked on various health, economic, transportation, environmental, governmental and other civic issues, locally, in the North Central New Mexico region, and throughout the state for nearly 20 years. The statement of the council was just provided separately. I speak here as an individual.</p> <p>The mission of the Los Alamos National Laboratory is to provide science to support national security needs, as identified by the President and the Congress. Several of those pursuits result in explosive material wastes, which must be treated. The largest present contributor to that waste stream results from a need to understand the constantly evolving improvised explosive devices that maim and kill thousands of our troops in the Middle East and have and will in other theaters of modern warfare. LANL transfers what is learned at the laboratory directly to soldiers who can put that science to immediate use, reducing casualties on the battlefield.</p> <p>What is more important, a possible -- and I emphasize possible -- minor risk to common earthworms and deer mice in a small patch of LANL property, or the lives and limbs of our military service personnel? Waste is also derived from research relevant to detection of explosive devices at airports and other transportation hubs, reducing the spread of nuclear weapons and from cleaning up legacy laboratory facilities. All are worthy pursuits. These are just a few of the many, many areas of research providing technical</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>solutions to national problems that are part of the ever more diverse missions of the laboratory.</p> <p>Treating waste materials near their point of generation in space and time creates fewer risks to fewer people, and to the environment, than transporting the waste for treatment elsewhere. These components of the LANL mission are essential to the national interest. The risk associated with open burning of energetic waste, if it is significant at all, which is questionable, is less than any other means of accomplishing this treatment. I urge you to issue the requested RCRA permit for open burning of energetic waste materials at LANL.</p>		
163	Gen.	<p>I am a chemical engineer retired from Los Alamos National Laboratory. For 41 years, I've also been a volunteer public advocate for a healthy environment. My years of volunteer work include testifying and cross-examining at numerous regulatory hearings, participating in public projects of the NMED and others, and writing a regular environmental column in the Los Alamos Monitor since 1971. From this background, I submit comments on the issue of open burning of high explosives at LANL.</p> <p>The comments are consistent with my long-standing approach to making environmental progress. They apply equally to open burning for disposing of high explosives and open burning for training nonnuclear bomb technicians. The propositions I've used to help bring large and long-lasting environmental gains rest on certain principles. My criteria are: one, apply the best technology to minimize pollution that is consistent with sound economics; and, two, weigh the total degradation of the environment that results from each alternative proposal.</p> <p>In short, the best solutions work for more than one piece. These principles raise two specific questions in the issue of open burning at LANL: Is stopping the open burning a sound use of pollution control expenditures? Secondly, how much total degradation of the environment results from each alternative proposed?</p> <p>I assume stopping the open burning will result in trucking the high explosives to another state to be burned or disposed of in some way, or will result in building a structure here of sufficient dimensions to continue the work here. I don't know what those dimensions are for the test work on bombs, it could be very large. I do not have the information required to sum up answers to the key questions. The NMED has much more of the</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>relevant information, as do others.</p> <p>To my long-tested way of thinking, it is important to use the best available information that answers the questions. Not to do so weakens the fabric of regulation itself and diminishes the sum of public support for regulation. I believe in regulation and I actively support its effective and efficient use, and have spent many, many months and man-years over 41 years pursuing that.</p> <p>In the long run, maintaining public support for sound regulation is vital. My comments are not answers, but guidance. My aim is to broaden the assessment enough to gain the best long-lasting results for the environment.</p>		
164	Gen.	<p>As State Representative for District 43, I represent all of Los Alamos, part of Santa Fe County, part of Sandoval County. I served six years on the Los Alamos County Council. I have been in the legislature for 20 years. I do plan to continue.</p> <p>You know, over the years -- we've lived in Los Alamos for 52 years, and so when other people get up and say we've lived here for 30 some years, I think, "Gee, I've lived here 52 years already." Cleanup has been a big issue over the years, and I don't want to get into what we call -- talk about as far as RCRA goes, but it is part of what we're talking about. I have worked with DOE many times, I've made many trips to Washington over funding issues for the cleanup, and, yes, we have worked on it diligently. We haven't always agreed with the Environment Department, but that's been our own disagreement.</p> <p>Let's get into the safety of what we're talking about now -- the open burning versus the transportation. The open burning does not cause the damage that we are afraid that the transportation -- we have not seen what regulations we would have for the trucking. We have not seen how we can transport it safely, the materials that are in the open burning. I do not want to repeat everything everybody has said, I would just urge you to listen and move forward with due diligence on the RCRA permit.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
165	Gen.	<p>I'm a Los Alamos County Councilor. There is no better place to come than the beautiful State of New Mexico, and I appreciate the efforts of NMED to make sure that our water is safe to drink and our air is clean, and I appreciate the work that you do.</p> <p>I would like to speak in favor of granting the open burn permit for Los Alamos, because</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>I believe this is the best way for us to safely dispose of this HE waste.</p> <p>I was impressed with the record of Los Alamos National Laboratory in dealing with HE waste. Over the last few years, they have reduced the amount of HE waste that they produced by more than half, and I think that's to the benefit of Los Alamos County and all of Northern New Mexico.</p> <p>But there is a real danger in transporting this material on our roads, through our communities, through residential areas, and I don't like to see that happen.</p> <p>In the course of making a decision about whether to grant the permit or not, I think if the permit were to be denied, I think that should be based on hard, concrete evidence that this practice of open burning will, in fact, have a damage to the environment and have an adverse impact on wildlife. One of the treasures that we have here in the State of New Mexico is our beautiful environment, and we don't want to see that tarnished. I don't see conclusive, concrete evidence that this activity at Los Alamos National Laboratory will have any detrimental impact on wildlife in the community.</p> <p>I'd like to point out that this activity is done in an isolated, outdoor burning pit. I see very little chance for interaction with wildlife. And, furthermore, I characterize this kind of disposal of waste as being no more dangerous than burning charcoal in one's backyard. I think this really is the best way to dispose of these materials.</p> <p>But what is concrete -- and as I've said, I don't see that the damage to wildlife is concrete, but what is concrete, should the permit be denied, is the fact that science is going to be hurt at Los Alamos National Laboratory, and I believe, ultimately, we will lose not only the capability to do research that's vital for our country, but we're also going to lose jobs here in Northern New Mexico, and I don't want to see that happen. If the permit is denied, this work will go somewhere else, and we're still -- we have the capability to do it right now at Los Alamos, there is going to be a delay before that capability gets reproduced somewhere else, and while we're delaying, we're denying the opportunity of our government to find ways to defeat improvised explosive devices and the kinds of threats that we could face, not only in our airports and subways, but that our soldiers are facing every day overseas. So I think that in the absence of any concrete evidence that this is going to hurt the wildlife, I would urge NMED to approve the open burn permit.</p>	Comments.	

No.	Loc.	Comment	NMED Response	Δ
166	Gen.	<p>I'm enormously disappointed by this attempt to stop the lab from burning excess high explosives. Given all the technical information available, there seems to be no other reason for this decision other than politics. In fact, it seems that this decision is a misguided political attempt to stop or make more difficult programs that use unique laboratory skills to protect our troops and our citizens.</p> <p>Much has been made from the threat to our troops from improvised explosive devices. I'll point out it's not only our troops. We face occasional -- thank goodness, they are only occasional -- problems in our homeland as well.</p> <p>We recently just remembered the 15th anniversary of the Oklahoma bombing. Thank goodness that that hasn't been repeated. But the same science that will address these issues for our troops overseas may have to address those at home, and it would be best to be as well prepared as possible.</p> <p>I also speak from a very personal view. I have a son who is a Marine -- who was a Marine in Iraq and served and who was with one of these young men that died. He was later disabled by an IED, while in service in Iraq. So any attempt to stop the science that will further protect our troops, I find to be objectionable, at best.</p> <p>I've been involved in New Mexico state politics for some time. I've been a consultant to numerous state agencies. I've been an acting IT manager for the state Supreme Court. I've served in the Governor's Cabinet. I was a member of -- I was a leader of one of Governor Richardson's transition teams. And this -- and I must say that this is the most - - let me rephrase that -- this is the least rationale-based decision I've ever seen, and I highly object to this blatantly political decision. I consider it irresponsible at best and malicious at worst.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
167	Gen.	<p>I'm a resident here in Los Alamos County, and it's in that capacity that I'd like to speak. In addition, I'm also the principal associate director for weapons physics here at the lab. My own technical background is that I'm a physicist. Early in my career, I actually did quite a bit of work with HE myself, and so I think from that background, I have some understanding of HE and HE operations.</p> <p>I'm speaking in support of the laboratory's request for the open burning permit. The first piece of this, in my mind, is that the open burning permit, I believe, allows a very safe,</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>very environmental sound approach to dealing with the explosives that we're using in the broader national security mission that goes beyond the weapons program at the laboratory. Compared to the alternatives, such as transportation over the roads, I believe this is a very sound way to approach the issues.</p> <p>The second is that this capability at the laboratory enables us to support, as I said, the broader national security mission, but in particular our troops who are deployed today in Afghanistan. As you probably know, the laboratory has a training effort that it does for soldiers who are on their way to Afghanistan, and I've been privileged in my laboratory position to be able to go out and see some of these courses, to see the young soldiers who are on their way to Afghanistan. The kind of work that the laboratory does in showing these soldiers what to expect, what they can see in terms of improvised explosive devices, how to recognize the precursors and then deal with those, I believe, is saving lives today.</p> <p>So I believe that the permit that the laboratory has applied for here is not only a sound thing to do, but also is important in the broader national security mission and in saving lives.</p>		
168	Gen.	<p>I'm speaking today as a private citizen, although I am employed at the laboratory. I support the continued burn operations at TA-16. Yesterday, I was fortunate to receive two environmental awards for eliminating truly hazardous waste from TA-16.</p> <p>The most environmentally friendly way to deal with the materials we're discussing is by open burning. There is -- there is no documentation or evidence to support that that is not the most environmentally friendly way.</p> <p>I support the national security mission of the laboratory in this respect and point out that in addition to the lives and the faces that were on the poster presented by Carl a few minutes ago, there are very many hands and feet and arms and legs spread over Iraq and Afghanistan that our work can help prevent the recurrence of.</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
169	Gen.	I'm writing you at this time because of recent events involving your Department and the Los Alamos National Laboratory. Specifically, my concerns deal with the continued	Comment noted. See the Department's response regarding	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>ability of the laboratory to dispose of its energetic waste materials on site.</p> <p>I understand there are a number of related health and environmental considerations to be addressed within the framework of the permitting process, but I want to restrict my comments to the safety aspects because that's where my area of expertise lies. For over 40 years, I have been directly involved in work with explosives, munitions, and explosives safety for both the Department of Defense and the Department of Energy. The practice of packing and shipping energetic materials off site for treatment that can be accomplished at their point of origin -- that is to say, the laboratory -- flies in the face of the cardinal principle of explosives safety as accepted by the Department of Energy, Department of Defense, and every other agency handling explosives or energetic materials, to wit:</p> <p style="padding-left: 40px;">Expose the minimum number of people to the minimum amount of explosives for the minimum amount of time.</p> <p>Los Alamos is well positioned to safely and efficiently treat explosive waste materials generated on site. Transporting these materials to an off-site location will involve additional packaging and handling operations as well as subjecting the energetic materials and those individuals sharing the highways and surrounding communities to the risk of exposure to an explosive accident. Such accidents can and, in fact, have happened. The reference is the collision between a tractor/semi-trailer transporting bombs and an automobile, resulting in fire and explosions, which occurred at Checotah, Oklahoma, August 4th, 1985. The reference is NTSB Number SIR-87-01. I note that this accident was caused by the driver of the automobile, not by the truck transporting the explosive materials.</p> <p>In addition to its traditional activities in support of congressionally mandated national defense programs, Los Alamos has been assigned an increasingly significant role in support of the nation's homeland security and counter-terrorism programs. Many laboratory activities in support of these programs generate explosives waste products and require the ability to treat this waste in a safe, efficient, and environmentally responsible manner. As noted above, transport of this waste to an off-site location may not always be feasible and it's not often the safest alternative.</p> <p>The loss of the capability to accomplish this treatment at Los Alamos can place nationally important programs at risk, jeopardizing the future of the laboratory and the</p>	<p>open burning in the document titled General Response to Comments.</p>	

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		economic vitality of Northern New Mexico. I certainly support the continued on-site disposal burning of the explosives waste materials we generate here.		
170	Gen.	<p>I'm currently an employee of the Los Alamos National Laboratory and a resident of Santa Fe. My comments here are my own and should not be construed to represent LANL's position.</p> <p>As a mother of small children, and like any concerned resident, I want to make sure the air we breathe and the water we drink is healthy and safe. I think much of the permit that NMED has prepared is a positive step. It is important that we each -- that each waste storage, treatment and disposal site in New Mexico receives a permit. Permitting requirements need to be consistently applied, and requirements need to be based on regulations and provide clear and consistent guidance for facilities to operate under and for the regulator to enforce.</p> <p>However, there are several key issues that I would like to address. First, the removal of the open burning is not a -- is not justified on environmental grounds. The treatment units for open burning are designed so that they burn hot and clean. No impact to human health or the environment is present. However, if NMED imposes a requirement to ship the waste elsewhere, the trucking impacts could be significant, because there are few, if any, in-state options for burning this type of hazardous waste, and these wastes must be burned, if not here, then somewhere else. Frankly, I trust the Laboratory's environmental controls more than I would trust the environmental controls of burning in Texas or elsewhere, where they may not have the environmental requirements to burn hot and clean like we do.</p> <p>How many miles to the gallon do these big hazardous waste trucks get? What are the emissions of the big hazardous waste trucks? What are the safety hazards posed to other drivers in New Mexico by the trucking? These environmental impacts could all be avoided by allowing the open burning. If there were significant auto emissions resulting from the open burning, I would feel very differently about this issue, but that is not the case.</p> <p>Second is the information repository. Anything other than a virtual information repository is not justified, again, on environmental grounds. It has been proposed that in addition to the virtual repository there be hard copies of everything stored in a location in Espanola. We're talking about stacks and stacks of paper, and many trees sacrificed to</p>	Comment noted. See the Department's responses regarding open burning and the information repository in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>maintain this hard-copy repository. Additionally, it encourages people in Santa Fe and Los Alamos and other places to drive many miles to review the information. Automobile emissions are one of the top sources of emissions in the state and in this country.</p> <p>I recommend keeping the repository on-line, accessible to all, in a modern 21st century way, and preventing loss of trees or unnecessary automobile emissions. Thank you for your consideration. Protection of the public health, as well as the environment, is an extremely high priority for both sides of this issue and for all of us who live and work here. Please make sure that the environmental health and safety issues are truly guiding NMED's decision making.</p>		
171	Gen.	<p>My comments today are entirely my own. I support the draft LANL hazardous waste facility's permit issued by NMED with one important exception, that being the denial of permitted provisions for open burning units at TA-16, Buildings 388 and 399. These units provide the long-standing, on-site needs for safe, compliant, and effective ways to dispose of certain kinds of HE waste and waste contaminated by high explosives. I, therefore, focus my comments on this one exception and provide justification for reinstating permit provisions for these open burn units.</p> <p>My comments are those of a New Mexico citizen and a resident of the incorporated county and municipality of Los Alamos for more than 38 years.</p> <p>These comments are also provided from an unusual blend of expertise and working knowledge. Four years ago, I retired as a member of the Los Alamos National Laboratory and an employee of the University of California, following a career spanning some 35 years of national service. In the late 1980s, I served as deputy and subsequently the division leader for Dynamic Testing, which was the organization responsible for operations and facilities involving local testing with explosives, high explosive R&D, and emerging technologies employing explosives. I then spent several years as the deputy associate director for Nuclear Weapons Technology, the laboratory's major mission program. That assignment provided broader context for the importance of high explosive research and development for stockpile stewardship and for other emerging programs involving HE. And then in 1993, I began my eight years of service as the director and institutional executive manager for environment, safety, and health. In this capacity, I had responsibility for environmental protection, worker safety and</p>	Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>health, and public safety and health. It is perhaps ironic that during my term as ES&H director for the laboratory, I was the laboratory's signatory on several of the facility-specific permit renewal applications that are included in the draft hazardous waste permit. The irony is not that I signed the applications, but that I did so more than a decade ago in 1999 and 2000.</p> <p>I give you three reasons for reinstating the permit provisions for the open burn units, and I'm sure that in testimony throughout the last month there have been many more. First, I submit that responsible regulatory processes require an objective basis for denying existing and long-standing operations. Since there is no objective standards-based evidence as to the operational risk presented by the continued use of these units to the safety and health of the laboratory workers, to the safety and health of the public, beginning with the residents of Los Alamos County and moving out into the communities of Northern New Mexico, or to the safety and health of the environment, either on the laboratory site or off site, there would seem to be in this instance no quantifiable basis for NMED's intent to deny these permit provisions.</p> <p>Second, I submit that the loss of these burn units would unnecessarily and irresponsibly compromise an R&D capability critical to national security, that being Los Alamos National Laboratory as an international center of excellence for high explosive research and development and for technology advances involving explosives. As the laboratory has testified, certain mission-based efforts involving high explosives, including present efforts which focus on counterterrorism and proliferation, depend on the burn units for disposal of explosives waste. Whereas, critics postulate that other means are available for explosives waste disposal, assuming LANL's desire to continue such research, I commend to you a recent study that suggests otherwise.</p> <p>The study concerned the transfer or closure of Site 300 at Lawrence Livermore National Laboratory in Northern California, the sister laboratory to Los Alamos. This study contains a comprehensive analysis as to the merits of options given an assumed closure of Site 300 burn units similar to those operated by LANL. The study was conducted by TechSource, using a team in which I participated and chaired. TechSource is a small company employing retired national laboratory and NNSA experts. It is recognized by the federal government for its independent, objective, and comprehensive analyses of national security issues, especially those related to the weapons complex. The study,</p>		

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		<p>submitted to DOE/NNSA in September of 2008, was done in the context of evaluating preferred alternatives in NNSA's draft Complex Transformation Supplemental Programmatic EIS. After assessing the full range of disposal options, the TechSource team concluded that, desired by NNSA, the continuation of Livermore's high explosive research and development excellence, quote, "depends on the retention of specific support capabilities at Site 300, especially those for HE waste treatment (that is, disposal) and storage," end quote.</p> <p>Translating, closure of the Site 300 waste treatment capability would lead to a demise of the Livermore HE R&D capability, in that there were no safer, effective, sustainable, affordable, or permitted options to on-site disposal of explosives waste. I submit that such would be the case for Los Alamos -- for the Los Alamos National Laboratory emerging mission programs if the permit provisions for the burn units were not to be reinstated.</p> <p>I further believe that this issue would become a moral dilemma for the State of New Mexico. Following through on the NMED intended action to deny operation of the open burn units would sideline Los Alamos National</p> <p>Laboratory's world-class researchers in the current national imperative to find technical means to detect and defeat improvised explosive devices at a safe distance. We all know that such devices continue to kill and maim American soldiers and those of our US allies. Denying participation in this quest to save lives and disabling injuries, without objective reason, is, in my judgment, unconscionable.</p> <p>Third, and finally, I submit that denial of permit provisions for the open burn units at Los Alamos on what appears to be a purely subjective and arbitrary basis would compromise New Mexico's regulatory responsibility and integrity. The lack of objectivity in this situation is dismaying and inconsistent with expectations for fair, defensible, and transparent regulation. Having served on loan from the laboratory as Governor Richardson's science policy advisor early in his administration, I have great admiration for the Governor and his accomplishments during his two terms. Following through on NMED's intent in this regard will, I am sad to contemplate, not be viewed as a positive accomplishment of this administration for the reasons I've stated and for many other reasons entered into the record by many others.</p> <p>So given my justification and that of others, I provide the following recommendation.</p>		

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		<p>So given the intent of NMED to deny permitted provisions for the open burning units at TA-16, Buildings 388 and 399, and given the lack of objective-based and quantifiable risk to workers, the public, and the environment to support the intent, and given the consequential negative and unconscionable impact that such intent would have on near-term and long-term national means involving high explosives research and development and technologies, and given the associated negative impact such intent, if implemented, would have on the need for fair and objective regulation in the State of New Mexico, I recommend reinstatement of said permit provisions in the draft Los Alamos National Laboratory hazardous waste facility permit, and further recommend, upon reinstatement, its speedy issuance to conclude 12 years of process.</p>		
172	Gen.	<p>I represent a company called Energy Related Devices in Los Alamos. When I heard about this, I was concerned that, as a business, I want to see sort of equal treatment to all businesses.</p> <p>So if you want to shut down -- since you are open burning explosives, if you think about all the other businesses or home residences that have open burning or people who have campfires and say, "Well, are we applying the rules to all of them equally?" I see the laboratory as a very remote facility and that burning can be taking place far away from the general public, so the impact is very small.</p> <p>So I'm trying to question why are we concerned about open burning of explosives, when it's probably the safest thing to do to get rid of those explosives, when the general public does have fires and they burn things that are probably just as hazardous. So what is the tolerance level, and how do we make sure that it's sort of an equal application of the rules and regulations.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
173	Gen.	<p>I'm here as a private citizen. I have three children, who we raised here in Los Alamos. When I think about balancing the really small risk between transporting HE and burning HE, I would take burning HE any day, when I think about all of that -- those tons of explosives going along the public roads.</p>	<p>Comment noted. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
174	Gen.	<p>I'm with College Democrats of America. College Democrats of America has a New Mexico division. We recently submitted a petition in support of allowing the waste</p>	<p>Comment noted. See the Department's response regarding</p>	Yes

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		<p>permit, and I'd like to read the literature as it reads on the petition. It says,</p> <p>I am in support of the Hazardous Waste Permit for Los Alamos National Laboratory to continue operations to continue to conduct cutting edge research and development for our nation.</p> <p>I am also in support of Open Burning activities in support of IED and counterterrorism training for our troops fighting wars in Afghanistan and Iraq.</p> <p>The denial of the Open Burning permit by the New Mexico Environmental Department is based on a very conservative risk assessment that showed a low risk to deer mice and earthworms. The issue is not enough to derail the important mission that LANL conducts to protect our troops from further harm from IEDs or the necessary training conducted for the Department of Defense regarding field identification of IEDs.</p> <p>By my signature below, I am asking New Mexico Environmental Department to grant the Los Alamos National Laboratory a hazardous waste permit that includes the Open Burning provision. I also understand I can submit more detailed and private citizen comment to: John Kieling at john.kieling@state.nm.us."</p> <p>Basically, we gathered the signatures from Northern New Mexico, as well as in the Albuquerque area. We're in support of allowing this permit because it establishes that New Mexico's willing to do business with our laboratories and provide long-term jobs. We feel that if the permit isn't allowed to continue, it sends a message to Los Alamos National Labs that New Mexico government isn't in support of cutting edge research and -- and development. We believe it's also important that they consider all the research, not just pick pieces out and make an argument based on that. We believe that New Mexico deserves the long-term jobs that this permit allows for, and if the permit isn't allowed, the research is going to go to another state, as well as those jobs, those taxes, those revenues will go to another state.</p> <p>We've sent letters to all of our Democratic leaders across the state, including Congressman Lujan, Congressman Teague, and Congressman Heinrich. We have a meeting actually with Governor Richardson today at 2 o'clock, when he's holding his open office hours, to submit the -- submit copies of this. And we're also lobbying with</p>	<p>open burning in the document titled General Response to Comments.</p>	

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		Diane Denish, who is our -- will -- Democratic nominee for governor to promote this. And we just believe that on behalf of all young people, especially College Democrats, that this is a very important issue to our state.		
175	Gen.	<p>Public Participation Must Be Early, Often, Meaningful and Continuous. The EPA has issued enhanced public participation requirements for early, often, meaningful and continuous contact with the public about cleanup of the old LANL dump sites that are known as MDAs. The 25 dumps contain "legacy waste" which are dangerous mixtures of chemical and radionuclide wastes. The LANL Legacy Waste Dump Sites include MDAs G, Hand L at Technical Area 54 (TA-54) and MDAs A, B, T, U and V at TA-21. DOE/LANL have been lax in fulfilling public participation requirements for the cleanup of the 25 LANL MDAs, such as providing access to documents and opportunities for public input into the decision-making processes and holding public meetings. Further, DOE/LANL is required to establish an Information Repository where permit documents are readily available to the public.</p> <p>As an act of Restorative Justice and in order to meet the needs of both urban and rural communities and future generations, NMED must require DOE/LANL to establish both a physical Information Repository in the Espanola Valley as well as a virtual Information Repository. Further, NMED must require DOE/LANL to meet the enhanced participation requirements for early, often, continuous and meaningful contact with the public as specified by the EPA for both the Consent Order and the Final LANL Permit.</p>	Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.	Yes
176	Gen.	<p>There is a need for a Physical Information Repository for permit documents in the Espanola Valley, as:</p> <ul style="list-style-type: none"> - a place for individual, student and community learning and research about the ten-year permit for continued hazardous waste operations at LANL, the permitting process, how to get involved and make comments. - an act of Restorative Justice and in order to meet the needs of both urban and rural communities and future generations, <p>Therefore, NMED must require DOE/LANL to establish both a physical Information Repository in the Espanola Valley, as well as a virtual (electronic) Information Repository before the permit is finalized.</p>	Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
177	Gen.	<p>I am a PhD physicist, retired for the last four years, following twenty years of employment at Los Alamos National Laboratory, in the Applied Physics Division (X Division). Prior to my LANL years, I worked for seven years as a Research Associate Professor of physics at the University of Connecticut. I have lived in Espanola for seventeen years.</p> <p>During the past two years I volunteered my time to the DOE's Northern New Mexico Citizens Advisory Board (NNMCAB), where I became familiar with issues concerning hazardous waste generation, storage, and treatment at LANL. While with the NNMCAB I also learned about the sometimes difficult relations between the present regulator, the Hazardous Waste Bureau (HWB), an arm of the New Mexico Environment Department (NMED), and LANL's present owner, the National Nuclear Security Administration (NNSA), as well as LANL's current management contractor, Los Alamos National Security Limited Liability Company (LANS-LLC). I also learned about the role played in these relations by local citizens groups such as Concerned Citizens for Nuclear Safety (CCNS), Nuclear Watch of Northern New Mexico (NWNM), and Citizens Action of Albuquerque (CAA), as well as local pueblos, especially those allied into the Eight Northern Pueblos; e.g., Pojoaque, Santa Clara, Ohkay Ohwingeh, San Idelfonso, Tesuque, Nambe, Taos, and Picuris.</p> <p>It was with much interest that I heard testimony presented at this hearing. I have also listened with interest to comments presented by many private citizens.</p> <p>I have been particularly struck by the emphasis placed by private citizens on the call for an information repository, to be located on the campus of Northern New Mexico College (NNMC). As conceived, this repository would be for the purpose of accumulating and making available to local residents information relating to the history of the generation, storage, and treatment of hazardous waste at LANL, as well as relating to the history of relations between the local communities and the DOE, the NNSA, and LANS LLC, and to relations with the previous management contractor, the University of California (DC).</p> <p>It appears that NMED is well aware of a desire on the part of local citizens for such an information repository. In fact, Mr. James Bearzi, head of the HWB/NMED, addressed this issue in Sect. IV. D. of his written testimony. However, he said in that testimony that it is the opinion of NMED that an electronic information repository should suffice.</p>	<p>Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.</p>	<p>Yes</p>

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		<p>Even so, he also says in his written testimony (Sect. IV. C.) that NMED is attempting to adhere to Environmental Protection Agency (EPA) concerns for the promotion of environmental justice among local communities. Such concerns require that local communities be provided with all possible opportunities to participate in decisions related to local environmental matters; e.g., matters resulting from the actions of government in New Mexico, especially the federal government.</p> <p>In this regard, environmental justice concerns would be better met, in my opinion, by the establishment of a permanent information repository at NNMC, than with a simple electronic repository. In my view, if such a repository is to serve the purpose for which it is intended, it must have an on-site staff, trained in its maintenance, and able to assist local citizens in their quest for information.</p> <p>Mr. Bearzi also refers to the RACER database in his written testimony (Sect. IV. G.). He points out that RACER is a compendium, in electronic form, of environmental data recorded in and around the Pajarito Plateau. He notes too that this database is already fully accessible to the general public (at least that part of the general public that has access to a PC and a high-speed data link) and is being well-maintained by the Los Alamos Community Foundation. He does not mention that it is currently a part of the RACER plan that RACER shall eventually be maintained by a staff located at NNMC.</p> <p>I would like also to recall a critical public comment made at this Hearing, this past Tuesday, regarding the influence of LANL on the local economy. In this remark it was suggested that an unfortunate dependency had been created in the local community on the economic benefits brought here by LANL over the last sixty years.</p> <p>It is in this context that J would like to speak briefly about the last few months of my two years of service on the DOE's NNM CAB. It was during this time that I first recognized the presence of a tension between Board members who believed that economic benefits brought by LANL to the local communities were always of paramount concern when dealing with regulatory matters, and other Board members who felt that health matters were much more important. In an attempt to quantify the strength of such opposing opinions, and the degree to which such opposed opinions were wide-spread in the local community, I conducted a public opinion survey.</p>		

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		<p>This survey was conducted in the fall of 2009 in the towns of Santa Fe and Espanola, and accumulated responses from 225 persons. The questions in the survey were written, the survey administered, and the results analyzed entirely by myself. In an effort to obtain some technical guidance in this matter, I did consult briefly with a staff member from Research and Polling, Inc. of Albuquerque.</p> <p>The results of the survey can be perused in my attached report (provided to hearing officer at hearing). In quick summary, these results show that there are indeed two strong attitudes about LANL to be found within the local community. One attitude is of appreciation for the economic benefits brought here by LANL. The other attitude is one of worry about possible environmental hazards arising from the type of work done at LANL. This second attitude is combined with uneasiness about the nature of that work itself, i.e., the R&D of nuclear weapons.</p> <p>Simplifying somewhat, approximately 25% of respondents felt that the economic benefits brought by LANL were great, while environmental hazards were of little concern, and uneasiness about nuclear weapons R&D was just not a factor. Approximately 25% of respondents felt just the opposite, i.e., while economic benefits did not impress them, the threat arising from environmental hazard was great, and the culture of nuclear weapons was rejected strongly. Interestingly, ~50% of respondents displayed both attitudes simultaneously. For these conflicted individuals, there was an awareness of a clear economic benefit brought by LANL to the local community. At the same time, however, worry about possible environmental hazards due to the business of LANL, and uneasiness about the nuclear weapons industry was also great.</p> <p>In closing, I make the claim that it is the effect of LANL's business on the local community which should be the subject of further study. Evidently, this effect is perceived to be wholly positive by some and wholly negative by others, but generally both positive and negative effects are experienced simultaneously by at least half the members of the local community.</p>		
178	Gen.	<p>I support the people of Espanola in requesting a physical repository be required in the RCRA permit!</p> <p>Safeguard us from these deadly poisons at LANL! Do not cave into pressure from LANL and the U.S. government! How will future generations judge your decisions?</p>	<p>Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
179	Gen.	We request that there should be both an electronic and a physical information repository.	Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.	Yes
180	Gen.	EPA recommends that the Informational Repository at a minimum be a physical repository to allow access for individuals without internet capability.	Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.	Yes
181	Gen.	<p>I'm a Sister of Loretto, and I am authorized to speak in the name of the entire Loretto community of sisters and co-members. The Sisters of Loretto have been in the Northern New Mexico area since 1852, 60 years before New Mexico became a state, so you know we care about this Land of Enchantment and its beautiful people.</p> <p>We support the physical information repository in the Espanola Valley that was in previous drafts of the permit and somehow is now omitted. I have, on occasion, had to rely on using the library computers and have found it to be very frustrating. Sometimes I've had to wait an hour or more to use a computer, and then I would be limited as to how much time I could spend on it before giving someone else a turn. If I was not finished, I would then have to sign up again and wait for another turn. I have heard that the time allowed in the Espanola Library is even shorter than the time I was given in the Santa Fe Library. This puts an undue burden on the citizens of the Espanola Valley, who are downwind from the Los Alamos Lab, and thus most affected by airborne contaminants. Refusing to give them a physical repository is saying to them, "Yes, we will make available this information, but we will make it difficult for you to access it."</p> <p>Since many citizens of the Espanola Valley are Hispanic or pueblo people, it feels to us to be an example of economic and racial injustice. The Loretto community requests that as a matter of justice, the New Mexico Environment Department require DOE/LANL to establish a physical information repository in the Espanola Valley, in addition to the electronic version, before the permit is finalized.</p> <p>I also want to commend the nonprofit organizations that are represented in these</p>	Comment noted. See the Department's responses regarding the information repository and environmental justice in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>hearings, who work full-time not only to protect the environment and health of citizens living downwind and downstream from the nuclear labs, but also for the safety and health of the workers at the labs. Corporation and government attorneys are paid substantial salaries. The nonprofit representatives here struggle for meager funding and sometimes have to find other part-time jobs in order to eat and pay their rent, which cuts into their time and energy to fulfill their primary nonprofit mission. Their commitment to public health and safety is admirable, and the Loretto community thanks each of them.</p>		
182	Gen.	<p>I am from Northern New Mexico College. I am not speaking on behalf of the college as a whole. I am speaking on behalf of the environmental sciences program, and I am also chair of math and sciences at Northern New Mexico College.</p> <p>I have been in discussions with community members regarding a physical repository at Northern New Mexico College and have been very active at the college in acquiring capabilities for the RACER project. I do not have any statements with regard to the proposed burning, but more so with regard to our community's ability to address and understand these issues more appropriately.</p> <p>On behalf of the college and my role as environmental science director, I will say that I did spend a number of years working at the laboratory myself and have been very proud of the work that we've done in -- at the time in the Environmental Safety and Health Division and look forward to continuing our opportunity educate our community.</p> <p>A lot of the questions that come up, a lot of the dialogue and the discussion, has a lot to do with a misunderstanding, a lack of information, and frankly an inability to understand the types of issues that we're actually talking about. We live in a community that spends a lot of its time concerned about the environmental health risk. As a person whose background is in environmental health and environmental epidemiology, I understand the questions, the types of concerns that do come up regarding these matters, and the importance of addressing these matters in our community and particularly in the communities of the Espanola Valley.</p> <p>I'd ask for any type of consideration and support in assuring that, as the laboratory proceeds with the work that it does, that we do more to prepare the community, our community with regard to our students, our work force community, those who will actually work on environmental restoration projects, those who are impacted off the hill</p>	<p>Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.</p>	Yes

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		<p>and on the hill, that our opportunity to actually develop our educational capacity in these areas. So I speak on behalf of the environmental sciences, in the interests of bringing education to this bigger picture, in the interests of what I will say is not chasing our tails and wondering why some are just worried and concerned, and bringing more of a science and background in a broader context in the Northern New Mexico area.</p>		
183	Gen.	<p>I work with a nonprofit organization, Cultural Energy. We're starting a new public radio station for Northern New Mexico and a new TV station. One of our goals is to involve all the disparate communities that will be in our listening and viewing areas in generating content. I'm speaking to urge the Hearing Officer to consider that the internet is not the only way that people get information. People learn in many different ways.</p> <p>Internet access is very, very different in different communities. If you go around, you'll find that most people in Northern New Mexico do not have broadband. The demonstration today, in a building that has wireless, you can't even download a darn file. It gives you an idea of how inaccessible this information will be to most people.</p> <p>I speak, as a media person, and wanting to get youth involved in understanding these issues and communicating them to their elders, if we had an information center at Northern, with the kind of expertise that people that Camille bring to helping people understand the information, if we were able to have actual physical hard copies, where I can take this part of the permit application and this part of the permit application, open up to one page, refer to the other page -- you know, to print out the volume of paper that is required to study this whole permit application, you'd be running into hundreds of dollars in printing fees. If there is a physical paper copy that you can read and compare with another paper copy that's already in the repository, and there is -- you know, and other students that work with the Environmental Department at Northern can then help people understand the terms that are in these documents -- these are very technical documents. I mean, even if you have a lot of time, you're going to have a hard time understanding this stuff. We need that physical repository.</p> <p>We have a university that, according to the reports here, is interested in doing that, and they are already setting up a repository for the database and for the report, so why not support that, and get people so that they can actually meet and discuss these issues, so that youth that would work with us, which we plan to do with the students at Northern and at UNM Taos, that they could access this. How many students are going to be able</p>	<p>Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.</p>	Yes

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		<p>to print out hundreds and hundreds of pages of these reports at every -- you know, at the prices that we're talking about?</p> <p>The internet is not the only way people get information. Most people don't get their information from the internet, in spite of Obama's and other people's push to make everything broadband. We need to preserve the other media sources. We need to preserve paper. Paper is very valuable, and that's from me coming to a media that wants to do radio and TV.</p> <p>So please consider the value of a library-type situation, where you can sit down with these paper documents, study them, have other people help you understand them. That doesn't happen staring at a computer screen. Scrolling down, I mean, the – the gentleman from Los Alamos kept saying, "Well, you can just scroll down the screen." Well, that's not the same thing as opening up one page, looking over here, taking notes. It just isn't the same thing. So I urge you to support the physical information repository that is being proposed by HOPE and other advocates here.</p>		
184	Gen.	<p>I'm a member of the board of directors of Concerned Citizens for Nuclear Safety.</p> <p>The testimony this morning from the witnesses requesting a physical information repository as part of a broader vision recognizes that a significant portion of the concerned population lacks the technical skills and sophisticated equipment to manage efficiently a virtual repository, in spite of their commitment to be better informed about the regulations governing their relationship with LANL.</p> <p>In LANL's line of cross-examination this morning, I was alarmed and distressed by the reluctance to acknowledge this reality. As America has become a two-tiered society, in terms of income and wealth is inequitably distributed, we see the same thing in Northern New Mexico. Without wishing to offend anybody, I want to observe that it is important for the representatives of LANL to acknowledge that their neighbors are relatively deprived and relatively vulnerable. To fail to respond affirmatively to the expressed needs of their neighbors is a further expression of unacceptable economic discrimination and is unconscionable.</p>	Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.	Yes
185	Gen.	I am the legislative advocate for the New Mexico Conferences of Churches. The New Mexico Conferences of Churches represents over 800,000 Protestant and Roman Catholics across the State of New Mexico. I had planned to make comment later in the	Comment noted. See the Department's response regarding the information repository in the	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>week, but I feel compelled, after this morning's testimony about the information repository, to speak.</p> <p>Before I begin, I do want to acknowledge that Senator Udall has honored us by sending Michelle Jacquez-Ortiz here this afternoon, and we're so grateful that you're here on behalf of Senator Udall.</p> <p>Let me just say that I am simply baffled by the opposition to the information repository. I think that LANL and NMED have wasted yet another opportunity to demonstrate to the public that you are concerned about and respectful of the needs and quality of life of your neighbors. To oppose this request, I believe, is shortsided, frankly insulting, but it is also revelatory.</p> <p>As people of faith, we believe that budgets are moral documents, and they are very good indicators of our true values. How we choose to spend our money is a reflection of what we believe in value. Our budgets speak louder than our words. In light of FY 2011 and the fact that President Obama has announced that he has put a freeze on domestic funding for domestic projects, but has increased funding for programs like the CMRR at LANL and the 2.2 billion dollars that has been appropriated for LANL, it is beyond me why you would deny this small request from those who have lived in the shadow of LANL for 67 years now. If it is your goal to further alienate, antagonize, and erode public trust, you will succeed. It is not, I believe, the impression that you want to leave, and I would implore you to reconsider and to take advantage of this opportunity to invest in good PR.</p> <p>There is nothing that has been presented so far today that explains the grounds for your opposition to the information repository. Simply -- what you have said is simply this: that you have determined what we need and what we don't need. It is reminiscent to Marie Antoinette, who, when told that the people had no bread, responded naively, "Then let them eat cake." It is a measure, I fear, of the disconnect between LANL and NMED and the people that you have been called to serve. You are setting up a double standard for us by denying us the resources that are available to you. It is frankly unbecoming behavior.</p> <p>Is your opposition based on the cost? I would suggest that what you are investing in staff and legal fees for these hearings to oppose our concerns could probably fully fund the information repository for a year. Is it seen as providing too much access to</p>	<p>document titled General Response to Comments.</p>	

No.	Loc.	Comment	NMED Response	Δ
		<p>information? Is it that you do not share the vision for Northern New Mexico College and for the Espanola Valley, other than to continue to use them as a cheap labor force? Is it your fear that if they have too much access to information, they will know more than you truly want them to know?</p> <p>I would suggest some reasons for supporting the information repository, by setting up a win/win situation. First of all, it is cost-effective. Second of all, it is environmentally responsible, by limiting the needed travel, printing of documents, by providing this hard copy of the permit to people who are in this concentrated area who have the most interest in having access to it.</p> <p>It is also a huge investment in goodwill. Northern New Mexico College, my understanding, is already a grantee of LANL. You have already made an investment in its future, in its vision, and its mission, and this furthers that. We have a vision of Northern New Mexico College of being a state-of-the-art institution in New Mexico, something that's long overdue.</p> <p>Finally, it's fair. It not only benefits the people of Northern New Mexico, it benefits you, by doing the right thing, putting people before profits. It benefits the people who have lived in your shadow for 67 years now, who have served you and who have suffered far more than they have benefited from LANL. It is an opportunity for both LANL and NMED to demonstrate your tangible, measurable respect and concern for your neighbors.</p>		
186	Gen.	<p>I'm director of public affairs for Northern New Mexico College, just up the street.</p> <p>We're proud that you're our neighbor. There is no more important research and educational institution to us at this time than Northern's matriculation as a four-year graduate school and a close relationship with the lab. We think about it every day.</p> <p>We're in touch with your external affairs people on a weekly basis, we're thinking and working all the time to find ways that we can participate with you to enhance opportunities for our students and our faculty. You're 20 minutes away from us, highly unusual facility, terrific resources, and an environment in which our people can get exposure, perhaps, and students elsewhere -- many other places never even see. So we're proud to be with you.</p> <p>I'm here today on behalf of David F. Trujillo, who is the interim president of Northern.</p>	<p>Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>David asked me five minutes ago if I would take time from my schedule to come here and support Dr. Camilla Bustamante, who heads our Environmental Sciences Department, in a plea to you to support us in building the capacity of our programs that are lab related in order to, in particular, better understand and address all environmental issues affecting our community and Northern New Mexico. In particular, we're requesting consideration for support of the environmental reading room, the information repository at Northern, and would be proud to host that facility for you.</p>		
187	Gen.	<p>One of the things that I would like to state, I am here as a community member, but I'm also an employee of Northern New Mexico College.</p> <p>When we're speaking of the information repository for this community, I'd also like to state that our facilities and our technology that we have available is capable of providing this information to this community, it is a central location for our community, as far as higher knowledge, and it is the place where we continue to educate our community well beyond the typical college experience. This is a community that has long been in need of moving on to a higher education, so that we can continue into a future where we're not so heavily dependent on chemicals and chemical properties that are destructive to life in our community and the planet and the global environment. So I just want to simply state that having an information repository for this community, based on all that is going on in LANL, I don't see as difficult for people to understand this need. This community is directly affected by what happens in those laboratories, and we would like to see the information available to the public.</p> <p>What we already have the knowledge of is, obviously, the groundwater situation. And as much as there could be debate on numerous sides of this issue, we are also aware of the fact that LANL has already been cited for safety violations, in fact, just this year by Governor Bill Richardson. I think LANL was fined a million dollars for a potential hazard with the storage of the waste that's already been produced by the facilities.</p> <p>So that, in itself, also brings up issues with regards to the future of the labs. I understand that we are here to speak specifically about the repository and open burning, but I would also like to emphasize that, as it's been discussed in previous hearings, that the laboratory has plenty of potential for moving forward and to another direction that can potentially avoid any form of life-destructing types of activity that go on there. Already</p>	<p>Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.</p>	Yes

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		<p>at the laboratories, we do have a large amount of research occurring that is in the direction of renewable energies, and I would also like to emphasize that that's a potential for an increase in heading in that direction. Already the President of the United States has stated that we want to move in a direction toward that. I don't want to allow for that discussion to end even though we are discussing something more specific as far as open burning.</p> <p>So in closing, I just want to emphasize that this community has the capability to have the information available to the public, but also that we have hard copies available for those individuals who do not have access to the internet and digital devices that exist within this community, being that it's rural and an impoverished community, that we have a location where they can receive that information by hard copy, and also keeping to the knowledge and traditions of this community as being able to continue and informing our population about what is going on in that -- in those facilities up there. Of course, there are plenty of top-secret type of activities that goes on up t here, but we do have a right to know what we may be exposed to, and that is -- and should be pretty much common knowledge that should be fairly understood.</p>		
188	Gen.	I just wanted to say that, as a younger person, I think that we should be concerned about the future of the environment, and we should think about how the air and the water, groundwater, will be affected, and also I think that there should be a printed copies for like people who don't have internet or access to any computers.	Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.	Yes
189	Gen.	<p>I'm a librarian and I've just signed a petition that reads this way, "We, the undersigned, state: There is a need for a physical information repository for permit documents in the Espanola Valley, as a place for individuals, students and community learning and research about the ten-year permit for continued hazardous waste operations at LANL, the permitting process, and how to get involved and make comments, also an act of restorative justice, and in order to meet the needs of both urban and rural communities and future generations.</p> <p>Therefore, NMED must require DOE/LANL to establish" -- that's not fair DOE/LANL, let's be fair -- "to establish both a physical information repository in the Espanola Valley, as far as a virtual electronic information repository, before the permit is</p>	Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>finalized."</p> <p>Let me just say, briefly, the reason I've -- I'm signing this is obvious, I was talking with some of my librarian friends and even patrons, and while that looks like a lot of documents, or the equivalent sort of situation is -- it is an awful lot of information to have out there in hard copy -- what's called hard copy. I really think it's very important to do so. People can browse on the internet, that's true, and people who have internet availability with printing availability at home are at an advantage, but there are lots of people in this area who don't have that.</p> <p>So as a librarian, as a person who likes to read through these kind of things, I do think it would be a great PR, if nothing else, a very important step. People just don't have the time to come in and -- you know, you have to schedule time in the library, and if you jockey around, you can spend more than an hour at the library getting information, it's 10 cents a page to print something up. I think it's really important.</p>		
190	Gen.	<p>Yesterday, I got to make most of my comment, but today, after listening to people talk about the physical repository and hearing that they had no idea that Northern wanted to have this physical repository, I just wanted to get up and say that I know that's not true, because I was working at Northern at the time, and I work informally with Marian Naranjo and Joni Arends and helped to facilitate meetings between Dr. Camilla Bustamante, the president at the time, Jose Griego, and Marian, and I had lunch at El Paragua with Mr. Bearzi and other people from his staff, and we talked about this, and they held listening sessions in Espanola on, you know, this permit, and we talked about this there. I mean, this has been going on for quite a while, and a lot of it has centered on the RACER database, but there is a larger vision, and that has been discussed, and I want that in the record, that if New Mexico Environment Department is going to say that they had no idea that Northern wanted it there, that's not true, and that's breaking faith with me.</p> <p>I'm probably the only community organizer that's come to this hearing that's not affiliated with one of the nonprofits, and if you're breaking faith with me, then you're breaking faith with a big part of my community, and I'm going to make sure that they know that. So before people lie on the record, they should just think about what they are saying to our community, because people like me -- there are a lot of people who count on me to make sure that things are getting done that they don't have time to do, because</p>	Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.	Yes

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		<p>they are working in Los Alamos, or wherever else, to feed their kids, you know. I'm one of the few people who will take my own time to make sure that things that I think are important get done with the women who have been doing this work for a long time. So it's important that this relationship remain intact and that LANL honor that and that they listen to our community, because, honestly, for everything that LANL has destroyed in our community, they owe us, and they owe us more than this repository. So I'm expecting that to happen, and I think the people at Northern are really excited to think that that's going to happen there. So there are big consequences to people not holding up their end of things.</p> <p>The Rio Arriba County Commissioners are ready to pass a resolution in favor of this physical repository. So there is a very broad interest in our community.</p>		
191	Gen.	<p>I was at the meeting with the former president of Northern College when we were discussing the idea of an information repository, and then later Joni Arends and I met with former Mayor Joseph Maestas, the mayor of Espanola, and in the course of that conversation, we talked at length about the idea about an information repository. So the idea that this isn't -- that this is just an idea that's been floated broadly in the community baffles me again, because I was privy to many of those conversations.</p>	<p>Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.</p>	Yes
192	Gen.	<p>I had a little time to kind of think it over, but in regards to the physical repository, just kind of thinking about the concentration of people in Northern New Mexico who don't even have computers -- like, for instance, my father, you know, he doesn't even know how to operate a computer, much less, you know, go out to a website, mark a file "save as," put it in a folder, be able to use Adobe Acrobat, open that, and take it to a local printer and take it, get on it in duplicate, but that doesn't really make his life any less worthy. Growing up in the digital age, I mean, this is like reading for me, but I can speak for a lot of people in saying that this is out of the grasp of many people, and I think it's doing a disservice, and it's actually a form of disrespect to people who have maintained the land for generations to impose this technology on them without helping them.</p> <p>I mean, if the argument is for or against a physical repository -- I mean, if you're going to go digital, you can't just hand somebody a wire and say, "Good luck." I mean, there</p>	<p>Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.</p>	Yes

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		<p>would have to be an educational process involved in teaching somebody how to do that. You know, I work for the local school district, and we have the technology, we have the computers in the classroom, we have multiple labs, but we're finding time and time again that the teachers don't know how to utilize the technology, and it ends up being the kids that are teaching the teachers.</p> <p>So, you know, again I would like to petition for a physical repository at as many locations as possible, because as my wife said, you know, this here is sacred, and there is really a lot of people who would like to read that information, have it available to them in a setting where it's comfortable for them, you know, and there is a lot of people that don't like to ask for help, they don't like to feel stupid, and it's disrespectful to assume that everybody has that sort of knowledge, when you, yourself, possess the knowledge.</p>		
193	Gen.	<p>And it seems like I've been doing this for too many years. But anyway, this is a particular time that we need to all be informed and be involved. And from all of the information I've heard today and known about for many years, I strongly recommend that New Mexico Environment Department deny a permit to LANL to continue burning hazardous waste in the open air.</p> <p>New Mexicans have suffered the disastrous health problems from all of the hazardous waste created by LANL for too many years. Native Americans have been particularly impacted with their water being contaminated, as well as their air and soil. The New Mexico Environment Department must require that LANL clean up all hazardous sites and start restorative efforts as soon as possible.</p> <p>I strongly support that LANL be required also to establish both a physical repository in the Espanola Valley as well as an electronic version before the permit is finalized, and that all documents relating to the type of waste and kind of treatment to be established be included in that repository. The vision for the repository is that it will contain permit documents, regulations and maps, as well as computers, printers and a copier. It will provide a venue for people to become familiar with the complexity of the Los Alamos National Laboratory site. And there will be opportunities for all who are interested to learn about the permit – the permitting process, the compliance order -- on the consent order and the cleanup and the database that contains the historic and current environmental sampling results. In fact, it might be interesting enough that young</p>	<p>Comment noted. See the Department's responses regarding open burning and the information repository in the document titled General Response to Comments.</p>	Yes

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		<p>people will get involved.</p> <p>And as a matter of fact, we were all young when we started this. It's 40 years that I've been doing this. And I really think it's time for Los Alamos National Laboratories to start its cleanup.</p>		
194	Gen.	<p>I think it's just kind of common sense stuff. I don't think -- I mean, I know you guys are sitting here for many, many hours and many thousands of dollars are being spent on lawyers to, you know, debate and quantify whose science is better than the other, but I think at the end of the day, the -- we all know it's about like our future generations, right? And that water is a basic, vital ingredient to human life.</p> <p>We as human beings -- the majority of our body is water. We need water to survive. I'm a breast-feeding woman, and I think about a lot of the toxins that enter my body and enter his body, and I think about a lot of diseases or -- that are impacting children, like autism, and we don't have a lot of stuff. Barely now are we seeing research to quantify a lot of reproductive health issues that we're seeing in women of my generation as we're not being able to conceive, right?</p> <p>So I think it's -- it's just common sense, right? We all know that it causes cancer. That's been quantified. We all know that it's being connected to a lot of health issues within children. So it just seems to me that we wouldn't continue to contaminate something that's so basic to life, right? From the food we eat to the water we drink. And that the which -- and it's about future generations, right? How are we ensuring Mother Earth for our children?</p> <p>And I also think a basic thing is just -- I mean, we supposedly live in a democracy and shouldn't a basic tenet of democracy be transparency and that all community members should have access to that information? And understanding that I'm -- not all of us can afford computers, and not all of us can break down this technical jargon that you need a lawyer to decipher for you, and even the lawyers need scientists, right? So I think it's just kind of, once again, basic common sense that -- that this information should be provided. I don't even see what -- what the struggle is. If you say you're not hiding anything, then just make it public. It's that basic.</p>	<p>Comment noted. See the Department's responses regarding groundwater protection and the information repository in the document titled General Response to Comments.</p>	Yes
195	Gen.	<p>I am presenting a resolution that was passed by Northern New Mexico College Student Senate. This letter is addressed to Mr. Kieling.</p>	<p>Comment noted. See the Department's response regarding</p>	Yes

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		<p>"Thank you for the opportunity to make public comments to the LANL hazardous waste permit.</p> <p>On April 20th, 2010, the Student Senate from Northern New Mexico College met and passed a Resolution in support and establishing a physical information repository at Northern New Mexico College.</p> <p>Along with this letter, I have attached the Resolution.</p> <p><i>Resolution in Support of Establishing an 'Information Repository' at Northern New Mexico College</i></p> <p>As students want to be involved in the public process for the permit, we would like the Northern New Mexico College Student Senate to adopt this resolution for the following reasons:</p> <p>Whereas, our proximity to LANL and Northern New Mexico College is a central location for the information to be held,</p> <p>Whereas, the hearing for the draft ten-year permit for hazardous waste operations at LANL begins on April 5th at Santa Fe Community College,</p> <p>Whereas, an 'information repository' is in Section 1.10 of the hazardous waste permit. This permit is requested by LANL and regulated by the New Mexico Environment Department,</p> <p>Whereas, the term of the permit will be for ten years,</p> <p>Whereas, this is a learning opportunity in that this would support the right to be informed as citizens in the events at LANL,</p> <p>Whereas, NNMC will serve as a place to keep citizens and students informed; by providing a place for permit documents, maps, regulations and any equipment necessary to download, print and/or copy the information,</p> <p>As a result of this resolution, the Student Senate will be in support of bringing the information repository to Northern New Mexico College and participate in the public forums throughout New Mexico.</p> <p>This was signed on April 20th, 2010, by all the Senate members.</p>	<p>the information repository in the document titled General Response to Comments.</p>	

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196	Gen.	<p>The Permittees support the requirements for an information repository as set forth in the revised draft Permit, which allows the Permittees to establish either an electronic repository with access available through the internet or a physical repository or both. It is the Permittees' position that a virtual repository will provide the most accessibility and will support the goals of transparency and providing information to the public. 40 CFR §124.33 provides the Secretary with discretion to determine if an information repository is needed and the type of repository that should be maintained. The requirements in Section 1.10 satisfy and exceed the requirements of §124.33.</p>	<p>Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.</p>	Yes
197	Gen.	<p>I am currently an employee of the Los Alamos National Laboratory and also a resident of Santa Fe. My comments here are my own and should not be construed to represent LANL's position.</p> <p>As a mother of small children, and like any concerned resident, I want to make sure the air we breathe and the water we drink is healthy and safe. I think much of the permit that NMED has prepared is a positive step. It is important that each waste storage, treatment and disposal site in New Mexico receives a permit. Permitting requirements need to be consistently applied, and requirements need to be based on regulations and provide clear and consistent guidance for facilities to operate under and for the regulator to enforce.</p> <p>There are several key issues that I would like to address.</p> <p>First -removal of the open burning is not justified on environmental grounds. The treatment units for open burning are designed so that they burn hot and clean. No impact to human health or the environment is present. However, if NMED imposes a requirement to ship the wastes elsewhere, the trucking impacts could be significant because there are few if any in-state options for burning this type of hazardous waste. And these wastes must be burned -if not here then somewhere else. And frankly, I trust the Laboratory's environmental controls more than I would trust the environmental controls of the burning in Texas or elsewhere, where they may not have the environmental requirements to burn hot and clean like we do. How many miles to the gallon to these big hazardous waste trucks get? What are the emissions of the big hazardous waste trucks? What are the safety hazards posed to other drivers in New Mexico by the trucking? These environmental impacts could all be avoided by allowing open burning. If there were significant emissions generated as a result of open burning, I would feel very differently about this issue. But that is not the case.</p>	<p>Comment noted. See the Department's responses regarding open burning and the information repository in the document titled General Response to Comments.</p>	Yes

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		<p>Second (information repository) Anything other than a virtual information repository is not justified on environmental grounds. It has been proposed that in addition to the virtual repository there be a hard copies of everything stored in a location in Espanola. We are talking about stacks and stacks of paper-and many trees sacrificed to maintain this hard copy repository. Additionally, it encourages people in Santa Fe and Los Alamos and other places to drive many miles to review the information. Automobile emissions are one of the top sources of emissions in this state and in the country. I recommend keeping the repository online, accessible to all in a modern, 21st century way and preventing loss of trees or unnecessary automobile emission.</p> <p>Thank you for your consideration. Protection of the public health as well as the environment is an extremely high priority for both sides of this issue and for all of us who live and work here. Please make sure that environmental health and safety are truly guiding NMED's decision making.</p>		
198	Gen.	Public notification and information and the information repository are issues that are very important to the public. I, as member of public, wish to support the concept of a virtual repository. It is that type of progressive thinking proposed by NMED in the draft permit that will give a broader range of the public access to the repository. Libraries and general access to the internet has become so pervasive that this is the best possible approach. It also makes it easier for the Laboratory to maintain an up-to-date repository. A single facility with hard copies would be difficult for the public to access and difficult for the Laboratory to keep current. Access to a virtual repository is 24/7, not just during business hours making it difficult for people working to partake in the public participation aspects of the program	Comment noted. See the Department's response regarding the information repository in the document titled General Response to Comments.	Yes
199	Gen.	"All things are connected. What we do to the earth we do to the children of the earth" Chief Seattle	Comment noted	NA
200	Gen.	Sometimes – often – I get the feeling that even through government agencies “go through the motions” of asking for and receiving public comment and opinions, it seems like those same comments are disregarded, and again the big business interests prevail. Please give public health and safety, and long-term protection of the earth, a chance.	Comment noted	NA
201	Gen.	As a citizen of Northern New Mexico, I am concerned that hazardous waste of any kind from LANL be disposed of in waste consistent with public health and safety.	Comment noted	NA

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202	Gen.	I serve on the Board of Directors for the NM Conference of Churches which works with a constituency of about 800,000 congregants. We are watching this issue closely.	Comment noted	NA
203	Gen.	Hazardous waste should be subject to strict regulation and should also be responsible for these products.	Comment Noted	NA
204	Gen.	When the fire happened, I and a few of my neighbors got stomach aches and could smell fumes in our neighborhood outside of Taos. We need clean air.	Comment noted	NA
205	Gen.	I have environmental illness and these issues are killing me and my family – all sensitive – faster than necessary. There are other ways ... let's look at those ideas.	Comment noted	NA
206	Gen.	The root of all the malaise in the world stems from the mistaken belief that you can make war on all your fears by creating the more destructive weapon – the livelihood of most LANL employees depends on this wrong thinking. In the course of acting on this wrong belief, LANL has polluted a large part of our atmosphere and land and people with radioactivity. This is no way to show respect for life itself. It is time to stop this insanity and listen to these brave souls who are trying to communicate with you. That is the only path to peace and your own hearts.	Comment noted	NA
207	Gen.	It would seem that NMED has no regard for our children's future let alone the planet we live on. I am appalled the CCNS has to exist.	Comment noted	NA
208	Gen.	I would like to know who make the spending decisions on a project-by-project or month-to-month basis. Is it Congress or a secret committee? Also, public hearings are essential and so are LANL responses to public demands.	Comment noted	NA
209	Gen.	As a M.D. in Santa Fe, NM and I test patient's hair levels for toxic elements. Very high levels of uranium are found in the drinking water that drains off the Los Alamos plateau – Pojoaque, Espanola, etc. Please do something to prevent this water and soil contamination.	Comment noted Well water in Pojoaque, Espanola and, generally, in the area between Santa Fe and Espanola, originates in the Sangre de Cristo Mountains and not on the Pajarito Plateau. High concentrations of	NA

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			<p>uranium in drinking water in some wells in that area are the result of documented uranium ore deposits that extend from Tesuque north to Espanola (for example, see a map at http://geoinfo.nmt.edu/faq/mining/Ur_20Dec04.pdf or the publication McLemore, V. T.; Chenoweth, W. L., <i>Uranium Resources in New Mexico</i>, New Mexico Bureau of Mines and Mineral Resources, Resource Map 11, 1989). Although these ore deposits are generally low-grade and not economical to develop, a single mine south of Espanola (San Jose #13) produced 12 tons of uranium ore in 1957 (McLemore, V. T., 1983, <i>Uranium and thorium occurrences in New Mexico: distribution, geology, production, and resources; with selected bibliography</i>: New Mexico Bureau of Mines and Mineral Resources, Open-file Report OF-182).</p>	
210	Gen.	Please do the right thing.	Comment noted	NA
211	Gen.	We, the citizens of northern New Mexico, deserve to live and work in a healthy environment. During these economic times, more and more people are growing their own food, and turning to farming and other sustainable lifestyles. There are many new and innovative technologies that LANL could develop to participate in reducing global	Comment noted	NA

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		warming, in creating alternative energies and fuels, and other sustainable sciences. This is not the time to be continuing to make weapons of mass destruction. Not only is it illegal and unethical, it further drags us into irreversible debt. It is a time to respect the teachings of the indigenous peoples whose land LANL took over and to join with scientists from all over the world to solve some of the many problems that threaten our very existence on this planet. We implore you to respect the environmental laws and safeguards, strengthening rather than undermining them, and encourage LANL to begin the process of cutting back on weapons work and shifting to "green" alternatives.		
212	Gen.	Time is necessary for CA and the public's review for non-enforcement of the analytical requirements of the Consent Order by the NMED at LANL. The same requirements are now required in the draft permit. The public needs to be confident that the analytical requirements for protection of the public are being enforced by the NMED.	Comment noted	NA
213	Gen.	Generally, and as explained in more detail below, the LANL draft permit should be denied because it does not comply with all local, state and federal requirements. (42 U.S.C. Section 6961). Under these circumstances, the LANL Draft Permit should be denied by the New Mexico Environment Department (NMED).	Comment noted	NA
214	Gen.	I live downwind of Los Alamos and have Leukemia from breathing the TOXIC air from the 2000 fires. It can only get worse with so much waste sent into the air. Please think about how you might feel if it were your family breathing this polluted air. Please do everything you can to stop this release of POISON air.	Comment noted	NA
215	Gen.	What part of the scientific mind has gone totally to sleep to the facts that support LANL's responsibility for the increasing number of cancer deaths in Los Alamos as well as surrounding regions? All residues must be cleaned up, not buried in Fed. Approved So N Mexico Collection Territory!	Comment noted	NA
216	Gen.	I object to hazardous waste that harms humans and living creatures all, whether airborne, water, or the earth. Stop insidious waste.	Comment noted	NA
217	Gen.	The battle for safe, clean air has gone on for so very long. Battle after battle has gone on in the state to halt or lessen the dangers of hazardous waste, yet we are still dealing with the same questions and the same responses. When will the safety of ordinary people hasten action?	Comment noted	NA

No.	Loc.	Comment	NMED Response	Δ
218	Gen.	Please let's stop the money game and make our water really safe for ourselves and especially for our children.	Comment noted	NA
219	Gen.	<p>I have been horrified over the years what LANL chooses to do with its' toxic waste. Really, this needs to end. The "monitoring" has been a bad joke on the public for years. Lord knows what the consequences of the 2000 fire were, or the 79(?), or the daily burnings. Surely our water is a precious resource and I say enough! Prove a sound disposal method. Better yet, stop the waste and give our people honest meaningful work to help save our planet and to stop providing jobs for killing people, inhabitants, and resources. Our air needs to be cleaned, not contaminated, and it all returns to the earth and our water. "In the wastebasket" no longer. Let us be heard!</p> <p>Vulnerable are we like infants. We need each other's care or we will suffer. - St. Catherine of Sienna</p>	Comment noted. See the Department's response regarding groundwater protection in the document titled General Response to Comments.	NA
220	Gen.	New Mexico must no longer allow any hazardous waste or any toxic substances to foul our already fragile environment. The New Mexico Environment Department must do all in its power to be mindful and responsible to their constituents and to protect the environment and the populace from any and all harm. Our present and future depends on it.	Comment noted	NA
221	Gen.	<p>It's really not a matter of "saving the Earth" as the planet will be here long after humanity has gone. It's a matter of waking up and respecting each other and each other's right to clean air, clean and abundant water, and the right to planetary citizenship.</p> <p>The loss of respect for other human beings, as well as the loss of integrity in some, is what will end the human race. Cultures world-wide know this is our last chance. And that chance is now. Right now. Unless we wake up to our responsibility to each other, our children, and succeeding generations, there will be no more humanity.</p> <p>Is that a risk we are willing to take?</p> <p>In the movie, "Oh, God", a grocery store manager realizes how much has to be done and goes into a panic stating, "How are we going to do all this?" God answers, "That's why I gave you each other".</p> <p>That's what we've got...each other. And the understanding that the answer to the</p>	Comment noted	NA

No.	Loc.	Comment	NMED Response	Δ
		problem is never found at the level of the problem. Guidance and direction from a higher level will get us through this crisis-based "status quo" (which is Latin for "the mess we're in"). It's really quite simple.		
222	Gen.	<p>It seems to me that you are doing your part to hasten climate change.</p> <p>Do you know whether we will develop immunity to tritium and uranium in our water?</p>	<p>Comment noted.</p> <p>Regarding the Department's knowledge of the development of immunity to tritium and uranium in our water, the issue of radionuclides is not within the Department's authority and the Department does not know about how individuals might develop immunity to the associated constituents.</p>	NA
223	Gen.	<p>We need you to examine your heart and your ethics, and not be influenced by those whose greed is destroying our health, our lives, our planet. Please, no more dumping and no more toxic waste leaking into our children's bodies. Hear us please. I think you know what to do.</p>	Comment noted	NA
224	Gen.	<p>As a Taos resident who lives downwind of LANL with two small children, I'm writing to encourage you to do all you can to help LANL become the safest and least polluting facility it can be.</p> <p>Though, to be honest, I disagree with LANL's mission regarding the upkeep of old and making of new nuclear warheads, I understand that the facility will most likely continue its nuclear weapons work as well as work with other dangerous materials. Given this, I respectfully ask that you do all in your power to keep those dangerous chemicals and materials safely contained within the facility.</p> <p>The legacy of our nuclear weapons program is includes more than just deterrence. There is, as you know, the legacy of nuclear-related illness in civilians ranging from uranium miners to downwinders to nuclear facilities workers, including my neighbor in Taos who installed warheads at LANL and now suffers from cancer. There are also the ubiquitous beryllium disease fliers around town, implying that numerous LANL</p>	Comment noted	NA

No.	Loc.	Comment	NMED Response	Δ
		<p>workers are now suffering from that disease.</p> <p>If we are going to have military work in NM, it is my heartfelt desire that we do so with the utmost care for the safety and health of those people involved in the work as well as those of us who live in our beautiful and extraordinary state.</p>		
225	Gen.	<p>I've known David McCoy for years and honor and respect his work on behalf of all New Mexicans. His views concerning LANL mirror my own and I implore you to respect Mr. McCoy and act on his reservations and recommendations. He represents over 60 % of the people of New Mexico vis a vis LANL related issues concerning safety and health.</p>	Comment noted	NA
226	Gen.	<p>Yo me siento muy preocupada por este asunto de “Desechos Nucleares.” Vengo de un pais un el cual este problema no existe. Cuando me traslade a este pais pense que mi salud esta ria major, mayor seguridad, menos contaminantes de los que tiene mi pais, cuando pone basura plastica y desechos en el agua por falta de recursos monetarios para hacerlo de la manera correcta.</p> <p>La situacion aqui es escalofriante e impredecible. Un potencial mas elevado de riesgo con enfermedades pulmona res, cancer, y danos permanentes a los habitontes y el medio ambiente.</p> <p>In Latinoamerica tenemos la imagen de USA, como una gran nacion, una potencia, entonces</p> <p>Esta es una actitud inteligente</p> <p>Con tantos especialistas, nadie piensa por lo menos en su propia familia?</p> <p>En mi pais queremos ol major para la nacion, ustedes no?</p> <p>Otra situacion: Estube en Mexico cerca de areas nucleares y peligrosas, pero pude ver muchas senales por millas y millas, marcando y senalando “Ruta de Evacuacion.”</p> <p>Tenemos alguna aqui? De verdad cree cada uno de ustedes que estamos o a salvo? NMED esta hacienda lo major nosotros Y New Mexico.</p> <p>I'm very worried about “Nuclear waste.” I come from a country where this problem does not exist. When I came to this country I thought my health would be improved, there would be greater security, and less pollution than in my country, which it puts</p>	Comment noted	NA

No.	Loc.	Comment	NMED Response	Δ
		<p>plastic and other wastes in the water due to insufficient resources to do it do the correct way.</p> <p>The situation here is chilling and incomprehensible. There exists a potential of elevated risk of pulmonary disease and cancer doing permanent damage to homes and the environment. In Latin America we have the image of the USA being a great and powerful nation. However, I wonder. There are so many specialists yet no one considers the threat to society. In my country we want the best for our nation. Apparently you don't.</p> <p>Another situation: When I was in Mexico near nuclear plants and other dangerous areas I could see miles and miles of signs indicating an evacuation route. But do we have some here? These signs assist everyone out of danger.</p> <p>NMED must do what is best for the people and the State of New Mexico.</p>		
227	Gen.	<p>I'm a board member of New Mexico Conference of Churches, and we're very concerned about these issues. I'm also a new Citizens Advisory Board member, which oversees the cleanup of LANL, working with the DOE. I came to these hearings to educate myself, and I do have a history of understanding some of these issues and problems, however, not the technical aspects of them. As a citizen, I'm very concerned.</p> <p>I came here to register my concern on the inadequate -- what I see as the inadequate regulation of cleanup at LANL and throughout the complex. It certainly isn't LANL alone. I was reminded of this inadequacy during Mr. Grieggs' testimony this morning regarding the treated effluent being released in outfalls, which still contains tritium, which is a serious contaminant. It's absurd to me that the radionuclides are not regulated by the agencies responsible for overseeing cleanup. I am -- I would like to know the level of the tritium being released into our environment.</p>	Comment noted	NA
228	Gen.	<p>My concern is that in the past five years there has been tremendous research around nano-particle contamination. They are looking at zinc dioxide -- nano-particle zinc in sunscreens, they are looking at titanium dioxide in health-care products, and recognizing that this crosses cellular membrane. So my question is, does the radioactive contamination that we may be exposed to in our water from the Buckman Diversion project cross cellular membrane, and how will it affect fetal development, and increase birth defects, affect autoimmune diseases, premature birth, low birth weight, those types</p>	<p>Comment noted.</p> <p>See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>of issues.</p> <p>I'm concerned about how this mix -- how one affects the other and how one may become a catalytic reaction that would cause something to permeate the cell membrane, that if it was not in the mix, and that there is not research for this.</p> <p>When I've asked for research, I'm not even getting research. They are saying they have not looked at research for this. To my knowledge, the water quality standards do not even look at specific needs of infants, of pregnant women, or people that have -- whose autoimmune systems are suppressed in some sort of way.</p> <p>Regarding standards for cleanup for soil contamination, to my knowledge they have not been reviewed, and it's my concern, because, as we know in the past ten years, all standards have been reviewed. We used to be able to smoke in bars, and now it's recognized that in bars that secondhand smoke can affect everybody in the bar. Originally, those standards, you know, we thought they were safe. We've looked at arsenic in lumber. You used to be able to put arsenic-treated lumber in water and that was the accepted standard. Now you can't buy arsenic-treated lumber, because the standards have changed.</p> <p>We're also looking at carbon footprint and that contamination in our air is effecting us globally. I feel, like I say, it's time for a thorough review of -- or here is the research that tells us it is safe for nano-particle contamination in our air at the levels it's at, in our water at the levels it's at, in our food at the levels it's at, and what happens when you get nano-particle contamination in the water and in the air and in your food and you're pregnant, you know, what are the consequences, what are we setting up for future generations. The reproductive organs of an infant are created in the womb, and so we're not only looking at this current generation, but for three generations down the line. And so I want standards that reflect the state-of-the-art biotechnology, looking at epigenetics, how are these levels of radioactivity affecting us.</p> <p>I am concerned about the chemicals and the toxins. We have fish in the river that, you know, we can't eat, and yet they continue to have fishing contests for children, and they won't tell them that they are not supposed to eat the fish.</p> <p>And so with regard to your work on the Buckman Diversion project and the concern about the finding of plutonium in the Buckman Well Number 1, may I show you this</p>		

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		<p>figure? It's from James Bearzi's testimony. I believe it is Exhibit 87. This is new information, and I'd like to share it with you. I know that you're familiar with some of the schematics from the laboratory. I don't understand what a basalt vent is. I'm assuming that that is -- a vent, to me, means there is some sort of channel.</p> <p>It raises the question for me that I did not speak about originally, that in our water quality test in 2006, it was recorded publicly that there was an undetectable detection of plutonium in our drinking water, and the public was noted -- notified six months after the detection of the non-detectable detection. We were presented the information only if you were a land holder, and so if you were a renter, you had to go to the library or you had to seek out the information, and then nobody could answer what is an undetectable detection of plutonium. I mean, it's like what does that mean? If it means at the nano-particle level, then tell us what the standards were. I mean, is this where it came from? I mean, where did the plutonium come from that was at this undetectable/detectable level? So I don't have the understanding of what this would mean, but it's something that I certainly would want to find out more about. If it goes to the well, does it go to the river? What is venting down through this, and how long has it been there, how long has there been a potential threat that we have not been informed of?</p>		
229	Gen.	<p>After many years of attending hearings such as these, witnessing overwhelming public opposition to nuclear weapons production in New Mexico, I'm dismayed that LANL is still under operation. I vehemently oppose approval of all permits in relation to this hearing. It is clear that there is no safe way to dispose of nuclear wastes. Radionuclides have been detected in the Rio Grande's water, now the source of drinking water for Santa Fe.</p> <p>Open pit burns have sent deadly carcinogens into the atmosphere, including radionuclides. And native lands appropriated for nuclear weapons production, testing and waste disposal have become dead zones for centuries to come.</p> <p>After so many years, I've grown somewhat cynical about the hearing process itself, seeing it as a smokescreen created to perpetuate the illusion that the public actually has a say in how the federal government maintains its global empire.</p> <p>I therefore indict and shame both the US federal government and the New Mexico state government for being complicit in this ongoing crime against nature and its people.</p>	<p>Comment noted.</p> <p>See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>Yet I do believe that we stand a chance of diminishing these crimes by denying this hazardous waste permit which would inhibit LANL's ability to operate.</p> <p>Perhaps some day the NMED will have the courage to deny its operational permit, the voters will vote in a governor who is not so DOE friendly and end New Mexico's status as a nuclear colony of the United States.</p>		
230	Gen.	<p>I was here 21 years ago with many of the same concerns about LANL. As I explained last week, I'm a retired public schoolteacher. I have been in Santa Fe and this area for 40 years. In that time, I've been proud of our ability to be heard as a public. I feel that legislators in the past -- not the recent period, but in the past -- would listen to voters' opinions.</p> <p>I understand there has only been a handful of people coming to speak at this public hearing, and I asked myself, "Why aren't the people that I know" -- and</p> <p>I know, many, many, many, many people -- "Why aren't they coming?" People are intimidated by the cross-examining, which can happen after any individual speaks; and people are losing faith, losing faith in the public process. I don't really understand exactly what's happening here at this public hearing.</p> <p>I am very interested in having the public's opinion a part of this process today. It doesn't seem to me, that in something that concerns my life and the life of my friends and my students and the people here in New Mexico, it doesn't seem that it's right that it's a win or lose process -- Los Alamos wins, the public loses; the public wins, Los Alamos loses.</p> <p>I just don't think that's a real healthy way to go about this. I don't understand why things like these aren't -- when they are so, obviously, two extremely different opinions, I don't understand why things -- more things aren't mediated, and I'm just -- I'm sort of -- I'm appalled, because there are things that are affecting my life; and, for example, if you could read, not just listen to people reading the secret documents that were produced, if you could read those and see those.</p> <p>I actually feel frightened -- I could feel intimidated or frightened by these people, but I'm not. I'm a teacher, I'm used to standing up and saying something, you know, and whatever goes, whatever goes, but I'm frightened the way we could be heading right now and the way we are heading politically. It's not a team. It isn't a team. It's the one with the most money, the most experts. Those are the ones that are winning, and that</p>	<p>Comment noted.</p> <p>See the Department's response regarding contractor documents in the document titled General Response to Comments.</p>	Yes

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		<p>frightens me. I hope that you will consider, in your reading, to have some type of a board that looks at these problems, and that people that are supported by the public, like CCNS, is included.</p> <p>I hope that some of the recommendations on that -- on those secret documents, 123 of them, are looked at and included.</p> <p>I would not want your position for anything in the world, and I'm glad that you're doing this and not me. It's very difficult to foresee something that will be a win/win situation.</p>		
231	Gen.	<p>I would like to voice an opinion of what I generally saw since 9:00 this morning in testimonies, or whatever you want to call it, the discussions of the LANL board, the panel, and that is it seems to me as though there is a lack of thoroughness in terms of the testing in the lab. It's probably a hard call to say that, because I'm sure there is a tremendous amount of testing that does go on and has to go on, but, for instance, the seismic problem, the seismic hazard up there, it increased by 50 percent. Why has it been left alone? Why is it not being addressed?</p> <p>Another point today that was made by the woman on the LANL panel, Ms. Vigil, that there was no time to test -- I believe it was the composition of the ash, that there were certain components suspected to be in there, but they didn't have time to test it. Well, why didn't they have time? There should be no such statement at the LANL laboratory facility that there is no such time for testing. Now, that may have to do with the orders from DOE, which, of course, come from clear across the country. They don't live here. They did not experience the Cerro Grande fire, et cetera, et cetera, et cetera. And, also, I'm sure most of the people in Washington, DC, do not have their children gaining clusters of brain tumors from playing outside in the canyons around Los Alamos.</p> <p>So it just seems to me that I would -- I, for one, would like to see more thoroughness in the testing of all of the activity that goes on in the lab.</p> <p>I want to also come -- coming after Anna from CCNS, I want to just say something about the Cerro Grande fire.</p> <p>I was at that meeting in 2000, in July of 2000, after the fire, at the Eldorado Hotel, where there were about 400 people or so, and we got a chance to stand up in the aisles and speak over a microphone, as residents of the area. I asked the LANL panel that day whether or not the burning of plutonium would remove the radioactivity from the</p>	<p>Comment noted.</p> <p>See the Department's response regarding seismic hazards in the document titled General Response to Comments.</p> <p>Regarding the composition of ash that resulted from the Cerro Grande fire, the subject is beyond the scope of the Renewal Permit.</p>	No

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		<p>substance, and they said, "Absolutely not, burning does not ruin plutonium. It continues to go on for 24,000 years." So I sent to the Albuquerque media mounting company for a tape from a news program that I saw on Wednesday, right after the fire -- it was the first time the fire was reported on television, as a matter of fact, and that afternoon, I packed up my animals in my little camper and got out of town, because the smoke plume was predicted to come over the next day.</p> <p>I had seen the broadcast on television that morning of John Brown, standing up in front of the microphone, and professing that there were plutonium particulates -- plutonium and tritium particulates in the smoke plume.</p> <p>Then Barry Ramo came on right after John's talk and advised everyone in the area who was four years old or younger to get out of dodge immediately, because he didn't want the young children to be around that smoke plume, and he also advised anybody with any respiratory problems to get out. I did not have either one of those conditions; however, I got out, because my family has a history of cancer, including my son, who died of cancer at the age of 29.</p> <p>So at that meeting at the Eldorado Hotel, I asked the scientists on the panel, the LANL part of the panel that morning, "Is it true that burning plutonium removes the radioactivity from plutonium?" and they said, "Absolutely not."</p> <p>So I sent to this media for the tape of that news broadcast, and they could find nothing showing John Brown speaking on television that morning. The only thing they could send me, for a \$40 tape, was Barry Ramo's talk on that newscast.</p> <p>Now, that says something to me, which is really bad. It's a cover-up. It's an obvious cover-up right there. I think that, combined with the lack of thoroughness, what sounds to me are -- is definitely a lack of thoroughness in the lab's testing of things, I think all of these issues should be addressed as soon as possible.</p>		
232	Gen.	<p>I'm 17 years old, and I'm from the Pueblos of Ohkay Ohwingeh and the Santa Clara Pueblo. I'm a youth coordinator for Honor Our Pueblo Existence, and I'm an S5 NCO at the Espanola Military Academy. I work with public relations. I'm commenting on behalf of myself and the youth of the valley.</p> <p>I am honored to have the opportunity to experience local, state, national and international networking at educational environmental gatherings. I have been involved</p>	<p>Comment noted.</p> <p>See the Department's responses regarding the information repository and public involvement in the document titled General Response to Comments.</p>	Yes

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		<p>with such activities since my childhood. Very few people have had this opportunity to attain and even fewer retain and pass along this knowledge to fellow students. As some may say, they show great interest, which is vital, for one day they will lead the structure of which will keep this community together.</p> <p>I feel these growing minds of the Espanola Valley should have the right to a reliable reference in close proximity and easy accessibility to all students, no matter what their situation, for these actions will affect our future, as there are many people who may not be able to accurately browse and/or comprehend this virtual repository without the hands-on assistance of a trained professional. With my understanding, there won't be very many of them. How can we assure that the students and the peoples will have the same opportunities in reference to acquiring the ability to comprehend and pull the criteria on which this document is based? Everyone's voice has a place.</p> <p>I wrote this poem, it's entitled "Why."</p> <p style="padding-left: 40px;">Why is a word many times I have heard, a cause, purpose, or reason no matter the season.</p> <p style="padding-left: 40px;">Do you ever wonder, dream, or think how worse life could be and thus I think and thank God the sun's still gleaming so we may search for life's true meaning, learning the ways of the lands, the mountains, waters, and sands.</p> <p style="padding-left: 40px;">This will be done, passed along from father to son, mother to daughter.</p> <p style="padding-left: 40px;">It will spread like fire without water.</p> <p style="padding-left: 40px;">And what to ask when you come along, someone whose knowledge is surpass?</p> <p style="padding-left: 40px;">Fire away for what they say will live on with you for days and days.</p> <p>And with that, plant a seed and let it grow, share with the world what you know, and if something isn't right, don't be afraid to stand and fight, share with the world your important insight, for alone we are weak but together we are strong, gathered here to protect Mother Earth from all that is wrong.</p>		
233	Gen.	<p>I'm a resident at Ohkay Owingeh. I'm a tribal member. I have the opportunity to just make a couple of comments. First, during the fire that occurred up in Los Alamos on the mountain, 2000 or so, the -- when that happened, it covered this whole</p>	Comment noted	NA

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		<p>valley with smoke. For seven days, it rained ashes on my house and on my field. That tells you where the open burn ashes are going to land. It's going to be in here. I want to remind the New Mexico Environment Department, it's their job, and it's your responsibility, to keep us safe.</p>		
234	Gen.	<p>Maybe I can give you a tiny bit of an anecdote as to why I'm concerned about this as a civic issue. My wife is related to people we brought over from the Ukraine, and they were living near Chernobyl, and the -- when Chernobyl erupted and melted down over there, they were reflecting back that for so long the experts, so-called, had told them not to worry, not to worry, and it happened.</p> <p>When it happened, they had people with Geiger counters come down, and they were checking their garden and said that you could have radishes from this part, but don't have carrots from this part. That's the reason they left.</p> <p>We have a situation, I think, where we have some of the finest minds in the country, scientists, working at the lab, and for very, very long, they couldn't imagine that this would become an issue. The fact of the matter is it's like a room with two doors. In one room you are getting rid of garbage; the other room, you're bringing in more garbage. So we have a situation where we have to deal with possibilities. The Cerro Grande fire, I think, should have alerted us that Murphy's Law is not abolished. You still have things develop that you didn't plan on, you didn't want.</p> <p>So I do believe that the expert minds – and they are indeed expert -- could reorient themselves towards solving problems. In Chinese, problems sometimes -- the letters are re-altered to make it opportunity. I think this is a real opportunity for us to go forward, but it takes a certain amount of courage and recognition that people have to get a life – a very, very new life -- if they are going to help our community and our states and our nation.</p>	Comment noted	NA
235	Gen.	<p>I'm from San Ildefonso Pueblo. I didn't prepare a speech, and I don't have all the technical terms and information that a lot of the people who are doing the work around this do, but I'm concerned about our children and what we're leaving behind for our children. I'm concerned about our land, our animals.</p> <p>I know that my daughter was born in 2007, and the first time she heard the detonation, the explosion, she started to cry, and it made me really sad, because it's something that</p>	Comment noted	NA

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		<p>so many of us have become used to. And me, it still startles me, and it still startles her. When she asked me -- when she was old enough to ask me, you know, what is that noise, what is that sound, I told her that it's explosives coming from the laboratory. When she asks me why, I can't answer that question; and if it's safe, I can't answer that question, either.</p> <p>I'm concerned that that alone, the noises, the things that we can't see, are affecting our environment, they are affecting our trees, our animals, our wildlife; even the process that things have become -- that used to be around our house, like lizards and snakes, some have become rare and some have grown in abundance. I think these are all things for us to consider and look at and think about when we're thinking about these toxins that have been released into our air. And not only that, but this needs to stop, and this needs to stop now, and not only for our future generations, but also we need to think about what harm we've already done and how we can clean up and how we can make amends with our children, with our earth, and with one another.</p>		
236	Gen.	<p>The information I'm about to impart is not so much to protest anything or -- it's mainly information that was given to me, and I have no idea why it was given to me, but when I saw this forum being presented here, I said, "Well, this is a good place to, you know, divulge what's come my way.</p> <p>There is three items. The first item happened, I think, about a year or so after the Cerro - Cerro -- that fire. A friend of mine, who lived in Pojoaque, was telling me that after visiting the -- well, the person had a little rough time with money and so forth and went to get food stamps, and at that time -- and it was during the noon hour, and I don't know, you've probably have never been to a Human Service office, but it gets pretty busy down there, and the supervisor was out in the -- helping the workers, and my friend said to the supervisor, "Why are you here, you know, you're a supervisor, you know, you're not supposed to do this kind of work." The supervisor said that there had been a great influx in people seeking food stamps, and the reason was that -- this is what my friend told me --that the high rate of birth defects after the Cerro Grande fire [had caused] the people's welfare had run out and they were now going to the state for food stamps. Of course, I'd never heard anything in the papers about birth defects after the fire, and so, you know, I was a little surprised and saddened.</p> <p>Then maybe a month or two months later, I read an article in the paper that said that</p>	<p>Comment noted.</p> <p>Regarding the effects of the Cerro Grande fire, the subject is beyond the scope of the Renewal Permit.</p>	NA

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		<p>there was no bad or poisonous residue in the air after the Cerro Grande fire, after the fire, but it didn't elude to anybody was protesting it or anybody that had made any comment, it was just sort of a blanket statement, which sort of told me that, "Well, there is some kind of rumors going around, but nobody wanted to talk about it, whatever the rumors were."</p> <p>And then the third incident was -- well, I think it was about a year ago, where I was talking to a person that was on -- more or less on the front line to the fire and told me about the -- the air filters that were put out by the State Environmental Department, and those filters, this person told me -- they still have them up in Los Alamos, they stored them up there and they can be checked. I said, "Oh, you mean" -- and he said, "Oh, yeah, they checked for this and that," and the whole list. And I said, "Well, did they check for radioactivity?" And the person said, "No, they didn't check for radioactivity." The person said, "You could go up there and check it now, because they are still up there." But, you know, like I say, I'm just a person that received this information, I didn't -- I'm not here to pursue that. You people are more qualified to do that kind of thing than I am.</p>		
237	Gen.	<p>I'd just like to also say that I know it's important to think of -- I know I've talked about, you know, the human cost and the human risk of this, and I just also felt like I needed to speak for the land and the animals and the plants. One of the opposing arguments for this is that, well, maybe it's done away from people, but this is a place where people live, and you can't deny how we're connected to where these environmental releases are happening.</p> <p>Our water comes from there. The animals that we still hunt and eat come from there. We make clay for our dishes from there. We gather plant medicines for our kivas from there, from the mountains. It's sad enough that we have to be disconnected from our ancestral sacred mountains, where we've essentially been cut off from generational knowledge by not even having access to these places.</p> <p>I'd just like to take this opportunity to recognize the Jemez Mountains for what they are and what they represent to my communities. I'm from Santa Clara Pueblo, and I feel the need to speak out in defense of our ancestral lands and for the right for the future generations to live in their ancestral lands and knowing that they don't have to fear invisible poisons from anybody and knowing that this is their place where they belong</p>	<p>Comment noted.</p> <p>Regarding the effect of the activities addressed in the Renewal Permit to the land, animals, and plants, <i>i.e.</i>, the environment, the Department considers all effects to these receptors and it is principally this reason that the Department denied the Permittees application for open burning. See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>and where they can remain.</p> <p>I know our water is in big danger right now, and our water is everything. If we don't have our water, we can't live here. I'm sure it would be really convenient if everyone had to just move, but it's not right that -- the source of this water is like for everybody here, and not just the people that live next to it, it's like the whole State of New Mexico, you know, one source – there is only like one puddle of water under this land for all of us. It's not -- it's too precious to put in danger for any kind of prediction or any kind of profit.</p> <p>I've also heard that there is a BWX military training that is happening at the labs, and this is concerning to me because it's not a military base. You know, they say they are doing research there, and why are they having military trainings where they have to detonate extra bombs? I have a big issue with having to listen to these bombs being on my back porch, you know. They can't even -- and I know it's a lot to ask, because this is from the same people that will not stop detonation for a week while we have our ceremonies and religious happenings from our community, you know. It's -- we think it would be respectful to at least refrain from doing it at that time, but they still do it. I just think that that's something that's definitely not necessary to be going on. There is plenty of bases where that can take place in a safe way, if it's necessary.</p> <p>So now I'd just like to close with a poem I wrote for a public meeting a couple months back, if that's okay. It kind of just talks about what we've had to go through generationally in having our ancestral lands occupied and having -- having to get born into this kind of time and place where we exist and where now my children are growing up.</p> <p>Growing up I was disconnected, some things were not discussed among people who valued hard work and employment. One-sided silence through years of schooling, I learned about the nuclear age from movies and propaganda and Bradbury field trips, the glorified versions of a history that happened in my own backyard, in our state of Enchantment, pristine open spaces and a population not respected by a higher nation, still living off the land as the industrial age passed them by, only to get thrust into nuclear realization, beneath a mission, urgent and thick with intensity, beneath a shroud of secrecy. I was not yet born the day scientists feared for our sky, thoughts of atmospheric ignition, and that everyone would die. I was not yet born when the Jemez</p>		

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		<p>was taken, homesteaders relocated, not of their volition, uranium miners, on the road to perdition. Beloved mountains, occupied before I could praise them, disconnected from ancestral knowledge, in three generations, clan animals vanished, even as the jobs began to appear, unprotected hired hands from the valley, a job was nothing to fear. It was a welcome exchange in hard times. I wasn't yet born the day silver ash rained down for days, and a plume of poison drifted over state lines. Radioactive fallout, on cisterns of drinking water, on crops and livestock, who all miscarried that year. The people were lied to and went about life as usual, while the truth fled, with bread over their mouths to keep from breathing air they knew was foul, and the world was changed forever. A month later, 80,000 people were killed instantly, justified atrocity named enemy, and the book was closed on Trinity. Even though it was our own citizens who were bombed, children born into an experimental population, with a cancer rate way higher than the average nation, entire families still sick and dying, still crying, for the elders they lost too soon. I was born into military healthcare, mixed blood and desert beauty, free from the shame of colonized blame. My grandfather employed by Sandia, my down-winder grandmothers who birthed babies and taught me songs, while washing tainted laundry and making pots from local clay. I wonder now, can earth decay? Eating the elk my uncles brought down, and fire smoke from trees that drank from discarded waste placed anyplace. Today my daughters are born into single car driver twice daily parades, dependence on industrial weapons, economic charades, the sounds of bombs exploding as we pray to the sun in mornings. Will my cornmeal prayers protect them as they play in ditches, carrying water from a source three miles away from tritium releases? What did my oldest get exposed to? As I breathed in smoke from a tech area burned three times over. What kind of poison can penetrate the walls of my womb? What stories were silenced, and why and from whom? The truth must be told from the people who lived it, who dwell in this place that houses our spirit. Respectfully, I pray, for past, present and future souls to be at peace someday, for clean earth, air and water, so my children can play, splashing and laughing as we tend to our gardens beneath the living gaze of our sacred mountains, free of fear from invisible poison, free to hear, undisturbed and clear, the birds sing in the morning, as we continue to question and speak our points of view, let us share the stories anew that have never been told and release the pain not even a century old. No longer shamed by accusations of ignorance, let our diverse voices be our deliverance. No breath here is unimportant. We are free to pray, each in our own way, for justice, strong leaders, and supportive institutions, a</p>		

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		foundation for our expectations, as we welcome in this time of healing for the good of all future generations.		
238	Gen.	This is a comment from a Chelsea Valerie Kathryn Colon and me. We live downriver of Los Alamos and get 20 percent of our tap water from the Rio Grande. We're concerned about the communities who are downwind from Los Alamos National Laboratory. And we support the denial of LANL's permit applications for any more polluting of our State of New Mexico.	Comment noted	NA
239	Gen.	I'm from the organization Think Outside the Bomb. We're a large youth network nationwide that opposes -- or that's antinuclear. And I'd just like to go on record saying that I'd like a denial of the permit because Los Alamos -- its waste is affecting the communities specifically around Los Alamos, like Espanola and the pueblos, and -- and it's also trickling down and coming into Albuquerque. And I feel that it's a huge health hazard and that we need to start protecting our state instead of polluting it with radiation.	Comment noted	NA
240	Gen.	<p>I am very worried about the issue of nuclear waste. I come from a country where this problem does not exist. When I came to this country, I thought that my health would be better, that there would be more safety, less contaminants of the ones that my country has when they place plastic trash and waste in the water, because we don't have the financial resources to do it in the correct way.</p> <p>The situation here is very scary and unpredictable, with the higher risk of potential with diseases of the lungs with cancer and permanent damage to the inhabitants and to the environment. In Latin America, we have the image of the USA as a great nation, a world power. Then is this an intelligent attitude? With so many specialists, nobody thinks at least about their own family. In my country, we want the best for the nation. Don't you?</p> <p>Another situation, I was in Mexico, near nuclear areas, and other dangerous areas, but I could see that there were a lot of signs for miles and miles stating "Evacuation Route." Do we have one here?</p> <p>Do you truly think that we are safer here? Is NMED doing the best for us and for New Mexico?</p>	Comment noted	NA

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241	Gen.	<p>I'm a teacher here in town [Albuquerque]. The DOE lost my trust a long time ago. I used to live by the Fernald -- worked by the Fernald nuclear plant, and lived there, too, actually. And my students started getting cancer. So I do not trust the DOE. And, you know, I watched a six-year-old child go through hell with a brain tumor and a nine-year-old child go through hell with leukemia.</p> <p>The thing that I want to say is that I'm rapidly losing trust with the NMED. You know, we have radionuclides in the Rio Grande now, and our water -- our drinking water is coming through the Rio Grande. So I wish I could avoid bathing, showering and drinking the water that we have, but I don't have a choice. If I had an infant, I know I would move out of town.</p> <p>We now have jet fuel underneath Bullhead Park, where my husband and I walk a couple of times a week. We see the wells cropping up all over the place there. I don't understand why we would even give a permit -- a hazardous waste permit to Los Alamos National Laboratories. If we can't keep the radionuclides out of the Rio Grande and we can't keep the jet fuel out of our water, why would we allow more risky things to happen here in this state? I think that that permit should be denied.</p> <p>I think there should be total transparency, and I think the NMED should do its homework before it approves a permit. And I don't think the permit should be approved. And I don't think the NMED has been doing its homework.</p>	<p>Comment noted.</p> <p>Regarding radionuclides, though the Department does have jurisdiction over the hazardous component of mixed wastes, the Department has no regulatory authority over the radioactive component or radionuclides in general.</p>	NA
242	Gen.	<p>I got a call this afternoon that this hearing was happening. I had -- had no knowledge of it. And I went in to Sarah Gustavus, who is the All Things Considered host on KUNM, and said, "Do you know that there's a hearing happening and they're talking about burning all of this hazardous waste from -- from" -- I almost said Three Mile Island, because that's where I come from -- but "from Los Alamos National Labs?" And she said, "Oh, they wouldn't be allowed to do that. They can't open burn hazardous materials." Of course, she's from Texas and has lived in the Pacific Northwest so maybe she's not aware of how little the populous and the environment here is actually protected. So she thought it was an unthinkable thing. "Of course not, they won't allow that."</p> <p>So I am coming here today as a citizen, as someone who would like to retire in New Mexico. I'm here as someone who is the mother of this beautiful young woman who got up and spoke. And I would like her to stay in New Mexico. And if I ever have</p>	<p>Comment noted</p>	NA

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		<p>grandchildren, I would like them to stay in New Mexico. But it has to be a livable place. And I hope that you have children and grandchildren so that you want it to be a livable place for them, as well, and for all of New Mexicans.</p> <p>And as I said, I -- I grew up around Three Mile Island. I remember going to the observation place across the river, when they were building the plant. I was dating at the time, and we went there on a date. Crazy place to go on a date.</p> <p>But they said, "The chances of an accident here" -- because my date asked, What's the chance of an accident?" They said are four -- one in four trillion. And March 29th, 1979, we had that accident. So that one in four trillion happened.</p> <p>And I speak to you from a personal standpoint, because my relatives on my father's side are all Mennonites, they all lived within a 10-mile radius of Three Mile Island. None of them ever smoked cigarettes. I think that they were probably the original subscribers to Prevention Magazine. They ate the food they grew. They didn't use chemicals. They ended up with the most hideous cancers that you can imagine. My cousin, his first child was born with all of his major organs outside his body. He was in the neonatal intensive care unit of Hershey Medical Center for three months while they pieced him back together. He did survive. The nurse there told me that there were many, many incidents of children born with their major organs outside their body, much higher than the national average, much, much higher. They got all sorts of cancers. And like I said, never once smoked a cigarette in their lives, didn't use chemicals. And all of this stuff is being hushed.</p> <p>I say please, please, for the sake of the people here, who bother to buy organic food and they bother to buy bottled water, they could -- you could still allow them to have their health and their lives and their children's lives and their grandchildren's lives destroyed. Put a lid on this nuclear industry; make them do the right thing by our people, please.</p>		
243	Gen.	<p>I first arrived in Albuquerque in 1939, grew up there, graduated from high school, went off to engage in the academic world, Stanford, Georgetown, US Naval Academy, State University of New Mexico, did research for George Washington University, chairman of a large Middle-Eastern/African language department for the Defense Languages Institute. I'm not saying this to boast, but just to qualify my type of opinion. All of my teaching research and chairmanship jobs were by invitation, not application. I came back to Albuquerque after my teaching career in 1977, which is almost as old as I am</p>	Comment noted	NA

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		<p>now. I've been back here in Albuquerque and New Mexico since 1977. I am mainly Caucasian, but part Native American. I identify with New Mexico. I tend to have relatively little patience with -- I should also mention my wife and I were employed by the CIA in Europe in the '60s, in Spain. So I've had contact -- I was there at the Universidad de Madrid for two years in connection with that activity.</p> <p>I am deeply concerned with the state of buried, dangerous waste materials in connection with Los Alamos and Sandia Laboratories, and I -- especially with you people, I know I don't need to review details with people who know, undoubtedly, vastly more about the details of this than I do. But, in general, I'll just say that I agree with the type of concerns that have been expressed by people, such as David McCoy, whom I barely know. I met him, I talked with him, I didn't even -- I hadn't seen him before a couple of days ago. I am very, very concerned about the -- what I perceive as inadequate preparation, oversight, examination; what I perceive as -- I tend to speak carefully, because, first of all, I have a PhD in linguistics, so I tend to be language aware, but what I perceive as trickery on the part of people whose vested interests tend to minimize the - - what seemed to me to be clear dangers of the way waste has been handled, is being handled, and the dangers to aquifers, et cetera, the kinds of things that I'm sure have been talked about before here and all of you are much more familiar with than I am in detail.</p>		
244	Gen.	<p>I'm an occupational therapist. I work for New Vistas, which works with our community's children under three that have developmental disabilities. I spoke earlier about concerns, and I neglected to voice some of the concerns.</p> <p>I'm a spokesperson for over 300 parents with children with special needs, representing doctors, nurses, health practitioners, therapists, early interventionists. We submitted our petition with our concerns that were presented to the Buckman Diversion project. The area that I did not go in detail about is our concern about the area directly upstream from the Buckman Diversion project, it's less than a hundred yards away, and there is -- plutonium has been detected by the New Mexico Environmental Department, and we've been told that the -- that there is plutonium in it, as well as other heavy metals.</p> <p>We are told that we do not have to be concerned, because these levels are at Superfund cleanup levels, so that they already meet Superfund cleanup levels.</p> <p>Our concern is that the standards for Superfund cleanup levels are not current, to our</p>	<p>Comment noted.</p> <p>Regarding radionuclides, though the Department does have jurisdiction over the hazardous component of mixed wastes, the Department has no regulatory authority over the radioactive component or radionuclides in general.</p>	NA

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		<p>present research, for epidemic research; and looking at what now particle contamination may do -- affect infertility, premature birth, birth defects, autism -- we feel like this needs to be reviewed. We consider the plutonium and the heavy metals that are buried three-foot underground, less than a hundred yards away from our public water source, a potential threat, if new research is not reviewed.</p> <p>We would like the most recent research for nano-particle contamination to be reviewed. We feel like this is an off-site contamination site. These are materials that were supposed to be covered under the hazardous waste containment laws. They are off site.</p> <p>We are being told, "Don't worry." Well, we're in a state where we need to worry, because the levels that were again present ten years ago for smoking have changed. The levels for contamination for arsenic in treated lumber have changed. We are now looking at a CO2 footprint that was not heard of when the Superfund contamination levels were made. I would hope that we will be looking at a nuclear footprint standard that will be changing as research changes, and we ask that that be reviewed.</p>		
245	Gen.	<p>I have worked as a library science professor, librarian, and estate consultant in the Department of Education for many years, and I'm now retired. I'm just speaking personally that I think – I would echo the sentiments of the previous speaker just before me, that not enough careful thought is made about the future of this place and the population who lives here.</p> <p>I have witnessed many people in the area around Los Alamos having cancer, and I'm also a cancer survivor. I feel like it should be the highest priority, and the safety of this population should take priority over what I feel are arbitrary decisions related to nuclear safety.</p>	Comment noted	NA
246	Gen.	<p>For several years, I've been trying to understand an aspect of plutonium chemistry that I haven't quite been able to fully wrap my brain around. In the literature, plutonium oxide, PuO₂, in the four-plus oxidation state, is the stable oxidation state, and it's been generally known to not be very soluble in water. In my research, I discovered some articles published in Science Magazine since 2000 that indicate that there is a species of plutonium oxide, PU, that's a six-positive oxidation state that is actually soluble in water. I would like to read for the record the abstracts of three of those articles published in Science Magazine and then I would like to make a comment.</p>	<p>Comment noted.</p> <p>Regarding radionuclides, though the Department does have jurisdiction over the hazardous component of mixed wastes, the Department has no regulatory authority over the radioactive component or radionuclides in</p>	NA

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		<p>This is from Science Magazine, January 14th, 2000. The title is "Plutonium Chemistry: Toward the End of Plutonium PuO₂'s Supremacy?" by Charles Madic. "Plutonium oxide (PuO₂) has long been thought to be the most stable plutonium oxide under oxidizing conditions. Its stability has been a key factor in safety considerations for military and civilian uses of plutonium and for long-term storage of nuclear materials. A report by Haschke, et al., shows that PuO₂ is metastable and can be oxidized to PuO_{2+x}, with more than 25 percent of plutonium ions oxidized to the more mobile Pu(VI) oxidation state. The results have implications for both military and civilian applications, for the long-term storage of plutonium, and for the geological disposal of nuclear wastes."</p> <p>The second one is published 14 January 2000, also, and it is from Science, and it's "Reaction of Plutonium Dioxide with Water: Formation and Properties of PuO_{2+x}," by John Haschke, Tom Allen and Luis Morales. "Results show that PuO_{2+x}, a high-composition" -- and this is X lesser than or equal to 0.27 -- "phase containing Pu (VI) is the stable binary oxide in air. This nonstoichiometric oxide forms by reaction of dioxide with water and by water-catalyzed reaction of dioxide with oxygen. The PuO₂ plus H₂O reaction rate is 2.27 nanomoles per meter squared per hour at 25 degrees centigrade; the activation energy at 25 degrees to 350 degrees C is 39 kilojoules per mole. Slow kinetics and a low lattice parameter composition dependence for fluorite-related PuO_{2+x} are consistent with a failure to observe the phase in earlier studies. Perplexing aspects of plutonium oxide chemistry can now be explained."</p> <p>And the final one that I would like to read comes from October, 2006, in Science. It's called "Colloid Transport of Plutonium in the Far-Field of the Mayak Production Association, Russia." There are a number of authors for this. It says, "Sorption of actinides, particularly plutonium, onto submicrometer-sized colloids increase their mobility, but these plutonium colloids are difficult to detect in the far-field. We identified actinides on colloids in the groundwater from the Mayak Production Association, Urals, Russia; at the source, the plutonium activity is 1,000 becquerels per liter. Plutonium activities are still 0.16 becquerels per liter at a distance of three kilometers, where 70 to 90 mole percent of the plutonium is sorbed onto colloids, confirming that colloids are responsible for the long distance transport of plutonium. Nano-secondary ion mass spectrometry elemental maps reveal that</p>	<p>general.</p> <p>LANL and the Department have been aware of the possibility for colloid-facilitated transport of plutonium, and of the potential for fast movement of the colloid-bound fraction of plutonium downgradient from its sources. In order to detect and monitor both slow- and fast-moving contaminants, the groundwater monitoring network at LANL incorporates monitoring wells that are located at different distances from known or potential sources of contamination.</p>	

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		<p>amorphous iron oxide colloids adsorb Pu(IV) hydroxides or carbonates along with uranium carbonates.</p> <p>There are a number of other pieces in the literature that refer to colloid-facilitated contaminant transport, and there is even quite a long piece from the Savannah River site discovery of new plutonium chemistry and its potential effect on low-level waste disposal at SRS.</p> <p>I read those because I want to make a point regarding detection, and the ability of Los Alamos National Laboratory and NMED to assure the public that they know all they need to know, or that they know the latest and the most about the nature of these contaminants and their ability to migrate in the environment. For example, if the Buckman Diversion is going to use flocculators to take out, for example, other actinides or plutoniums that would bind to soil particles, that would be fantastic, but if there is a certain percentage of this that become soluble in water and is attached to micro-colloids, it seems that the detection and the cleaning of -- out of those contaminants might be very expensive, which brings me to the point that the ability to -- the ability to detect these very small quantities is expensive, and I don't think it's within the reach of a municipality or community to be able to detect these small quantities. So in a sense, the assurance that these levels are safe has to be taken on faith.</p> <p>I have great concern about this, because of the known contamination of the silts behind the Cochiti Dam, the implications for that in the long-term future to people downstream, for agriculture, for perhaps when the dam ceases to work the way it's supposed to, and those sediments that are building up get exposed to the air and, therefore, are free to be transported in the air.</p> <p>I would like to emphasize, then, that something needs to be done to address the issue of the detection of very small quantities of these substances, and even understanding the level to which they exist, if it's not widely known that there is this colloid transport mechanism and that it could be responsible for transporting these radionuclides long distances from their source.</p> <p>I would like to see the NMED work with LANL to assure the public that these things are taken into consideration.</p>		
247	Gen.	We're a victim of the Rio Grande -- the Cerro Grande fire ten years ago. Since then, I've	Comment noted.	No

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		<p>been hoping that maybe the EPA, or whoever agency, could do some vital statistics, because you always do some ground, air, water, but never the animals and the humans, and, unfortunately, all around me in the mountain, a lot of people are getting sick, a lot of thyroid problems, a lot of cancer. You have a pretty stable population around Los Alamos, i.e., the pueblos, the people stay there for years, they don't move, so they could be a good control population compared to the rest. I mean, I know that in the area that people move.</p> <p>I'm curious to know what to do to get some kind of movement towards vital statistics of the area, to know exactly why so many people have thyroid problems, cancer problems, and before we go and burn some more or add some more. The recent hearing where the Center for Disease Control told us that Los Alamos -- or its existence polluted more than all the nuclear plants in America put together. It doesn't take too many heads to realize that maybe enough is enough, and that we don't need to be spewed anymore, whether it's radioactive or not radioactive.</p> <p>Not only that, but it seems to me that being on the side of a volcano, we don't want to have the Gulf of Mexico happening. I think not very long ago, there was a – the front page of the papers was saying that Los Alamos could be in deep trouble if there was an earthquake, and I know there is about 300 faults underneath Los Alamos.</p> <p>So you're talking about all the details of those wells, all you need is a little bit of shaking and all your monitoring will be obsolete. It will be like when the Cerro Grande fire happened and the ashes covered the monitoring so you couldn't see or know what was in the air. I mean, those are the things that – what happened ten years ago is not going to be forgotten.</p> <p>As a mother, I had to tell my children that maybe they should think about taking their possessions, because we may not ever be able to come back if the fire has been coming too close. Personally, I managed to -- I mean, I was part of a class, a video class, and partook in making two movies. One was about the safety of Los Alamos. It was paid for and organized by Johnson Controls at the time. And then we did another one the year after, and that was right after the fire. The teacher that did that movie with me is now dead from thyroid complication. And I feel like we need somebody to stand up and say, "Where are those vital statistics?"</p> <p>Well, could we have some vital statistics done about the area? I mean, how much does it</p>	<p>Regarding radionuclides, though the Department does have jurisdiction over the hazardous component of mixed wastes, the Department has no regulatory authority over the radioactive component or radionuclides in general.</p> <p>Regarding seismic activity, see the Department's response regarding the subject in the document titled General Response to Comments.</p>	

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		cost?		
248	Gen.	<p>I'm on the board of Concerned Citizens for Nuclear Safety and retired from teaching at St. John's College, Santa Fe. St. John's is a nonsectarian liberal arts college that has no departments and no academic majors. The faculty is committed to teaching across the curriculum, and my background has a bearing on my comments.</p> <p>This is the first public hearing I've attended on hazardous waste permits. Over these weeks, I've been struck by the way the LANL and NMED concerns fall into areas of specialization. On occasion, we've heard the NGOs pose what seem like reasonable questions, only to be told, "Oh, you should have asked that question of the expert who gave the testimony yesterday." It's true that the last time we met, Mr. Bearzi returned and replied to some of those questions, but my point about specialized territory remains and poses a significant challenge.</p> <p>I suppose it is natural, during the 21 years since there has been a public hearing on the hazardous waste permit, that a labyrinth, like the archeology of an old culture, has developed, with layer upon layer of efforts undertaken and abandoned, regulations modified, and results in some critical areas, groundwater among them, too often unreliable. Someone really needs not only to see and to know the whole picture -- I'm sure there are people who do that -- but needs to take responsibility for communicating the whole picture.</p> <p>A public hearing like this is a hallmark of our democracy, and what will keep our democracy strong is when the citizens are educated and can participate in their government. If specialized knowledge marks off its domains so sharply that it's difficult to grasp the whole picture, you get a fragmented world of experts that is insulated against citizen education and participation. Specialized knowledge is absolutely essential, of course, but it must not shield institutions from citizen inquiry.</p> <p>The information repository created to serve as a resource for downstream and downwind communities is the first step in addressing this problem. I would add one thing to it, which is an intelligible overview of the hazardous waste system. Real transparency goes beyond releasing secret documents, to offer a context in which to understand them.</p> <p>I would respectfully ask that LANL and NMED prepare an introduction to the administrative record, a kind of reader's guide or navigational tool. In my mind, this</p>	<p>Comment noted.</p> <p>See the Department's responses regarding the information repository and contractor documents in the document titled General Response to Comments.</p>	Yes

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		<p>depicts, in an abbreviated form, the state of hazardous waste regulations at LANL. It pieces together the scientific information and brings it into the domain of a common language, recognizing that it is to everyone's benefit for the material to be not simply accessible but intellectually accessible. With such a tool, students of this particular time segment of hazardous waste operations at LANL have a solid footing for their studies.</p>		
249	Gen.	<p>I'm a writer. I've been doing research about issues related to nuclear weapons for many years now. I've been at a number of these hearings. For me, it's a heartbreaking experience to witness the labor, the expense, the struggle, the recriminations, the whole lot of it that's going on over these issues, which are very real and very serious ones. The 600-pound gorilla in the room is an atomic bomb.</p> <p>The reason why we're having these problems -- the reason why we're dealing with radioactive contamination, contamination of hazardous waste, is because Los Alamos was the first to produce an atomic weapon, and it continues to be involved in atomic weapons production. The waste from these years, as you have heard from everyone on all sides of the issue, is enormous, and there doesn't seem to be a stringent enough policy, enough money, enough direction from the federal government, enough consensus, to get rid of this stuff.</p> <p>So for me, you know, I find it really heartbreaking. So I'd just like to say that it's about time we address the source of the problem. If Henry Kissinger thinks that it's time to get rid of nuclear weapons, then, certainly, we could agree with that.</p> <p>It would be really nice to see all the energy in this room directed to addressing the source of the issue, which are these ridiculous useless weapons that have been hanging over us for 65 years and causing all of this stress, cancer, and, you know, acrimony amongst us. It's time for us to get it together and come together and really solve the problem at its source, and finally to make sure that there is enough money to really clean up this mess correctly and restore the environment to how it was 65 years ago.</p>	Comment noted	NA
250	Gen.	<p>My personal and public comment is based on my own experience with water, and as the wonderful expression of the Spanish goes (speaks in Spanish) without water there is no life. The need to keep our regional water systems clean and pure is of the utmost importance.</p> <p>I've been a resident in five different states in my lifetime, from New York to</p>	Comment noted	NA

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		<p>Pennsylvania, Colorado, Texas and New Mexico; and in each state, I've been quite aware of the problems of hazardous waste threatening municipal water systems. I am not an engineer, I'm not a hydraulics expert, I'm not a scientist, but I am a very concerned public -- private citizen, who is very concerned about this public issue.</p> <p>I do hope that the situation will be very, very carefully looked into, and that the labs will act in a manner in accordance with our protection and with the secure -- securing of the hazardous waste that apparently, by the commission's own recognizance, is already seeping into the Rio Grande.</p>		
251	Gen.	<p>I am reading a letter [dated April 26th] from our interim director, Jim Baird.</p> <p>I wish to speak out in opposition to awarding Los Alamos National Labs a waste permit for the open air burning of dangerous wastes and the continued systematic spoilage of our land, water and air in this ancient and beautiful land.</p> <p>For 17 years, I worked with the Ghost Ranch National Conference Center. From 2000 through 2009, I served as the director of program and was charged with planning and staffing more than 300 educational programs each year.</p> <p>Before Ghost Ranch was given to the church, it was owned by Arthur and Phoebe Pack. Arthur was an environmentalist who helped repopulate the high desert with several species of animals and who worked tirelessly for clean air and water.</p> <p>During the early 1940s, families would arrive from 'the mountain,' Los Alamos, to stay at the dude ranch, and it was only after the war that Arthur discovered that during that time the lab was conducting dangerous tests on what would later be called the atom bomb.</p> <p>Therefore, when Arthur Pack made a gift of his beloved ranch, he also gave a mission.</p> <p style="padding-left: 40px;">'This land must be a land of peace and justice, not war and destruction. This land is God's creation, and we must be stewards, not its destroyers.'</p> <p>That was the mission under which I worked and made programming decisions. It was my privilege to work with our neighbors, including Tewa Women United.</p>	<p>Comment noted.</p> <p>See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>Through this dedicated group of Native women, I discovered the extent of the tragic history of waste from" -- again, in quotes -- "'the mountain,' the contamination of the waters that has killed the fish, created unsafe drinking water, spoiled the canyons, and made inaccessible the ancient sacred places.</p> <p>As I learned more about the Los Alamos legacy, I discovered that Arthur Pack was only beginning to see that legacy. He witnessed the immediate destruction caused by the powerful bombs that destroyed Hiroshima and Nagasaki.</p> <p>He did not live long enough to see the long-term destruction, every bit as powerful and destructive as the ball of fire over a city, the slow and insidious destruction by contamination of our land, water and air.</p> <p>Approximately 21 million cubic feet of hazardous, mixed hazardous and radioactive waste generated from nuclear weapons production has been buried at LANL legacy waste dumps all across the Los Alamos mesas.</p> <p>Now a permit is being sought to continue open burning, that has been proven to release toxins into the air.</p> <p>Although New Mexico citizens continue to call for LANL to cease using our air and our water to dispose of these dangerous chemicals, their voices have gone unheeded by an agency that continues to act with impunity and privilege. The time to stop this process is now.</p> <p>As an organization representing more than 600,000 citizen Christians in this state, it is often called upon as a voice of concern and -- as a voice -- to voice the concern and the needs of the voiceless.</p> <p>In this case, many voices, beginning with those of our Native American sisters and brothers, have been raised eloquently through the years. What is missing is the will to act, to step forward as a state, and not permit these activities to continue.</p> <p>I urge you to deny LANL's permit application and to strongly monitor their future activities.</p> <p>Signed Jim K. Baird, Jr., Interim Executive Director, New Mexico Conference of</p>		

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		Churches."		
252	Gen.	<p>After we finished reading sections of the documents that have been kept secret for up to 10 years, we prepared sections for people to read of a hotline report from the EPA's Office of Inspector General, titled <i>Region 6 Needs to Improve Oversight Practices</i>, dated April 14, 2010, which we obviously received after this hearing had begun.</p> <p>In anticipation that some of these pages would be read, I gave the court reporter a copy of the entire document, and also a copy to you, Your Honor, for your convenience as pages were read, because it had not yet been introduced into the record. It turned out that citizens who came for public comment since then have prepared their own statements, and thus these pages were not read into the record. So I highlighted in a copy of the full document those parts that we had intended to read, and I would like to submit this copy with the pertinent parts highlighted. We respectfully request that Your Honor take administrative notice of this serious report from the Office of Inspector General.</p> <p>And in closing, I thank you, Judge Alarid, for your patient listening to citizens' comments during this long hearing. I pray that the Holy Spirit guides you as you review the mountain of documents and make your recommendations.</p>	Comment noted	Yes
253	Gen.	<p>Representing the legislative advocate for the New Mexico Conference of Churches – [i]n 2007, after being approached by Faithful Security: The National Religious Partnership on Nuclear Weapons Danger, the New Mexico Conference of Churches board of directors adopted nonproliferation of nuclear weapons and waste as one of its top priorities. Since then we have worked closely with the interested parties who have participated in this hearing on behalf of the people of New Mexico, especially Concerned Citizens for Nuclear Safety and HOPE, Honor Our Pueblo Existence.</p> <p>I would like to take this opportunity to express our appreciation to Bob Gilkeson, Don Hancock, Scott Kovac, Dave McCoy, Marian Naranjo and Joni Arends for the extraordinary service they and their organizations provide to all of us. We are deeply grateful for your brilliant and effective work.</p> <p>I am reminded of a refrain from a Bob Dylan song;</p> <p style="padding-left: 40px;">Well, it may be the devil or it may be the Lord, but you're gonna serve</p>	<p>Comment noted.</p> <p>See the Department's responses regarding regulated units/alternative requirements, groundwater protection, open burning, and the information repository in the document titled General Response to Comments.</p>	No

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		<p>somebody.</p> <p>Indeed, we're all gonna serve somebody.</p> <p>Clearly, these six and their organizations serve people rather than profits, and therefore serve in the best interests of God's creatures and creation.</p> <p>Which brings us to the issue of profits - We understand that the Los Alamos National Laboratory is currently operated by for-profit corporations that are committed to protecting and increasing those profits. That is the nature of for-profit corporations. However, we are witnessing the devastating consequences of allowing such corporations to compromise safety standards, most notably the decision by British Petroleum to not install a turnoff valve on their oil rig in the Gulf of Mexico, presumably to save \$500,000. Their decision was supported by the regulatory agencies at the time, persuaded by BP that public concerns were unwarranted.</p> <p>The damage inflicted by LANL since 1943 on the environment and surrounding communities of New Mexico is not so dramatic, but it is arguably even more insidious. Only 11 lives have tragically been lost in the latest oil rig explosion in the Gulf of Mexico. There is, however, reliable documentation that shows the alarming number of cancer and autoimmune deaths in counties surrounding LANL and the Trinity site where an estimated 19,000 women, men and children were living when the first atomic bomb was detonated in 1945. Science can be manipulated to support just about any position one wishes, as can theology.</p> <p>Therefore, we are not persuaded by LANL's testimony that open burning is safe any more than we are persuaded by Philip Morris that secondhand smoke from cigarettes is safe for those downwind. We are not persuaded that our groundwater is safe from the 21 million cubic feet of radioactive, hazardous and toxic waste buried in unlined pits, trenches and shafts in and around Pajarito Plateau. We are inclined to trust Dr. Barcelona's testimony that the monitoring wells are ineffective and that LANL needs to start over. We are not persuaded that the physical repository at Northern College is unnecessary and continue to believe that it is a reasonable and affordable request. We trust that LANL will consider it a worthy investment and offer it as a gift to the community that has suffered so much for so long by living in the shadow of the lab.</p> <p>In the event that the NMED draft hazardous waste permit is compromised by the efforts</p>		

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		<p>of the applicant, the New Mexico Conference of Churches will continue to work with the interested parties until health and safety regulations are put in place at LANL and cleanup is complete. We do not share the opinion of some that New Mexico and the world would be better off if the Los Alamos National Laboratory was shut down. We believe that the brilliant minds and expertise at LANL have a vital role to play in achieving our vision for a nuclear weapons-free world. This is a vision shared by a growing number of citizens, government officials, national and world leaders, people of faith and people of conscience.</p> <p>On September 21st, 2009, the National Council of Churches issued a statement entitled <i>Nuclear Disarmament: The Time is Now</i>. I will provide a copy of that resolution and a copy of the spring, 2009, issue of <i>Reflections</i>, published by the Yale Divinity School, entitled <i>The Fire Next Time: Faith and the Future of Nuclear Weapons</i>. I would share a brief quote from that document.</p> <p style="padding-left: 40px;">It is understandable that conventional wisdom would dictate that this is not the time for the United States to eliminate its nuclear shield. Rather, we should maintain a strong nuclear arsenal as a deterrent to attack. This reasoning breaks down for a number of reasons.</p> <p style="padding-left: 40px;">As Jonathan Granoff (president of the Global Security Institute) puts it, 'Nuclear weapons are of no value against terrorists, they're suicidal to use against a country that has them, and it's patently immoral to use them against a country that doesn't have them. So why do we have them?'</p> <p style="padding-left: 40px;">We cannot compel the rest of human kind to do our will based solely on the sheer magnitude of our military power."</p> <p>I would like to close on a lighter and more positive note from yet another song, this time from the song <i>Imagine</i>, composed by John Lennon.</p> <p style="padding-left: 40px;">Imagine that LANL stops producing and designing new nuclear weapons and commits their collective intellect and resources to leading the global campaign for nuclear disarmament, a goal that will take decades of work and generate profits, no doubt.</p> <p style="padding-left: 40px;">Imagine that instead of working to defend questionable safety practices, LANL commits itself to designing the highest safety standards and embarks on research</p>		

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		<p>into the handling and storage of nuclear waste and demonstrates its efficacy by using it to restore the Pajarito Plateau.</p> <p>Imagine that instead of opposing the physical repository at Northern College, LANL becomes its benefactor and helps to educate the next generation of scientists and technicians dedicated to nuclear disarmament, cleanup and restorative justice.</p> <p>Imagine if the history of LANL became a new chapter in our history books read by our children's children and their children for your decision to end your 65 years of service to weapons of death, and in the interests of national security, turn your efforts to disarming, containing, controlling and eliminating every one of the thousands and thousands of nuclear warheads that are scattered around the globe before one of them falls into the hands of a terrorist organization.</p> <p>Imagine if the staff of LANL became the first national laboratory to win the Nobel Peace Prize for its contribution to achieving a vision of a nuclear weapons-free world.</p>		
254	Gen.	I am writing to express my support for issuing LANL a Hazardous Waste Permit. I believe the laboratory can conduct its national security work and protect the NM environment and citizens.	Comment noted	NA
255	Gen.	<p>My stance on this issue is for the laboratory, for the DOE. And the reason for that is because there's inconclusive proof of any kind of detriment to the -- any kind of -- by the burn, open burn, of whatever it's called, waste or not, limited waste, to the public.</p> <p>You can take a look at any kind of an event that happened throughout the country or throughout the world, and -- and cannot be linked to any cancer or anything like that, any kind of disease or malfunction of the body. And I believe that the laboratory is saying that even though there will be slight elevations in whatever, the amounts will be slight. There are natural variations in the radiation or any other kind of variations in the atmosphere and on earth throughout time, have been and always will be.</p> <p>And I truly do not believe there should be any limit set to the laboratories in the sense of what they need to do. And -- and the reason they are limited in disclosing any details about anything like that is in terms of national security, because public is vulnerable to those things, and those who do not need to know things is for the benefit of the country as a whole, because elements can be vulnerable, the public can be vulnerable because</p>	<p>Comment noted.</p> <p>See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>they have information that they cannot keep to themselves. So I understand the nature of these proceedings to -- you know, to give information out only as is applied directly and not to -- not to have detriment to the national security in any other way to the country as a whole.</p> <p>But concerning the -- I believe this hearing is about the open burn issue and the permit for it. I believe the nature of the waste is -- although some people might consider is a terrible thing, it is not. It is a very minimal thing. And the elevations on and off in -- in whatever the -- consider the elements will not be insignificant or will not signify any kind of risk to population, or they will never be proven because they don't exist to any kind of disease or cancer or anything like that.</p> <p>Radiation in this area has long existed for many millions of years, and in many cases, it has been much greater than people can imagine, whatever.</p> <p>And I just question the whole validity of the opposition to this permit.</p>		
256	Gen.	<p>I just want to briefly comment, in a nondestructible way, about the public's resistance to allowing the permit here to go through. And as I have observed, most of their questions directed to the personnel, the people from the labs, were in a sense -- their base was in terms of helping those who asked those questions to understand -- to help them understand better the policies or the law that they were asking -- that they were asking questions about.</p> <p>So, I feel these proceedings are more of an informational thing for those five individuals who are in the front row on the left and I don't believe it's the job of anybody to be educated in the proceedings to the full extent, but that should have been the homework of those who asked those questions. I feel those who are asking those questions do not understand at all in their entirety how -- what -- if there are any issues at all, and the policies, I don't feel they really understand that, although they call themselves experts.</p>	Comment noted	NA
257	Gen.	<p>I just want to say a few points, because I've heard all the testimony -- I mean, the opinions of the public today. I'll try and make this short, in general, that -- well, I'll just speak about what the last person said.</p> <p>The actual effects of -- the perceived actual effects of -- on tissues, such as organs, that the lady here summarized, are inconclusive, because the transport mechanism of the -- is inconclusive, if it is even responsible in promoting the -- or having any effect on cellular</p>	Comment noted	NA

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		<p>structure, or the cellular components within an organism, or within -- and within any organ. It's inconclusive, because the -- the molecule – the receptor that binds to -- that received the – that receives -- that supposedly receives the chemicals in question, it's inconclusive of what mechanism actually, if at all, transports any kind of chemicals in question to the cell or if it has any effect on the body. But in any sense, that's all about that.</p> <p>I just wanted to say that most of the chemicals in question that -- are also inconclusive, that they actually cause any detrimental effect to the body, because all these chemicals, if they are called -- or radiation, they contain an ash or a natural – most of them are in natural forms in the soil and have been there for a long time before any kind of atomic development.</p> <p>I have here documents -- basic stuff I looked up on Wikipedia, it's all there, it's not classified or declassified, it's all available on-line, you can look at any on-line encyclopedia. Okay? And -- and in terms of radiation or any kind of radiation, it's inherent to -- to the -- to this body -- to the earth and outside the earth, the sun, and actually the radiation in question is the -- also the -- what people are worried about is the alpha radiation that many people commented on. It's part of a helium molecule that is present in the atmosphere. Helium is natural gas that is required, and the radiation is part of the process of the helium atom -- the natural process of a helium atom.</p> <p>So I'm -- these are just basic facts that are available on-line, Google, an encyclopedia, or Wikipedia, that anyone can access. Even a child can look at that. So -- and in terms of comments and participation of the public, I looked on your website, the New Mexico state website, and there are thousands of comments posted on your website with all kinds of documents. Basically, they all say the same thing and -- all the comments say the same thing, and leading me to the conclusion that there is no basic understanding of basic processes.</p>		
258	Gen.	<p>I live in Los Alamos and have worked as a scientist at Los Alamos National Laboratory since 1986. I am not a spokesman for the lab. This is a statement of my own personal knowledge and opinion.</p> <p>At the April 13th hearing at Ohkay Ohwingeh Pueblo, I made a statement. I wish to add to that statement today. At that hearing, I said that the work done for our national security at LANL over the past 65 years has resulted in undeniable damage to the</p>	<p>Comment noted.</p> <p>See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>environment of Los Alamos and surrounding areas, and this damage must be repaired. As a citizen of New Mexico and a candidate for New Mexico House of Representatives, District 43, I strongly support the New Mexico Environment Department's responsibility to regulate the cleanup of past environmental damage and to regulate present operations of LANL involving hazardous waste.</p> <p>As a citizen of the United States and a scientist at Los Alamos National Laboratory, I also support the work done there for our national security. Some of this work involves research into how to deal with emergency situations involving high explosives and high explosive residues, which can be extremely hazardous. Experts at LANL provide training to military personnel and first responders who have to deal with such situations.</p> <p>The safest way to dispose of the hazardous material produced in this research and training is to move it as little as possible, and then burn it in the open with high temperature burners. NMED and LANL agree that this procedure produces almost no air pollution or additional health risk to humans, and little other environmental impact.</p> <p>The work at LANL that requires open burning can save the lives of people who are asked to deal with hazardous situations. One of my duties is emergency response involving high explosives. It would be irresponsible for NMED to place me and my fellow responders, military and civilian, at greater risk by denying the lab permission to dispose of such waste in the safest and cleanest possible way. Los Alamos National Laboratory personnel, such as me, are ready and willing to do this work. The State of New Mexico should not tell the nation to find another place to perform this important mission.</p> <p>I urge the NMED to allow continued controlled open burning of the wastes produced in this work at Los Alamos National Laboratory. The lab has agreed to appropriate monitoring of any potential future environmental impacts.</p> <p>Today, I have additional comments. I have looked at many of the statements made in this hearing, which have been posted on the NMED website. There are statements critical of some of the national security work done at Los Alamos National Laboratory. We're all free to state our opinions on this, but these criticisms should not influence the decision NMED makes, because it is not the role of NMED to determine national security policy.</p>		

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		<p>There are statements criticizing the slow pace of the federal government to clean up previous environmental damage at the lab. I share this concern, and I continue to support the Obama administration's increase in funding for remediation work.</p> <p>There are also a lot of statements from people like me, who work here and live here, and from our local governments, such as the Los Alamos County Council, in favor of the permit to include controlled and monitored open burning. Of course, we want a clean environment in which to live and raise our families. We want to do our work at LANL in an environmentally responsible way. We expect the New Mexico Environment Department to work with the lab to make this possible, and to help decrease the misunderstanding about what we do at Los Alamos National Laboratory.</p>		
259	Gen.	<p>I care about health in my community and in northern New Mexico. Clean air to breath and clean water to drink are essential to a healthy life. The natural health industry is a vital part of our economy. I support NMED hazardous waste permit requirements that include confined burn facilities to capture harmful emissions, and financial assurance requirements that funding will be available to clean up contaminated sites when they are no longer in use. Please require LANL to START OVER by implementing a new system of wells for sampling and measuring the ground water contaminants, that will be effective overcoming the many current problems according to the expert technical testimony at the NMED permit hearing on 4/14/2010 by Dr. Michael Barcelona. Do not allow further hazardous waste operations without requiring adequate fire protection and a reliable network of seismometers to accurately monitor the seismic hazard, from ground motions, which is increasing at LANL. The national security mission of LANL demands that both the troops in Iraq and Afghanistan and the people in the United States, in New Mexico, receive protection and safety from LANL activities.</p>	<p>See the Department's response regarding open burning, financial assurance, groundwater, regulated units/alternative requirements, and emergency preparedness in the document titled General Response to Comments.</p>	Yes
260	Gen.	<p>I make the following public comments about the February 2, 2010 revised draft Hazardous Waste Permit for Los Alamos National Laboratory (LANL), which will allow the Department of Energy (DOE) and LANL to handle 114 million pounds of hazardous waste each year during the 10-year permit.</p> <p>I support the NMED denial of LANL's permit applications for the open air burning of hazardous waste. LANL has been on notice for more than 21 years that the public does not want them to use our air for disposal of hazardous waste. If DOE/LANL needs to continue to burn hazardous waste, there are alternatives, including confined burn</p>	<p>See the Department's responses, regarding open burning, the information repository, public participation, seismic hazards, financial assurance, and emergency preparedness in the document titled General Response to Comments.</p>	Yes

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		<p>facilities that are designed to capture the emissions. Any permit for confined burned facilities must include limits on the amount and types of waste to be burned, as well as the frequency.</p> <p>I support NMED requiring DOE/LANL to install confined burn facilities before the permit is finalized as an alternative to open burning. The permit must include limits as to the type and amount of waste and the frequency of the burns.</p> <p>The Environmental Protection Agency (EPA) issued enhanced public participation requirements for early, often, meaningful, and continuous contact with the public about the cleanup of the LANL dumpsites. The 25 dumps contain "legacy waste," which are dangerous mixtures of wastes contaminated with chemicals and radiation. NMED, DOE and LANL have been lax in fulfilling the public participation requirements, such as holding public meetings on a regular basis, providing documents, and informing the public of opportunities for input into decision-making processes.</p> <p>The permit must include prescriptive requirements for NMED and DOE/LANL to provide enhanced participation as required by EPA for early, often, continuous, and meaningful contact with the public about both the Compliance Order on Consent (Consent Order) and the Final LANL Permit.</p> <p>DOE/LANL is required to establish an Information Repository where permit documents are readily available to the public. NMED is only requiring LANL to create a virtual (electronic) repository. Previous drafts of the permit required both a virtual and physical repository. EPA supports a physical Information Repository.</p> <p>As an act of Restorative Justice and in order to meet the needs of both urban and rural communities and future generations, NMED must require DOE/LANL to establish both a physical Information Repository in the Espanola Valley, as well as a virtual (electronic) version before the permit is finalized.</p> <p>Over the past 10 years, serious deficiencies in the DOE/LANL Emergency Management and Response Division have been found by several government auditing agencies, including the DOE Inspector General, the Government Accountability Office, and the Defense Nuclear Facility Safety Board. The reports described serious problems with LANL fire protection before the Cerro Grande Fire of 2000. The new reports describe the ongoing failure to provide fire protection.</p>		

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		<p>I object to NMED allowing DOE/LANL to continue hazardous waste operations without meeting the emergency management, planning, preparedness and response requirements. NMED must conduct a full investigation into the recommendations of the expert reports and require their implementation before the permit is finalized.</p> <p>A 2007 report described a 50% increase in the seismic hazard at LANL. It identified many deficiencies in the knowledge of the seismic hazard and made recommendations for further field studies. It also identified the failure of DOE/LANL to install and operate a reliable network of seismic instruments (seismometers) to accurately monitor the seismic hazard from ground motions. The current network consists of uncalibrated seismometers at only three locations.</p> <p>I object to NMED allowing DOE/LANL to continue hazardous waste operations without the necessary field studies and without a reliable network of seismometers. NMED must conduct a full investigation into the recommendations of these seismic reviews before the permit is finalized.</p> <p>DOE/LANL and its contractor do not want to provide the financial documents to ensure that funding is available to cleanup the contaminated facilities at LANL when they are done using them.</p> <p>I support NMED requirements in the revised draft permit that DOE/LANL must meet all of the financial assurance requirements for each of the 24 hazardous waste management units.</p>		
261	Gen.	<p>I make the following public comments about the February 2, 2010 revised draft Hazardous Waste Permit for Los Alamos National Laboratory (LANL), which will allow the Department of Energy (DOE) and LANL to handle 114 million pounds of hazardous waste each year during the 10-year permit.</p> <p>I support the NMED denial of LANL's permit applications for the open air burning of hazardous waste. LANL has been on notice for more than 21 years that the public does not want them to use our air for disposal of hazardous waste. If DOE/LANL needs to continue to burn hazardous waste, there are alternatives, including confined burn facilities that are designed to capture the emissions. Any permit for confined burned facilities must include limits on the amount and types of waste to be burned, as well as the frequency.</p>	See the Department's responses, regarding open burning, the information repository, public participation, seismic hazards, financial assurance, and emergency preparedness in the document titled General Response to Comments.	Yes

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		<p>I support NMED requiring DOE/LANL to install confined burn facilities before the permit is finalized as an alternative to open burning. The permit must include limits as to the type and amount of waste and the frequency of the burns.</p> <p>The Environmental Protection Agency (EPA) issued enhanced public participation requirements for early, often, meaningful, and continuous contact with the public about the cleanup of the LANL dumpsites. The 25 dumps contain "legacy waste," which are dangerous mixtures of wastes contaminated with chemicals and radiation. NMED, DOE and LANL have been lax in fulfilling the public participation requirements, such as holding public meetings on a regular basis, providing documents, and informing the public of opportunities for input into decision-making processes.</p> <p>The permit must include prescriptive requirements for NMED and DOE/LANL to provide enhanced participation as required by EPA for early, often, continuous, and meaningful contact with the public about both the Compliance Order on Consent (Consent Order) and the Final LANL Permit.</p> <p>DOE/LANL is required to establish an Information Repository where permit documents are readily available to the public. NMED is only requiring LANL to create a virtual (electronic) repository. Previous drafts of the permit required both a virtual and physical repository. EPA supports a physical Information Repository.</p> <p>As an act of Restorative Justice and in order to meet the needs of both urban and rural communities and future generations, NMED must require DOE/LANL to establish both a physical Information Repository in the Espanola Valley, as well as a virtual (electronic) version before the permit is finalized.</p> <p>Over the past 10 years, serious deficiencies in the DOE/LANL Emergency Management and Response Division have been found by several government auditing agencies, including the DOE Inspector General, the Government Accountability Office and the Defense Nuclear Facility Safety Board. The reports described serious problems with LANL fire protection before the Cerro Grande Fire of 2000. The new reports describe the ongoing failure to provide fire protection.</p> <p>I object to NMED allowing DOE/LANL to continue hazardous waste operations without meeting the emergency management, planning, preparedness and response requirements. NMED must conduct a full investigation into the recommendations of the</p>		

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		<p>expert reports and require their implementation before the permit is finalized.</p> <p>A 2007 report described a 50% increase in the seismic hazard at LANL. It identified many deficiencies in the knowledge of the seismic hazard and made recommendations for further field studies. It also identified the failure of DOE/LANL to install and operate a reliable network of seismic instruments (seismometers) to accurately monitor the seismic hazard from ground motions. The current network consists of uncalibrated seismometers at only three locations.</p> <p>I object to NMED allowing DOE/LANL to continue hazardous waste operations without the necessary field studies and without a reliable network of seismometers. NMED must conduct a full investigation into the recommendations of these seismic reviews before the permit is finalized.</p> <p>DOE/LANL and its contractor do not want to provide the financial documents to ensure that funding is available to cleanup the contaminated facilities at LANL when they are done using them.</p> <p>I support NMED requirements in the revised draft permit that DOE/LANL must meet all of the financial assurance requirements for each of the 24 hazardous waste management units</p>		
262	Gen.	<p>As deeply concerned and worried residents of Santa Fe, my husband and I wish to present to you the following public comments regarding the revised draft Hazardous Waste Permit for Los Alamos National Laboratory (LANL), which proposes to allow the Department of Energy (DOE) and LANL to handle the alarming amount of up to a quarter of a million pounds of chemical and radioactive, and therefore highly toxic, hazardous waste material each year during a 10-year permit period:</p> <p>1. We very strongly endorse and support NMED's prior denial of LANL's permit applications for the open air burning of such hazardous waste. For over 20 years, the lab at Los Alamos and the DOE have received ample notice and indications that the citizens and residents of New Mexico most definitely DO NOT the LANL facility -- or any other entity -- to be allowed to use our air for the dangerous and harmful open burning disposal of hazardous waste! In the very worst case scenario, and only if no other choice is possible, any such incineration program should only be considered if alternative methods can be used to adequately protect the public health, and, equally</p>	See the Department's responses, regarding open burning, the information repository, public participation, seismic hazards, financial assurance, and emergency preparedness in the document titled General Response to Comments.	Yes

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		<p>important, the environment as a whole.</p> <p>Such much less dangerous alternatives might include the use of confined burn facilities designed to capture the emissions, and prevent the atmospheric release of harmful incineration by-products. However, any permit which might be granted for tightly controlled (and state monitored) confined burned facilities must also include carefully calculated limits on the amount and types of waste which could be burned, and to further protect our air quality, strict limits should be imposed on the frequency of such burns.</p> <p>Accordingly, before any permit is finalized, at the very least, NMED should absolutely require that LANL must install appropriate and effective confined burn facilities, preapproved by NMED, as the only allowable alternative to open burning. Again, such permit must also include limits as to the type, amount of waste, and frequency of burns.</p> <p>2. We further must strongly demand ONGOING AND TIMELY public participation in all phases of the decision-making process regarding disposal and management of the hazardous materials currently under the supervision of LANL.</p> <p>As you know, the Environmental Protection Agency (EPA) has already issued mandates about the cleanup of the numerous, highly contaminated dump sites now placed under LANL, including the requirement that public participation must occur early in all decision-making processes, AND that such participation and information dissemination must also be meaningful, and continuous. Specifically, the (EPA) has issued enhanced public participation requirements for early, often, meaningful and continuous contact with the public about the cleanup of the 25 dumpsites now under control of LANL. These dumps contain the so-called "legacy waste," which is comprised of highly dangerous admixtures of waste contaminated with both chemicals and radiation. To date, unfortunately, DOE and LANL have been very lax in fulfilling these public participation requirements, such as holding public meetings, providing documents, and informing the public of opportunities for input into decision-making, and the NMED has not as yet put sufficient pressure to bear to make this happen.</p> <p>Therefore, ANY PERMIT TO BE ISSUED MUST INCLUDE specific, detailed, and mandatory requirements for NMED, DOE, and LANL consistently and without fail to provide enhanced participation -- as already required by EPA -- for timely, continuous,</p>		

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		<p>and meaningful contact with the public about both the Compliance Order on Consent (Consent Order) and the Final LANL Permit.</p> <p>3. It is our understanding that DOE and LANL are obligated to establish an Information Repository where permit documents are readily available for public review. At present, it appears that NMED is only requiring LANL to create a virtual (electronic) repository. Previous drafts of the permit required both a virtual and physical repository, which the EPA supports, and which we endorse as well.</p> <p>Therefore, in order to make certain all members of the public, including residents of directly urban and rural communities, those without computers, and the present and future generations who might be deprived of information in the event electronic data were to be lost or altered, can have physical access to the information vital to protect public and environmental health and take informed action as needed, we must demand that NMED require DOE and LANL establish both a physical Information Repository in the Espanola Valley, as well as a virtual (electronic) Information Repository before the permit is finalized.</p> <p>4. In regard to the issue of "Emergency Management, Planning, Preparedness and Response", we understand that over the past 10 years, very serious deficiencies in the DOE/LANL Emergency Management and Response Division have been found by several government auditing agencies, including the DOE's own Inspector General, the Government Accountability Office, and the Defense Nuclear Facility Safety Board. The reports previously issued have described serious problems with LANL fire protection, even <i>before</i> the nearly catastrophic Cerro Grande Fire of 2000. Even more alarming is the fact that the most recent reports continue to cite describe the ongoing failure to provide fail-safe fire protection.</p> <p>I strongly object to NMED allowing DOF/LANL to continue hazardous waste operations without meeting the emergency management, planning, preparedness and response requirements. NMED must conduct a full investigation into the recommendations of the expert reports and require their implementation before the permit is finalized.</p> <p>5. We are also very concerned about seismic hazards on the volcanic Pajarito Plateau. A report described a 50% increase in the seismic hazard at LANL. It identified many deficiencies in the knowledge of the seismic hazard and made recommendations for</p>		

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		<p>further field studies. It also identified the failure of DOE/LANL to install and operate a reliable network of seismic instruments (seismometers) to accurately monitor the seismic hazard from ground motions. The current network consists of only seismometers at three locations that are not kept in calibration.</p> <p>Therefore, I also strongly object to NMED allowing DOF/LANL to continue ANY hazardous waste operations without the necessary field studies, and absent a reliable network of seismometers. NMED must conduct a full investigation into the recommendations of these seismic reviews before the permit is finalized.</p> <p>6. Financial Assurance Requirements. DOE/LANL and its contractor do not want to provide the financial documents to ensure that funding is available to cleanup the contaminated facilities at LANL when they are done using them.</p> <p>I fully support NMED's requirements in the revised draft permit that DOF/LANL must meet all of the financial assurance requirements for each of the 24 hazardous waste management units.</p> <p>In conclusion, I must beseech you in the strongest possible terms to think FIRST about the public health and safety, and the protection and preservation of our air quality, water sources, and the health and viability of all the other life forms that inhabit the affected New Mexico ecosystems, when your department makes any and all of its decisions regarding the handling of toxic wastes in our state.</p>		
263	Gen.	<p>As a statewide river conservation organization based in Taos and Albuquerque, Amigos Bravos, Friends of the Wild Rivers, works to protect the ecological and cultural richness of the Rio Grande and other rivers in New Mexico. Amigos Bravos is committed to the use of state and federal regulatory processes to stop ground and surface water pollution migrating from LANL facilities into our state's water resources. Amigos Bravos has specifically been working to protect and restore water quality and quantity in White Rock Canyon. Amigos Bravos believes that by preventing additional pollution from being released from LANL, and by requiring clean up of historic releases, the public's right to clean water will be protected.</p> <p>Amigos Bravos, Friends of the Wild Rivers submits the following comments on the 2/2/10 revised draft Hazardous Waste Permit for Los Alamos National Laboratory (LANL):</p>	<p>See the Department's responses regarding the RLWTF, open burning, the information repository, public participation, and financial assurance in the document titled General Response to Comments.</p> <p>Regarding tritium contaminated water at TA-50; the Department has no regulatory authority over radionuclides.</p>	Yes

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		<ol style="list-style-type: none"> 1. Amigos Bravos strongly supports section 4.6 of the proposed permit. We are concerned about the revelations in testimony yesterday from Tony Griggs about recent transfers of tritium contaminated waters from TA-50 to TA-53. We are particularly concerned that LANL has not found the source of the tritium contamination in the water collection system for TA-50, which has necessitated trucking elevated levels of tritium contaminated water from TA-50 to the evaporation ponds at TA-53. The October 30, 2009 notice to the Environmental Protection Agency (EPA) indicates that LANL has or plans to transport 200,000 gallons of tritium contaminated water, at levels above the drinking water standard of 20,000 picoCuries per gram (pCi/L), to TA-53. This may constitute a change of the location of the discharge under the Clean Water Act, requiring a permit modification request and opportunity for public review and comment and request for hearing. 2. Amigos Bravos strongly supports the denial of open air burning of hazardous waste at LANL and supports NMED's proposed requirement to install confined burn facilities. 3. Amigos Bravos urges NMED to include additional public participation components in the permit to ensure that the public is kept informed. These additional components must include requirements to notify the public of all draft documents and reports, requirements to hold public meetings on a regular basis and requirements to notify the public about opportunities for input into the decision making process. In addition, to ensure that all New Mexicans are able to participate in the process, both an electronic and physical Information Repository must be required. <p>Amigos Bravos supports the financial assurance requirements in the draft permit. Adequate financial assurance will ensure that the public and the state of New Mexico are not left footing a cleanup bill at LANL.</p>		
264	Gen.	<p>I am very concerned as a downwind/downstream citizen of the public health impact from what the U.S. Department of Energy and LANL are proposing in this 10 year permit at this final hearing.</p> <p>My concerns center mostly around air and water quality. Not only must we deal with the clean up from the unsafe storage from 1943 and the repeated delays in even the</p>	<p>Comment noted.</p> <p>See the Department's responses regarding the regulated units/alternative requirements, open burning, the information</p>	Yes

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		<p>authorized clean up, but current and future contamination from proposed open burning of toxic waste.</p> <p>The effects of contamination in daily inhaled toxic air and from daily ingestion of toxic water may not be immediate and dramatic but are nonetheless dangerous to the health of individuals and communities. This weakens the capability of New Mexico to sustain a viable economic base since much of that depends on services, industries and tourism. It also is a long-term effect.</p> <p>Clean up must deal with over 21 million cubic feet of radioactive, hazardous and toxic wastes. These rest in unlined pits, trenches and shafts dug into the volcanic tuff subject to erosion and drainage into the water supply for the most fertile and populated area of the state.</p> <p>I have attended environmental hearings for the last 15 years. Now it is difficult to find credibility in the repeated technical presentations I have heard since so much is promised (fixes, remedies, and excuses) and yet there is persistent bypassing of those who urge safety for their communities and their peoples.</p> <p>Groundwater monitoring that is promised is not to be trusted for the installation, capability and reliability since 1998 does not meet the promises. The Rio Grande River will be more and more polluted with waste from LANL just as more and more communities will be drawing from it. The long range view is very threatening. Protests of the open air burning have been consistent for years yet the alternatives to this process (notably confined burn facilities) are not seriously considered.</p> <p>Human health must be viewed as a natural resource for the state and the nation. When our environment is wasted, human health suffers. And, all this at great cost because it was not sufficiently valued in the first place.</p> <p>I have two overreaching concerns. One is the lack of transparency and accountability of both DOE and LANL. I see this particularly in the limited involvement of those affected by these decisions. Participation has indeed improved somewhat in the last 15 years and this hearing is more comprehensive and open than most. But, it still is nowhere enough. Solid participation relies on good information readily available. Without a print repository of documents as well as online, involvement is limited by geography and access. Earlier drafts indicated the value of this, but now it is missing.</p>	<p>repository, and emergency preparedness in the document titled General Response to Comments.</p>	

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		<p>The second overarching concern is the need for better emergency preparedness. With everything from the changing climate to attack possible, LANL must have better systems in place than it did during the Cerro Gordo fire. Media reports did not reveal all that was missing in the response to that and to the many "incidents" that have been reported as safety and security issues. Again, accountability is diminished in the background.</p> <p>I urge you please to address the various issues raised in these hearings. We live here and deserve acknowledgement and response.</p>		
265	Gen.	<p>On behalf of the members of the Embudo Valley Environmental Monitoring Group (EVEMG) and all those residing downwind and down stream from the Los Alamos National Laboratory (LANL) that are concerned with ongoing public health and safety issues generated by nuclear weapons production in the past, present and future at LANL, EVEMG offers the following comments on the New Mexico Environment Department draft Hazardous Waste Permit for Los Alamos National Laboratory.</p> <p>EVEMG is a non-governmental organization that formed in 2003 to address community concerns about the risks generated by the Cerro Grande Fire. As downwind neighbors to Los Alamos National Laboratory (LANL), EVEMG focuses on air emissions generated by LANL activities and their relationship to public and environmental health and safety. Located throughout the Embudo watershed are traditional land-based communities that are both culturally and economically dependent on a watershed that is free of contamination. Many families throughout our watershed area depend on small, family farms and kitchen gardens for both income and sustenance. We view healthy air, land and water as critical in providing local stability and security.</p> <p>EVEMG has been involved in issues of Emergency Management, Preparedness and Response (EMP&R) for over half of a decade. Beginning in 2002, one and a half years after the Cerro Grande Fire of 2000, we have been on a path of studying, investigating, questioning and educating and informing our communities and government agencies about EMP&R at LANL and the actions and lessons learned from this devastating event. In November 2004 EVEMG and the Community Radiation Monitoring Group co-sponsored the Emergency Management and Preparedness Forum in Dixon, New Mexico. Over 100 people participated in the forum, which consisted of presentations by federal, state, county and local emergency managers and responders and tribal and local</p>	<p>Comment noted.</p> <p>See the Department's responses regarding open burning, the information repository, and emergency preparedness in the document titled General Response to Comments.</p>	Yes

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		<p>leadership about what they learned from the fire and what they have done to improve on their preparedness.</p> <p>This is what we learned through the forum:</p> <ul style="list-style-type: none"> • Agencies were no more prepared for an emergency at LANL after the fire than before the fire; • Lessons learned were not being addressed at any governmental level; and • Local leadership and community members were very concerned, angry and had very little trust around EM&R in the event any kind of accident at LANL. <p>This was the outcome of the forum:</p> <ul style="list-style-type: none"> • NMED, EVEMG and CCNS began working together with our communities and agencies putting together a regional Homeland Security emergency exercise to evaluate the capacity of all local, state and federal in response to an emergency at LANL; • Increased community education interest and involvement in safety issues at LANL; and • Increased interagency involvement in issues of EM&R. <p>Please submit as public comments the following comments on the July 6, 2009 draft NMED, LANL Hazardous Waste Permit hearing.</p> <ol style="list-style-type: none"> 1. EVEMG supports the New Mexico Environment Department (NMED) in denying the Open Burn Application for LANL. EVEMG objects to the open air burning of hazardous waste. EVEMG fully supports the alternative of a Confined Burn Facility in order to facilitate eliminating the reactive component of High Explosives. We see this as an invaluable tool that can be used over the term of the permit to reduce the footprint at LANL. 2. As part of Restorative Justice to communities impacted by 65 years of LANL operations, EVEMG supports a Physical Information Repository to be located in an institute of higher learning in the Espanola Valley. 3. While EVEMG supports the language of the Emergency Preparedness and 		

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		<p>Management and the Contingency Plan in the draft permit, we have little faith that LANL is capable of carrying out the terms of the permit. This comment is based on many reports, some that are attached to our comments, that provide substantial on-going evidence that LANL cannot meet the requirements of emergency management and preparedness set forth in the permit. The culmination of reports is provided in the document The Fire Protection Deficiencies at Los Alamos National Laboratory, which you will find attached to this email.</p> <p>Further, attached are two recent letters dated October 16, 2007 and December 8, 2008 letter from the Defense Nuclear Safety Facility Board (DNFSB) that identify on-going problems with LANL's fire protection; staffing shortages, funding shortfalls, implementation of the Baseline Needs Assessment, achievement of fire and emergency response capabilities, and overall lack of progress with respect to safety improvements at LANL.</p> <p>We understand that the DNFSB deals with LANL as a nuclear facility, however LANL's hazardous waste operations are in many cases intricately tied to nuclear operations. Some hazardous waste storage units are located inside of buildings with plutonium operations and in the case of Area G and TA-54 there are operations that include a radioactive component. These reports also serve to accentuate the broader implication of a systemic problem with the entire facility, which in the eyes of the public makes it far more serious.</p> <p>In the interest of protecting surrounding communities from the consequences of inadequate emergency preparedness and fire protection by ongoing operations and units covered under the proposed permit, EVEMG recommends that hazardous operations be suspended and that the requested permit be denied until deficiencies are fully and completely addressed to satisfy what our communities see as homeland security. Homeland security to land-based communities means protecting the air, land, and water from the consequences of an accident at LANL.</p>		
266	Gen.	<p>EVEMG supports the New Mexico Environment Department (NMED) in denying the Open Burn Application for LANL. EVEMG objects to the open air burning of hazardous waste. EVEMG fully supports the alternative of a Confined Burn Facility in order to facilitate eliminating the reactive component of High Explosives. We see this as an invaluable tool that can be used over the term of the permit to reduce the footprint at</p>	<p>Comment noted.</p> <p>See the Department's responses regarding open burning, the information repository, and emergency preparedness in the</p>	Yes

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		<p>LANL.</p> <ol style="list-style-type: none"> 1. As part of Restorative Justice to communities impacted by 65 years of LANL operations, EVEMG supports a Physical Information Repository to be located in an institute of higher learning in the Espanola Valley. 2. While EVEMG supports the language of the Emergency Preparedness and Management and the Contingency Plan in the draft permit, we have little faith that LANL is capable of carrying out the terms of the permit. This comment is based on many reports some that are attached to our comments that provide substantial on-going evidence that LANL cannot meet the requirements of emergency management and preparedness set forth in the permit. The culmination of reports is provided in the document The Fire Protection Deficiencies at Los Alamos National Laboratory, which you will find attached to this email. <p>Further, attached are two recent letters dated October 16 2007 and December 8, 2008 letter from the Defense Nuclear Safety Facility Board (DNFSB) that identify on-going problems with LANL's fire protection staffing shortages, funding shortfalls, implementation of the Baseline Needs Assessment and achievement of fire and emergency response capabilities and 30verall lack of progress with respect to safety improvements at LANV (10-16-07).</p> <p>We understand that the DNFSB deals with LANL as a nuclear facility, however LANL's hazardous waste operations are in many cases intricately tied to nuclear operations. Some hazardous waste storage units are located inside of buildings with plutonium operations and in the case of Area G and TA-54 there are operations that include a radioactive component. These reports also serve to accentuate the broader implication of a systemic problem with the entire facility, which in the eyes of the public makes it far more serious.</p> <p>In the interest of protecting surrounding communities from the consequences of inadequate emergency preparedness and fire protection by ongoing operations and units covered under the proposed permit, EVEMG recommends that hazardous operations be suspended and that the requested permit be denied until deficiencies are fully and completely addressed to satisfy what our communities see as homeland security. Homeland security to land-based communities means protecting the air, land and water</p>	<p>document titled General Response to Comments.</p>	

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		from the consequences of an accident at LANL		
267	Gen.	<p>In 2007, after being approached by Faithful Security: The National Religious Partnership on the Nuclear Weapons Danger, the NMCC board of directors adopted nonproliferation of nuclear weapons and waste as one of its top priorities. Since then we have worked closely with the "Interested Parties" who have participated in this hearing on behalf of the people of New Mexico, especially Concerned Citizens for Nuclear Safety and Honor Our Pueblo Existence.</p> <p>I would like to take this opportunity to express our appreciation to Bob Gilkeson, Don Hancock, Scott Kovac, Dave McCoy, Marian Naranjo and Joni Arends for the extraordinary service they and their organizations provide to all of us. We are deeply grateful for your brilliant and effective work.</p> <p>I am reminded of the refrain from a Bob Dylan song:</p> <p style="padding-left: 40px;">Well, it may be the devil or it may be the Lord But you're gonna have to serve somebody. Indeed, we all are gonna serve somebody.</p> <p>Clearly, these six and their organizations serve people rather than profits, and therefore serve the best interests of God's creatures and creation.</p> <p>Which brings us to the issue of profits. We understand that LANL is currently operated by for-profit corporations that are committed to protecting and increasing those profits. That is the nature of for-profit corporations. However, we are witnessing the devastating consequences of allowing such corporations to compromise safety standards, most notably the decision by British Petroleum to not install a turn-off valve on their oil rig in the Gulf of Mexico presumably to save the \$500,000 cost. Their decision was supported by the regulatory agencies at the time, persuaded by BP that public concerns were unwarranted.</p> <p>The damage inflicted by LANL since 1943 on the environment and surrounding communities of New Mexico is not so dramatic but it is arguably even more insidious. Only eleven lives have tragically been lost in the latest oil rig explosion in the Gulf of Mexico. There is, however, reliable documentation that shows the alarming number of cancer and autoimmune disease related deaths at LANL, and the Trinity site where an</p>	<p>Comment noted.</p> <p>See the Department's responses regarding open burning, regulated units/alternative requirements, and the information repository in the document titled General Response to Comments.</p>	Yes

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		<p>estimated 19,000 men, women and children were living when the first atomic bomb was detonated in 1945.</p> <p>Science can be manipulated to support just about any position one wishes (as can theology). Therefore, we are not persuaded by LANL's testimony that open burning is safe any more than we are persuaded by Philip Moms that second hand smoke from cigarettes is safe to those down-wind.</p> <p>We are not persuaded that our groundwater is safe from the 21 million cubic feet of radioactive, hazardous and toxic waste buried in <u>unlined</u> pits, trenches and shafts in and around Pajarito Plateau. We are inclined to trust Dr. Barcelona's testimony that the monitoring wells are ineffective and that LANL needs to start over.</p> <p>We are not persuaded that the physical repository at Northern New Mexico College is unnecessary, and continue to believe that it is a reasonable and affordable request. We trust that LANL will consider it a worthy investment and offer it as a gift to the community that has suffered so much, for so long by living in the shadow of the lab.</p> <p>In the event that the NMED draft Hazardous Waste permit is compromised by the efforts of the applicant, the NMCC will continue to work with the "Interested Parties" until health and safety regulations are put in place at LANL and clean-up is complete.</p> <p>We do not share the opinion of some that New Mexico and the world would better off if the Los Alamos National Laboratory was shut down. We believe that the brilliant minds and expertise at LANL have a vital role to play in achieving our vision for a nuclear weapons free world. This is a vision shared by a growing number of citizens, government officials, national and world leaders, people of faith and people of conscience.</p> <p>On September 21, 2009, the National Council of Churches issued a statement entitled: Nuclear Disarmament: The Time is Now. I will provide a copy of that resolution (see NMED's LANL administrative record) and a copy of the Spring 2009 issue of Reflections published by Yale Divinity School, entitled: The Fire Next Time: Faith and the Future of Nuclear Weapons.</p> <p>I would like to share a quote from that document:</p> <p style="padding-left: 40px;">As Jonathan Granoff (president of the Global Security Institute) puts it,</p>		

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		<p>"Nuclear weapons are of no value against terrorists, they're suicidal to use against a country that has them, and it's patently immoral to use them against a country that doesn't have them. So why do we have them?"</p> <p>But what about "rogue states," such as North Korea and Iran, which have recently acquired or may soon develop their own atomic bombs? Here, we must rely on the diplomatic weight of the entire rest of the world coming down on them, peaceably, in order to induce change. This will not happen, however, until the United States takes the lead.</p> <p>... we cannot compel the rest of humankind to do our will based solely on the sheer magnitude of our military power.</p> <p>I would like to close on a positive note from another song. This time from the song "Imagine" composed by John Lennon.</p> <p>Imagine that LANL stops producing and designing new nuclear weapons and commits their collective intellect, innovation and resources to leading the global campaign for nuclear disarmament, a goal that will require decades of work....and profits".. Imagine that instead of working to defend questionable safety practices LANL commits itself to designing the highest safety standards, and embarks on research into the handling and storage of nuclear waste, and demonstrates its efficacy by using it to restore the Pajarito Plateau.</p> <p>Imagine that instead of opposing the physical information repository at Northern.NM College, LANL becomes its benefactor and helps to educate the next generation of scientists dedicated to nuclear disarmament, clean-up and restorative justice.</p> <p>For over sixty years, the United States has relied on the possession of an arsenal of nuclear weapons in order to impose world peace and deter attack. It has accomplished neither. Rather, it has siphoned off untold billions of dollars that could have been spent on far more just and productive means of ensuring global "security" through economic and cultural development and cooperation. It has poisoned our air, our water, and our children. It has produced toxic waste products that will remain radioactive for millions of years. Many believe it has also engendered a false sense of security coupled with inordinate pride much resented by other nations. This has only served to degrade the</p>		

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		<p>status and esteem accorded to the U.S. by other peoples of the world, not to maintain or improve them. The same might be said of other nations that possess nuclear weapons.</p> <p>It is understandable that conventional wisdom would dictate that this is not the time for the United States to eliminate its nuclear shield. Rather, we should maintain a strong nuclear arsenal as a deterrent to attack. This reasoning breaks down for a number of reasons.</p> <p>Is it possible to put the genie back in the bottle? Yes, because, once the current worldwide stockpile of weapons is eliminated, it will become extremely difficult to assemble the raw materials to make a new one without the rest of the world taking notice and forcing an end to such efforts. This would require continued support for the U.N.'s international inspection system. This would also keep nuclear devices out of the hands of terrorist organizations-the technology and construction of a nuclear device is so extremely complicated and energy intensive that it is not feasible to imagine that a terrorist group could actually make and employ one on their own successfully. The prospect for what might happen if we do not act is too terrible to contemplate: nuclear winter, the end of all human life on earth, and the transformation of much or all of our planet into a radioactive hell. This far outstrips the potential damage that could be done by any other environmental threat. The end of the Cold War did not make the world safer; quite the opposite. It is time to finish what Ronald Reagan and Mikhail Gorbachev began in Reykjavik. It is time to realize that we cannot ensure our own security by force of arms, even if they be the most powerful weapons ever created.</p> <p>Imagine if the history of LANL became a new chapter in <i>every</i> history book read by our children's children, and their children for your decision to end your 67 year service to weapons of death and in the interests of national security turn your efforts to disarming, containing, controlling, and eliminating every one of the thousands and thousands of nuclear warheads that are scattered around the world before one of them falls into the hands of a terrorist organization.</p> <p>Imagine if the staff of LANL became the first national laboratory to win the Nobel Peace Prize for its contribution to achieving a nuclear weapons free world.</p>		
268	Gen.	I'm speaking from my history as the chair of Concerned Citizens for Nuclear Safety from 1991 to 2004, as the organizational coordinator for CCNS from 1995 to 1998.	Comment noted.	Yes

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		<p>During that time, a number of things took place. I have worked with many of the people in this room, along with CCNS. When I was organizational coordinator, we won the Clean Air Act consent decree against LANL for being out of compliance with the Clean Air Act Radionuclide Standards. Judge Mechem found 31 of the 33 stacks, emission stacks, were out of compliance at that time. This was in 1996, '97.</p> <p>Part of what happened during that time with the radionuclides and the air emissions was that LANL didn't really have -- didn't seem to have the capabilities to keep accurate records; and so Dr. Arjun Makhijani and the risk assessment manager, who did the audit of this whole consent decree, went through all of the records and instructed them how to keep records and how to be in compliance. This consent decree lasted until 2002, at least, and it was public participation, it was -- it was an avenue for the public to actually really be in compliance or be in participation with this whole process. It was the first of its kind of audits of LANL. It made LANL more in compliance. You know, our air is cleaner because of the consent decree and because of Judge Mechem bringing this judgment.</p> <p>The second thing that happened under my watch as chair, once I became chair of Concerned Citizens, is the Cerro Grande fire happened, and I felt an extreme call to action by numerous, numerous people in the community. They came to me, they asked me, "Anna, what is happening to our air? Look at the smoke and the dirt that's coming out of here." I had friends visiting with small children. I told them to leave town. We are all downwind from Los Alamos, and we are affected by what happens up there. So air emissions are extremely important. So this is another instance.</p> <p>So out of that concern, I organized a conference on the Cerro Grande fire and the aftermath, where over 450 people turned up to talk, to be informed, to find out what was happening to their environment, with the air, with the water. At that moment, our Governor, Bill Richardson, was Secretary of Energy. He wrote me a personal letter. He supported the whole process. He had DOE at the table, many of the people in this room were at that table. Along with the New Mexico Environment Department, LANL was at the table. We all -- we had a conference.</p> <p>We discussed people's concerns. We worked out a solution. We talked about different things that could be done to mitigate the run-off into the Rio Grande.</p>	<p>See the Department's responses regarding the information repository, contractor documents, and open burning in the document titled General Response to Comments.</p>	

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		<p>There was -- it was a really important moment in this community.</p> <p>Now, the woman before me was concerned that a lot of people haven't shown up here, and part -- I would say there are a number of reasons why people have not shown up here. One, it is way out of town. Almost all of our other hearings that have happened have been right in the center of town, making it much more convenient for people to get there. That might be one reason. But I also think they are disenchanted, you know.</p> <p>But I, myself, as somebody who has run for public office, has a large constituency, I know that I am here speaking for them and on their behalf, to protect the public. I am here to support 100 percent what the -- that the Environment Department has denied LANL's application for open air burning, and I feel that I represent a large constituency.</p> <p>During the Cerro Grande fire, we were all -- we were concerned about many things, but the plume was one of the biggest things that was of major concern to people. But also the official record said one thing about what happened, but the citizens and other activist groups had different records and different concerns. I find that some of the secret records that are just now being released about the Cerro Grande fire do confirm some of the people's concerns. Also, in 2002, the first run-off after the fire, the amount of radionuclides, the amount of contaminants, perchlorate, different poisons that Los Alamos produces from their weapons manufacturing, were in the water and entered into the water stream. That is a big concern to me that, you know, different things have -- are migrating, you know. In the beginning, LANL said 600 years before anything gets into the Rio Grande. We already know today that there are things -- 60 years, there are things in the Rio Grande. There is plutonium in the Rio Grande. That is a fact.</p> <p>So those are some of the things that happened under my watch. I really pushed CCNS to become involved in doing water contaminants. One of the pieces of information that has been put into the record is the "New Mexico Right to Know, the Potential for Groundwater Contaminants from Los Alamos National Laboratory." This was produced, and there was other booklets produced under my watch as chair that were about health contaminants. Since that time -- since my chairmanship ended in 2004, I was also the -- I have also been the chair of the New Mexico State Acupuncture and Oriental Medicine Board for the State of New Mexico. That term has also ended. So I feel that I have credibility in making these statements.</p> <p>The other thing that I wanted to comment on is that there was a fire that was generated</p>		

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		<p>by LANL's operation in 2008, and it burned over 15 acres at one of the open detonation sites. So there is like a number of things that continually happen at LANL that are making all of us concerned about their ability to protect the public, and that is the New Mexico Environment Department, Concerned Citizens for Nuclear Safety, they are the people who are protecting the people, and so, therefore, I support what they are doing.</p> <p>One other thing I would like to request is that this -- that there be established and maintained a physical information repository, to be located in the Espanola Valley, as a matter of restorative justice for the citizens of New Mexico.</p> <p>So LANL has been on notice about public concern and air emissions for the past 20 years. These are some of the examples that I stated. I just felt that, since I came last time and read the secret documents, that I needed to come and present myself as a professional in the community so that you would understand my grave concern about this open air burning permit, and that it really needs to not happen, and that we, the citizens of New Mexico, need to be protected.</p>		
269	Gen.	<p>I'm going to read selected sections of what was, until recently, a secret document, which is now identified as Administrative Record Number 32470. The document is dated February 18th, 2004. It is from June Dreith, Program Manager of TechLaw, Incorporated, to Mr. David Cobrain of the New Mexico Environment Department. The document refers to "Review Comments on LANL's Ecorisk Database, Release 2.0," dated November, 2003.</p> <p>Mine is a Spanish last name, which is actually a Jewish convenso last name, and so somewhere in my father's family there were Jews named Casias, who hid and came to this country. I was born in Southern Colorado, but only was there for a couple of days, until my parents came home with me here to the Espanola Valley. I've lived here in New Mexico all of my life, and all but seven years here in this valley. My parents are first-generation Espanola residents. They came from Southern Colorado. My mother's family, they were sheep ranchers, now cattle ranchers. My father's family comes from an area near Mora called Rainsville, and they -- his people were miners. They were relatively poor. But both of my parents were college educated, and I feel very blessed for that fact.</p> <p>I have been able to participate in a group of women who have been working on these issues, some of them over 20 years, and although I don't understand the technical</p>	<p>Comment noted.</p> <p>See the Department's responses regarding contractor documents, open burning, and the information repository in the document titled General Response to Comments.</p>	Yes

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		<p>portions of a lot of what they do, my part has been to help bring the community to many events, including public hearings, such as this one. I would like to thank my parents for being the activists and being the intelligent people that they were, who gave me a mind to think on my own and not necessarily listen to what people who might be telling lies had to say.</p> <p>What I have to say about that is that I can remember growing up and being told to hide my head under a desk just in case Los Alamos was attacked. Of course, hearing that all the things that were coming down the canyons from Los Alamos, they weren't toxic, there were no problems, it was supposed to be a happy life, but, in fact, a life that my grandparents lived and their parents before them, and all the generations, since my great, great-grandmothers, who were from Picuris and Ohkay Ohwingeh Pueblos, had lived, has been taken away from me, from my two children for the generations to come, unless I do something about this.</p> <p>So I'm here today to tell the people who work at LANL, who live in Los Alamos, that you have defiled one of the most sacred parts of Northern New Mexico, and</p> <p>I would like for you to stop. So burning chemicals in the air, that come here to my home, that get into my water, get into the water of my children, into our soil, into the food that we grow, as we've always grown it, is not okay. I don't want the New Mexico Environment Department -- I love Secretary Curry, I think he's fantastic. I don't want him to issue this permit.</p> <p>I respect the people whom I've met through the -- who work at the Environment Department, and I'm asking them -- through our short relationship with each other, you know that I speak my mind, and that I speak for a lot of people who live in this valley who are too scared to be here today because it would pose great financial threat to their families, and to those working-class families whose parents weren't educated and who working at LANL is a first chance for them to have any success in their family, in this world of greed and consumerism, which they have learned to participate in, thanks to the oppression brought on by LANL being our neighbor.</p> <p>So, again, I'd like for the permit to – if it's going to be issued, to follow all the things that our wise and brave women who have been here, Marian Naranjo and Joni Arends and Senora Martinez, all of our people here who represent us, our voice, you need to take those things into consideration and really take care of this, because we're coming</p>		

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		<p>into a time where what corporations have to say, and the greed that's represented there, are not so important anymore.</p> <p>Some of our children -- I worked at Northern for the last two years as a program coordinator for the Science Technology Engineering and Math Programs. Over two years, I had 150 of the brightest students in all of the valleys in this area, and this summer, out of 100 students, only two of them said they wanted to work at LANL. Some of them said that they might if they had to, but only two of them said they wanted to. So I think you've got to change your mission, I think you've got to do something that supports this planet, and I know that our students and people from this area are ready to support that, because it reflects our way of life and our true values, and we're tired of being oppressed. We may not rise up against you in riots and in violence, because that's not our way, but we are rising up in other ways, by educating our children and having them do something else.</p> <p>I'd really like to talk about the physical information repository. I have some statistics here. I was the public -- the Espanola Public Library Board president for two years and on the board for four years, thanks to my sister, former City Councilor Danielle Duran. There are only 12 computers at the Espanola Public Library. Out of those 12, often only 10 work, and, yes, intermittently the connection does go down. I know, because I've spent lots of afternoons there supporting the staff who works there and our wonderful library director.</p> <p>I'd like to tell you that the library at Northern is the only place for the public to use computers on that campus, and there are only 29 computers. Out of those 29 computers, if the students need to do their homework, then the community members are asked to release those computers, which we do.</p> <p>So we don't have a lot of access to computers. Yes, Northern has now become wireless, but how many people have laptops to go and use the internet on campus? Not very many people, really. You say that the students have access to that, well, I would challenge you there, too, because I worked in the Engineering Department, and some of those students -- you know, they are probably some of our brightest students, and people with scholarships and a few with financial aid, but maybe 10 to 20 percent of them had laptops. There weren't a whole lot of students who had that available to them. A lot of them were just trying to make it through school. Most of them had families.</p>		

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		<p>So I want to tell you about what this community is really like and why we need this repository. We need it because we're a traditional community that has oral story-telling as our way of communicating with each other. Word of mouth means more than anything here. If you go to a meeting in a city, maybe one person represents 20 people out of that community, but if a person goes to a meeting here, it's probably double that, or even more, because most people really just don't get out to these kind of things. So when you see me, think of at least 50 people, the people who couldn't be here today because they had to work. They might be here this evening, but most of them will be at home with their families. They need a place. When they hear from me and they hear from other people in our community that there is a repository, that there is a place where they can learn about what LANL is really doing, they need to go to a place where someone who has some expertise can help them, because -- again, I'm one of those people, my degree is in social work, but if you ask me to read the burn permit, I probably wouldn't know what most of it said, unless I asked for my -- for help from my friends.</p> <p>So how would people who may be -- I know there are a lot of people -- some of the parents of my students in the STEM programs had only finished junior high, hadn't gotten their GEDS, hadn't gone on to college. How would they understand the burn permit? Who would help them? If I was the person that told them about it, could I help them? No.</p> <p>So there needs to be someone there to help them. Someone needs to be available to our community to talk to them about what -- why we are feeling the effects that we feel, what these chemicals actually do to people, and what they do to our environment.</p> <p>So the other thing that's part of this permit is homeland security. It seems like a big rider to me. You know, you hear about that a lot in Congress, about how people tack on these riders and they can get anything through. I think using homeland security to train the military at Los Alamos is not okay. So I'd like for you to stop that, because the military has a big enough budget, let them train on their own bases, stay out of my backyard, thank you very much.</p> <p>I'd like to say that the people of our community have been deeply affected by the creation and establishment of LANL, and we, therefore, deserve the right to learn about all that is taking place in an institution which continues to adversely affect our ability to</p>		

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		live our traditional life. We deserve to learn about this information, not through technology, which is still unavailable and foreign to a significant portion of our community, but in a setting familiar to community members, Northern New Mexico College. We have meaningful involvement in this laboratory, we're your workers, and if you want a good work force, then you should treat us well.		
270	Gen.	<p>I'm an individual citizen and community activist. And I had a couple of suggestions and comments. First of all, I want to thank whoever is organizing these hearings, to give serious attention to the question. I think they're important questions, and they deserve maximum attention so that the public interest is protected and the health of the public is protected.</p> <p>I want to speak particularly about this idea of burning wastes. The State of New Mexico passed legislation which stopped people from burning leaves and burning garbage, and it seems to be counterintuitive that a place like Los Alamos, which has a history of – of questionable behavior in terms of dealing with hazardous materials, particularly atomic materials, but generally, and deals with chemicals that are toxic and – and conceivably a threat to the public health, that they would want to burn -- open burning for wastes that they have.</p> <p>I think that those of us who live in Santa Fe, who are privileged to live in Santa Fe, and in this area particularly, are very proud of the quality of air. According to the newspaper, we're one of the most clean air in the country. And -- and like I say, there are all these other cases where there are questions about what's being thrown into the water, the quality of the water and how that's impacting our health in the long run and the short run. And those are questions that are very complex and difficult.</p> <p>But at the same time, there isn't a day in the newspaper where there's something like that comes forth, and those of us who are concerned about our health and our community are worried about what's going on. But -- but I think that I would say that any policy that -- that encourages public burning is not a good policy and is a policy that should not be established.</p> <p>Two other comments, I think. One comment that many of us in the public have is that we have begun to lose our trust in scientists. We're always reading reports, many times generated by scientists, and sometimes generated by private interests, telling us don't worry, and then three, four years, five years, six years later, we find out that what we</p>	<p>Comment noted.</p> <p>See the Department's responses regarding open burning in the document titled General Response to Comments.</p>	Yes

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		<p>weren't supposed to worry about is now having a deleterious effect on our lives and our property, people's health. And I think that there is a public weariness about the credibility of scientists and the credibility of scientists who work on behalf of corporations and businesses that seek to sell products. And I don't know what the product there is to do with burning, but what I'm saying is I read the articles in the paper where their complaints against burning were sort of summarily dismissed. And frankly, I was not persuaded.</p> <p>The other thing I would say, and I asked your clerk about this, that those of us who are in the public are not full-time lobbyists. We come to these hearings because we have something to say, and hopefully intelligent. But it would be useful and helpful at the beginning of each of these hearings, looking at those documents there -- I'm sure you've all read them -- I wouldn't -- even if I went to read them, it would take me two, three, five days to read them and understand them, without questions.</p> <p>It would seem to me that the Hearing Officer or whoever is running these public hearings should spend approximately 10 minutes explaining the critical issues that are involved in this particular hearing and the process as to what happens, what has happened -- there apparently have been certain hearings -- what will happen in the rest of the hearings and what will happen after the hearings are finished, because we need a quick course. And as public people, we're entitled to it, because you're professionals, and you get paid. We're citizens, and we don't have the resources necessarily to do this. And I'm disappointed that this was only done at the first meeting.</p> <p>Well, how many of us can go to 10 meetings? In other words, we're interested, and we want to make an intelligent contribution. How much do we have to read in order to be intelligent participants in this process?</p> <p>And I'm rather disappointed that with all the expertise here and all these wonderful people from the state and others who understand this issue -- that at least those of us who come to this hearing are given at least a 10-minute introduction where we're told what are the three or four or five areas that are being considered and what is the process that will take place, so that we understand it.</p>		
271	Gen.	I'm a private citizen and a resident of Espanola. They are being presented here at the hazardous waste permit hearing. I'm a PhD physicist, retired for the last four years, following 20 years of continuous employment at the Los Alamos National Lab. I	Comment noted. See the Department's responses	Yes

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		<p>worked in the Applied Physics Division, which is X Division, which is where they design the nucs. Prior to my years at LANL, I worked as a research associate professor of physics at the University of Connecticut for seven years. During the past two years, I volunteered my time to do service with the DOE's Northern New Mexico Citizens Advisory Board; and during that two years, I became familiar with many of the issues that you're discussing here today -- hazardous waste generation, storage, and treatment at the lab.</p> <p>I also learned about the sometimes difficult relations between the present regulator, the Hazardous Waste Bureau of NMED, and the lab's present owner, NNSA, and its present management contractor, LANS, LLC. I also learned about the role that's played in these relations by the citizens groups, CCNS and Nuclear Watch of Northern New Mexico, Citizen Action of Albuquerque, and also the role played by the local pueblos.</p> <p>It was with much interest that I heard some of the testimony here. I've been attending sporadically. It's also -- it was also with much interest that I listened to the comments by public citizens during the last two weeks now. I was particularly struck by the emphasis placed by several private citizens on the call for an information repository to be located at Northern New Mexico College. As conceived, it seems this repository would be for the purpose of accumulating and making available to local residents information relating to the history of the generation, treatment, and storage of hazardous wastes at LANL, as well as to the history of the relations between local governments and the DOE, the NNSA, LANS, LLC, and the University of California.</p> <p>It appears from the material that's been presented at the hearing that NMED is well aware of the desire on the part of local citizens for such an information repository. In fact, Mr. Bearzi addressed this issue in Section IV.D of his written testimony. However, he said in that testimony that it is the opinion of NMED that the electronic information repository should be sufficient. But even so, he goes on to say in his written testimony, in Section IV.C, that NMED is attempting to adhere to EPA concerns for the promotion of environmental justice along local communities. Such concerns do require that local communities be provided with all possible opportunities to participate in the decisions related to the local environmental matters -- that is to say, matters resulting from the actions of government, in particular, the federal government here in New Mexico. In this regard, environmental justice concerns would be better met, in my opinion, by the</p>	<p>regarding environmental justice and the information repository in the document titled General Response to Comments.</p>	

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		<p>establishment of a permanent information repository at Northern New Mexico College, than with a simple electronic repository.</p> <p>In my view, if such an information repository were to serve the purpose for which it seems to be intended, it must have an on-site staff, trained in the maintenance of that repository, and able to assist local citizens in their quest for information. Mr. Bearzi also refers in his written testimony to the RACER database, in Section IV.G. He points out that RACER is an existing compendium, in electronic form, of environmental data that are recorded in and around the Pajarito Plateau. He notes, too, that the database is already fully accessible to the general public, or at least that part of the general public that has access to a PC or a Mac and a high-speed data link, and that it's being maintained now by the Los Alamos Community Foundation, in a very good way, I might say, too. I'm quite familiar with RACER and the staff that maintains it. He does not mention, however, that it is currently a part of the RACER plan -- long-range plan that RACER should eventually become a database maintained at Northern New Mexico College.</p> <p>I would also like to recall, on a different topic, another critical public comment made here at this hearing this past Tuesday, in fact, at the Ohkay Owingeh Conference Center, and that's regarding the influence of LANL on the local economy. In this remark that was made on Tuesday, it was suggested that an unfortunate dependency had been created in the local economy on the economic benefits that have been brought here by Los Alamos National Laboratory over the last 60 years. It's in this context that I would like to speak briefly about the last few months of my two-year term of service on the Northern New Mexico Citizens Advisory Board, which is a DOE advisory board. It was during this time that I first recognized the presence of tensions between board members, who are somewhat representative of the local communities, of board members who believed that economic benefits brought here by LANL were always of paramount concern when matters came up which had to do with regulation, and there were other board members who felt that health matters were much more important. So in an attempt to quantify the strength of those opposing opinions -- you know, being a physicist, I think about numbers and what can be measured and what can be verified -- I conducted a public opinion survey.</p> <p>I did this in the fall of last year, in the towns of Santa Fe and Espanola, and I</p>		

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		<p>accumulated responses from 225 persons. Now, the questions in the survey were written and the survey was administered and the results were accumulated and analyzed all by myself. However, in an effort to obtain some technical guidance about a matter concerning which I perhaps had no real expertise, other than being a technical person, I consulted briefly with the Research and Polling in Albuquerque.</p> <p>The results of the survey can be perused in an attachment I have, and I have a stack of them here. In quick summary, what was revealed to me in this survey was that there are principally two strong attitudes that exist among the local residents regarding Los Alamos National Laboratory. One attitude is of an appreciation for the economic benefits brought here by Los Alamos National Laboratory, and the other attitude is one of a worry about possible environmental hazards arising from the type of work being done at LANL. The second attitude, the attitude of worry, is combined with an uneasiness about the nature of the work done there; that is to say, the R&D nuclear weapons.</p> <p>So to talk about the results of the survey in a little bit more detail, but simplifying still greatly, approximately 25 percent of respondents -- and, remember, there is 225 respondents -- about 25 percent of those felt -- or it was my interpretations, based on their answers to the questions in the survey, they felt that economic benefits brought here by LANL were great, while environmental hazards were of little concern, and uneasiness about nuclear weapons R&D was simply not a factor. At the same time, approximately 25 percent of respondents felt just the opposite; that is, while the economic benefits didn't impress them, the threat arising from environmental hazard was felt to be great, and the culture of nuclear weapons was rejected strongly by that 25 percent. But then, interestingly, approximately half of all the respondents displayed both of these attitudes simultaneously. For these conflicted individuals, there was an awareness of a clear economic benefit brought by LANL to the local community, but at the same time, there was a strong worry about possible environmental hazards due to LANL's business, and an uneasiness about the nature of that business; that is to say, the nuclear weapons industry.</p> <p>So in closing, I make the claim here that it is the effect of LANL's business on the local community which should be the subject of some further study. Evidently, this affect is perceived to be wholly positive by some and wholly negative by others, but generally</p>		

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		both positive and negative at the same time.		
272	Gen.	<p>I heard all the explosions going on which turns out to be from the base, and the city for those years told me they didn't know what it was, and the one time they did say, "call the base," the guy down there said he didn't know.</p> <p>And it wasn't until Janet Greenwald had the information published in the Peace and Justice newsletter that I found out what it was. And when I spoke to the military man this time, he said I didn't know what I was talking about. And I said, "Well, this time I do." And I understand that the burning here in Albuquerque -- I think it's going to be stopping. It should stop.</p> <p>And I'm here to -- to address specifically the open air burning of hazardous waste up there in Los Alamos. And I support the New Mexico Environment Department in their intent to deny a permit for LANL to continue burning hazardous waste in the open air. LANL claims they need financial security training. There are alternatives such as burning in a confined unit and shipping the waste to a safer place for treatment and disposal. Some of this waste, for the record, is lead, mercury, chromium, cadmium, silver, barium, high explosives.</p> <p>Now, I am not in the science field. I do have a degree from Syracuse University, and I'm married to someone who has a doctorate from the University of Michigan. And it's difficult when you don't have that background, but I do know the health effects are nothing but bad. And I don't see how you can sacrifice the people of New Mexico for the continuing making of what are -- of what are weapons and equipment.</p> <p>I think enough is enough. I don't see why we have to make all those plutonium pits. I mean, they -- it's just -- it's immoral, it's illegal, and it's killing the people of -- of this state. And I don't understand why if our NMED knows.</p> <p>And I heard Bearzi say this morning he knows that some of these wells don't work. So what is he waiting for? We need a higher level of -- of monitoring.</p> <p>We have to get the -- those wells to actually know what -- what's going on and clean it up. And the bottom line is stop it. You cannot continue to do this if you are poisoning the people of New Mexico, and poisoning the future. You know, in 20 years, 30 years,</p>	<p>Comment noted.</p> <p>See the Department's responses regarding open burning and groundwater protection in the document titled General Response to Comments.</p>	Yes

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		<p>I'll be dead. You're poisoning the children. You're affecting their genes, their chromosomes. This is despicable. And for what - to make money. Well, yeah, to make money.</p> <p>My husband could have worked down there at -- out there in Sandia, and we are morally opposed to that. So we didn't even try to -- to look into that. I would not do that. I would not live -- I mean, I had no idea how bad it was here. And if we had to do it again, I would not have raised my daughter in this filthy town, city and state.</p> <p>And I'm ashamed that we have a newspaper that doesn't even print it. This last Friday, they -- they gave information -- it was -- John Fleck was reporting how the NMED -- the -- I think it was the DOE office in -- in Dallas, Texas, wanted to hide the information. So what they would do, they would have telephone conversations. They didn't want anything in writing. It's the US government, the EPA.</p>		
273	Gen.	<p>The trouble with the defense industry, nuclear industry is that they're notorious liars, and they do this by obfuscation and not coming up with -- with what the real truth of what they're doing. I went to this air quality board a couple weeks ago, maybe it was a month ago, and they had a thing where, yeah, we can't burn waste in open air. They're going to blow it up. And I pointed out to these Bozos that blowing up is just a rapid burning. And of course, there's a concomitant shockwave which just scatters the stuff that doesn't all blow up. So you never have a complete -- you know, like -- well, these guys slept through junior high school science or something. And the stuff that they try to put forth to you is just ridiculous.</p> <p>And here we've got all the waste in uncovered pits, and you don't know what's in these pits and all this. And it's hard to find out information on just where the wells are located and, you know, what is -- what they're looking for.</p> <p>Your best friend is transparency. If you don't want to be considered a bunch of liars and people who have basically screwed entire populaces, entirely on dropping radiation on them, nerve gas and the entire thing for the last 50, 70 years, you got to be out there. This is our plan, this is what the -- the sites are. This is what they consist of, public accessible databases, online webs reporting what they're seeing on a regular, timely basis. It's not really that difficult. You know, like get rid of the -- the encumbrances you have toward being open. You know, like this is the responsibility we've accepted, this is how we're trying to cope with it. Now, unless you're doing a scientific layout of wells to</p>	<p>Comment noted.</p> <p>See the Department's responses regarding open burning and groundwater protection in the document titled General Response to Comments.</p>	Yes

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		<p>monitor for toxic plumes, you know, which can be clearly evaluated by educational institutions across America, then you're going to end up with another Hanford waste site, where all the water -- you have this big plutonium plume that's going down to the Columbia River with all the nice salmon and everything else.</p> <p>This is what we're fighting against. It is the ignorance-making machine of the defense industry and their by-products. And if you want to be considered the good guys, start accepting responsibility, be transparent.</p> <p>Tell the Governor, you know, and all your supervisors that New Mexico has got to stop being satisfied with being the asshole of America. And when it comes to developing nuclear weapons, handling all the heavy metals necessary to make all these nuclear weapons and all the chemical wastes and -- of the propellants and the nuclear weapons, that's us. And the Rio Grande is the poop shoot that it all goes shooting down eventually. So this is where -- you can use this as a leverage point when dealing with the feds and these contractors to say, you know, "We're kind of tired of all this. We can't let you do this right here at least until you do this, this, this and this," the basic minimums that our people here are talking about. "If they don't do this, this and this, no, we're not even going to talk about all this other stuff here." And God bless you, which will be jobs involved in that. You know, actually, we could have a first class industry in processing all the waste that we have right now, if it's properly funded.</p>		
274	Gen.	<p>I do have some major concerns about the process that's going on for this permitting. It seems like some of the things I've -- I'm going to say have already been said by other people, I imagine, during both the afternoon and evening -- this evening's session. First, water quality is a very important thing to all of the citizens affected by any possible runoffs or leakage and runoffs into the Rio Grande or leakage into aquifers that are around our state. And a lot of us are affected by potential runoffs from LANL, including any that may come in contact with Rio Grande River water and -- and aquifer water that we have that might be affected by contamination. For these and other reasons, it seems like monitoring of the -- of the sites that are being permitted should at least comply with CFR 264.90-100, and possibly stricter.</p> <p>Some of these federal standards that were -- we talk about at times are actually weak standards. So I think the compliance with a Code of Federal Regulations standard is just minimal, and we should really consider even stricter standards than are being talked</p>	<p>Comment noted.</p> <p>See the Department's responses regarding groundwater protection and the information repository in the document titled General Response to Comments.</p>	Yes

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		<p>about as being standards that NMED may ask for compliance levels. Our groundwater is just so important. It's our life. Without water, we don't exist for very long as human beings.</p> <p>Next, it seems like we need stricter even enforcements of regulations that exist and that may exist if this permit is allowed. If we don't have enforcement, there's really not much sense in having regulations.</p> <p>And I don't know if transparency is one thing that might make that more apparent that it's happening, but it seems like some things aren't very easily found out about what's going on. And review of regulations that are in place, I believe, should be done on a regular basis. There can be things found out -- there are scientific discoveries happening, you know, as time goes on, different things are found out about -- about various things, and it could affect what are -- could make what are current standards really be -- become known as -- as weak standards and needing much better enforcement. I know Colorado's standards for water is fairly high compared with some other parts of the country, and there's other states probably that have very good standards, too. But some, I guess, government entities accept fairly low standards, and others require high standards.</p> <p>I think New Mexico should be a state that requires high standards. I don't think we should treat water as something that we can just pick the lowest standards possible to let compliance be easy for -- for whoever is in need of complying with the regulations.</p> <p>In addition, I mentioned transparency a little bit earlier, but I believe transparency and the availability of information is real important. The lady before me, Sofia, mentioned that she'd like to see a physical repository. I think even -- I think that would be great, but even if we don't have a physical repository, I think it's very important that we have a repository on the web part of the Internet. We could put all of the documentation on the Internet. I know it's a huge -- thousands and -- tens of thousands and hundreds of thousands, possibly, of pages, but I think it's important to let people know what you're looking at.</p> <p>There are enough meetings that aren't happening with public involvement and we need to know what you're doing. We need to have more trust in this organization. And without transparency, we don't have that. I mean, a lot of us feel that things are happening behind our back or aren't happening behind our back that should be maybe, or some things that should be and some things that shouldn't be. So I implore you to</p>		

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		<p>really provide us with more transparency about your actions and -- and that type of thing.</p> <p>I know recently I've heard that Citizen Action finally got some information released, and it was apparently several thousand pages of information that got released after not being provided to the public for years. I think it was something like 10 years that it's been denied the public. And it seems to me that you should have extremely good reasons not to provide information to the public.</p> <p>The public wants to trust you, I do believe. I know I do. And if we don't have openness of information, how in the world are we supposed to be expected to trust any of your actions? It just seems very important to me. We shouldn't just have to pry information from any agency that's supposed to provide -- provide the information without any prodding. And basically because of these and other dangers related to the issuance of this permit, I request that you deny the permit.</p>		
275	Gen.	<p>I want to preface my remarks by reading NMED's mission statement.</p> <p style="padding-left: 40px;">Our mission is to provide the highest quality of life throughout the state by promoting a safe, clean, and productive environment. We are committed to providing clear articulation of our goals, standards, and expectations in a professional manner so that the citizens of New Mexico can make informed decisions about the environment and their community.</p> <p>I want to contrast that mission statement with some of the patterns and practices of NMED, as well as the Department of the Environment, in not safeguarding the citizens of New Mexico. I want to show the real culture.</p> <p><i>Secrecy</i> - There was a TechLaw report, January 31st, 2006, there was a computer model called the black box that cast serious doubts on the safety of open pits at Sandia Labs, and I mention that because we have the same situation at LANL. The black box calculated the probability that contaminants would travel below the dump to the regional aquifer by Sandia scientists. The secret TechLaw report described important mistakes of the design of the dirt cover, and those mistakes were not fixed and the badly flawed cover installed over the mixed waste dump. NMED hid this document for four years. And at a meeting between NMED and the public, the report about concerns about this model, which was in May of 2006, were not revealed. Their remedy was to</p>	<p>Comment noted.</p> <p>See the Department's responses regarding contractor documents, open burning, regulated units/alternative requirements, and groundwater protection in the document titled General Response to Comments.</p>	Yes

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		<p>cover the dump and leave the waste in place. An organization called Citizens Action had to request public records by the FOIA documents, and a ruling by the Attorney General, Gary King, who ruled that the report is a public record and not subject to executive privilege, as NMED insisted. NMED spent \$100,000 plus fighting off Citizen Action's request, and they lost. This is money that the public spent.</p> <p>In the Albuquerque Journal news editorial last week, dated 5/1/2010, the article exposes the pattern of secrecy, lack of protection, and deceptive practices beginning in 1991. And beginning in 1991, the EPA, the DOE and NMED knew all about defective monitoring wells, so in 1998, NMED issued a deficiency notice -- this was at Sandia Labs at the time -- for the defective wells. When Mr. Bearzi became the new bureau chief, he did not pursue those violations, or inform the hearing officer, the judge, or the public or the work expert panel about the false monitoring data. So we have a dirt cover that does not provide long-term protection, and we have a defective monitoring network as of now.</p> <p>In another article by the Albuquerque Journal, on April 10th, 2010, the EPA Dallas office stated there was accurate groundwater monitoring over Sandia landfill, but, internally, the staff expressed serious doubts and did not discuss the issues in writing. They did not do this because they wanted to hold information from the public, according to the EPA's Office of Inspector General. And yet, NMED believes that the wells are adequate in spite of this internal report.</p> <p>NMED allows open detonation of rocket motors and weapons at Kirtland Air Force Base, which releases dangerous chemicals and heavy metals into the ground -- about six pages of that -- releases perchlorates, and according to the National Academy of Science report, perchlorates inhibit thyroid function, birth defects and they lower IQ. A letter from NMED Secretary Ron Curry to the EPA describes perchlorates from Kirtland and Sandia entering the water in 2008, and yet the practice continues.</p> <p>Bob Gilkeson, the former chief hydrogeologist at LANL, who was an expert witness, stated that rocket motors and weapons detonation releases other poisonous -- poisons to the soil, such as organic solvents, arsenic, lead, mercury, beryllium, barium -- we're all familiar with barium enemas, but when barium enters through the water, it has a much more insidious effect -- chromium, selenium, and radionuclides -- substances noted to cause cancer, respiratory diseases, brain damage, and fetal injury.</p>		

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		<p>Now NMED wants to revoke open pit burning at LANL, which will remove dioxins, and that is good, but it is also a diversion from the real environmental challenge of cleanup and removal of 21 million cubic feet -- cubic yards of hazardous, radioactive and mixed hazardous waste. It's like swatting flies while an 800-pound gorilla sits in the center of the living room.</p> <p>NMED never completed -- never required completion of a closure plan, as required by federal law under regulation 40 CFR 265.112, for the 21 million cubic feet of hazardous waste in unlined trenches and shafts since 1985 when the code of regulation became law. This is at LANL. There are three areas, they are called material disposal areas, pits -- Area G, which has 63 acres of radioactive nuclides; Area L, which has 25 acres of mixed hazardous waste; and Area H, which has six-tenths of an acre. They are allowing these contaminants to follow the pathways down canyons, by fires, by groundwater run-off, by winds, erosion, and gravity to municipal wells in Los Alamos, Santa Fe, and the Rio Grande. The groundwater requirements of these open pits have never met the legal requirements under federal law 40 CFR 264.91 through 100 at these disposal areas.</p> <p>Bob Gilkeson, the hydrogeologist, told NMED of defective monitoring wells, because drilling agents, such as organic foam and bentonite clay, contaminate the upper aquifer by creating a new chemistry that absorbs these contaminants, thereby preventing detection of wastes. These foams and other agents, they hide contaminants of radionuclides in the aquifer. The scientific literature confirms Gilkeson's testimony that these organic agents set up a new chemistry to prevent detection. They are worthless. LANL and NMED talked about it in their annual report, and they indicated there was a minor impact to foam and other organic agents, but they would go away in a few years. That's hogwash. The National Academy of Sciences, in 2007, and the EPA Kerr Research Laboratory, refuted this unscientific claim in four reports. Yet, NMED still allows LANL to use these incorrect methods to prevent detection data and accurate data. If the data is worthless, then it should -- it would appear that we should install new monitoring wells that can detect contaminants before it's too late. I think any mindful and concerned citizen would demand at least this kind of protection.</p> <p>Even Mr. Bearzi stated in his approval letter, which I have here, and I would like to submit as part of the record, for faulty well monitoring of contaminants, dated May 25th, 2007, and I quote, "NMED is concerned about the uncertainty with respect to</p>		

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		<p>monitoring certain potential contaminants of concern, such as the highly adsorptive radionuclides. NMED, therefore" -- and this is the term -- "therefore, suggests that the permittees' monitoring wells installed as the monitoring network are capable of providing reliable data to monitor potential releases of highly adsorptive radionuclides from operations at LANL -- of the laboratory to groundwater," end of quote. Since when is a watchdog agency allowed to use the term "suggest"? That doesn't -- "suggest" is not an enforcement term.</p> <p>Mr. Cobrain, senior staff over the corrective action process, stated at the RCRA public meeting on April 26th, 2010, like this meeting, that it would be too difficult to remove incorrect monitoring data from the monitoring wells. If that is the case, Mr. Cobrain, why don't we have new monitoring wells that work?</p> <p>Where is the enforcement and the plan to take corrective action, Mr. Bearzi?</p> <p>Is this the best we can hope for, in an agency that's mandated to safeguard our water and air quality from deadly contamination? Is this how the public is protected, by approving a defective well monitoring system to detect and intercept deadly contaminants? Is this the type of watchdog agency that allows eight million gallons of jet fuel to contaminate the Albuquerque drinking water? That's in yesterday's Albuquerque Journal. Is this the kind of regulatory agency willing to leave massive quantities of radioactive hazardous waste under dirt covers at Sandia and LANL?</p> <p>This is the agency that approved the improper drilling methods and signed off on the well completion report for nearly ten years. Consequently, our water quality and health have been sacrificed, as I see it, because of this cozy relationship between NMED, DOE, and the labs.</p> <p>If the past gives us a window into the future, should we, the public, assume that a dirt cover will be placed over the 21 million cubic feet of nuclear and hazardous waste at LANL? If so, we have a future crisis that will eclipse the gulf oil disaster threatening five states.</p> <p>This is the agency that never included the public when the plans were altered for groundwater monitoring of these toxic dumps, as required by federal law 40 CFR 270.42. This is an agency that greases the skids for billions of dollars to keep coming into the state by maintaining loose, ineffectual regulatory standards for cleanup and</p>		

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		<p>management of hazardous waste. The plan to use the consent order of cleanup at sites G, H and L at LANL is a plan to use lesser standards of protection than those required by law. This is a long-standing record of being soft on polluters. They are still doing it by allowing foaming agents to enter the aquifer. This is useless data for detection.</p> <p>I can't believe that the world's greatest scientists at LANL can't correctly install effective monitoring wells, and NMED continually violates their mission by allowing this. The result is that we have waste in the municipal wells of Santa Fe, Los Alamos, and the Rio Grande, radioactive nuclides and hazardous waste.</p> <p>And I want to ask this other question to NMED and to Mr. Bearzi. Where is the closure plan for all the radioactive and hazardous sites at LANL that's -- and Sandia, as required by law? The closure plan for the removal of the 21 million cubic feet of waste -- I want this to be part of the public record that a lack of a closure plan is a serious violation of federal law that I pray will be presented as one of the many violations of public trust in a class action suit against NMED as a state agency who continually violates its mission statement and those individuals who have jurisdiction to enforce the law.</p> <p>Is Attorney Domenici here today representing LANL? I did want to mention this if he was here, but I'll mention it anyway. He's a candidate for governor and he has a -- he has stated -- I listened to one of his broadcasts -- that he is a protector of the environment; he's concerned about the environment. So I would ask him, as a citizen who shares this vision for ironclad environment controls, that he would advise his client, LANL, to obey the law by putting effective monitoring wells in place and by following the law by preparing and implementing a closure plan at Los Alamos.</p> <p>Our most precious resource of New Mexico, the Rio Grande, must be protected, or else future generations will wonder why we were remiss by not passing on the legacy of affording clean water, air and soil for posterity. We have had 60 years of deferring to the hired experts. As a result, New Mexico has -- we're sitting on quite a few tons of unprotected pits oozing into our drinking water. We have rather poor and compromising air quality, and no effective monitoring and safeguarding of our environment. The experts have found rather compromising ways to make New Mexico the premier dumping ground of nuclear and other hazardous wastes in the nation. It's time to no longer defer to these experts, these hired experts, who do not have our best interests in mind, and defer to the citizens and citizen action groups who want clean water, air and</p>		

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		<p>soil.</p> <p>I will finish by quoting NMED's mission statement again, to remind them of their mandate that they have violated in the most egregious manner.</p> <p style="padding-left: 40px;">Our mission is to provide the highest quality of life throughout the state by promoting a safe, clean, and productive environment. We are committed to providing clear articulation of our goals, standards, and expectations in a professional manner, so that the citizens of New Mexico can make informed decisions about the environment and their community.</p> <p>Informed decisions (?)</p> <p>The word "safety" is used; "safe," to me, means being able to drink water and breathe air free of harmful contaminants. The term "clean and productive," that means ongoing monitoring and proven scientific measures to ensure safety. "Clear articulation of goals, standards, and expectations," that means transparency and timely release of all documents, or how are we -- the citizens of New Mexico, how will we be able to make - - to make informed decisions about the environment and our community, as stated in your last sentence of the mission statement.</p> <p>I'd like to present a petition from the citizens of this state to Mr. Kieling, Program Manager of the Hazardous Waste Bureau, which requires NMED to honor its mission by being the enforcement agency it was designed to be. And this petition statement is as follows.</p> <p>This is addressed to Mr. Kieling:</p> <p style="padding-left: 40px;">I provide the following public comments about the lack of groundwater protection requirements in the proposed hazardous waste permit for Los Alamos National Laboratory. The EPA has designated the Espanola Basin as a sole source aquifer, meaning that the Espanola Basin is the sole drinking water source for the area between the Jemez and Sangre de Cristo Mountains, running from Tres Piedras, to the north, to almost Galisteo, to the south.</p> <p style="padding-left: 40px;">Since operations began in 1943, LANL has buried over 21 million cubic feet of radioactive, hazardous and toxic wastes in unlined pits, trenches and shafts dug into the volcanic tuff." That's ash, and it absorbs water readily. "The LANL</p>		

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		<p>groundwater monitoring network has been under development since 1998 and has yet to provide reliable and representative samples of groundwater from the regional aquifer.</p> <p>I am particularly concerned about the lack of detection and compliance groundwater monitoring for the 'regulated units'" -- these are the pits -- "Areas G, H and L" -- over 65 -- 80-some acres of radioactive and hazardous wastes -- "at Technical Area 54," known as TA-54, that is.</p> <p>I quote the March 19th, 2010, written testimony by James Bearzi, Bureau Chief of the NMED."</p> <p style="padding-left: 40px;">'Groundwater contamination has already been detected beneath the regulated units at TA-54.'</p> <p>Groundwater beneath LANL discharges to the springs of the Rio Grande. Albuquerque residents are already drinking water from the Rio Grande and Santa Fe residents will begin next spring.</p> <p>It is time to get back to basics. NMED must require LANL to install wells drilled only with air. These wells must be able to detect contamination and provide the necessary information in order to implement corrective action, or 'cleanup,' in an efficient and cost-effective manner.</p> <p>Already too much taxpayer money has been wasted drilling defective wells, collecting and analyzing samples from defective wells and reporting data to the public that is unreliable.</p>		
276	Gen.	<p>First of all, just I wanted to just like let you guys know that here -- I mean, I'm here, I'm speaking from the heart, you know, from my heart, and I want to, you know, talk about my feelings. I'm not super, you know, involved on the whole technical nature of the proceedings. Sometimes some of these like big things, to be honest, go over my head. I see that there is like a huge amount of documents lined up on this table. I assume they are about these proceedings. I'm a graduate of the University of California, Berkeley, and to be honest, these things still go over my head and a lot of these like acronyms and terms are a little too much. I think the time for like deference to these like technical proceedings is over, and we really need to understand the real human aspects of what's going on at the labs and, you know, how that relates to really the environment of the</p>	<p>Comment noted.</p> <p>See the Department's responses regarding environmental justice and open burning in the document titled General Response to Comments.</p>	Yes

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		<p>land.</p> <p>Just speaking off of my feelings, I feel that there is a little bit of a travesty in these proceedings. I get the impression from being here that this is already decided, that this is almost already a done deal. That's the feeling that I get, that basically that Los Alamos is going to get this permit. Maybe they have this draft permit, and they are going to these public proceedings, and they are going to say like, "Oh, well, we're going to make these concessions," which have probably already been determined by the permit, and then go through this. This is almost that, just the necessary bureaucratic proceedings just to get this done, because this is the format that you guys have to do it, and it's just -- it seems to be like a big travesty and that we're just going through the steps and going through the processes. That being said, I welcome any kind of, you know, comments or questions after my speech, and, you know, please tell me that I'm wrong, please tell me that there is actually some democracy in all of this, and I would love to know that.</p> <p>First of all, I want to talk about the environmental devastations of the Los Alamos National Laboratories that have already gone on. The biggest one that I can talk about is this big fire in 1999, which, in my mind, that none of this should be happening. New Mexico Environmental Department should have dealt with that first. I mean, we have like this big fire that goes off -- it starts off as a forest fire and then goes into the city, burns down a bunch of houses that are built in the '50s that have asbestos, you know, the power lines burn and the telephone lines and the PCBs and those transistors, and all of that, you know, going into the air. Not even -- not -- that's -- none of that is mentioning the -- you know, what I've heard of Area G burning for three days during this. That's like this is a big smoke cloud that's going over the valley that's -- I heard went all the way through Texas, you know.</p> <p>In my livings in the Espanola Valley and staying in Chimayo, I've learned a lot from the community directly about how this has affected people, you know, young children immediately getting like strange chemical pneumonias as this is happening. I think this is something that like really should be addressed by the New Mexico Environmental Department, and what's really going on with, you know, the toxicity of what's going on at LANL, and really what's -- what is LANL doing, you know, why is -- like that should be addressed by the New Mexico Environmental Department. How is the mission of LANL against the environment? I mean, this isn't -- I mean, it's Department of Energy,</p>		

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		<p>but this is a weapons facility. They build nuclear bombs, and they test -- they had the first test of these here in New Mexico. I mean, that's -- these are all like big issues.</p> <p>To me, it's like none of this is real. I mean, we have all these proceedings, we have these technical things, with all these acronyms, and talking about why, you know, we're moving forward, why we're working with the Environmental Department, but I don't really see any change, you know. I mean, it begs the question -- in my mind it begs the question, really, about what is environmental justice? What is justice to the environment? In my mind, there is this interconnected nature of this environment. It's not just the sovereign borders of Los Alamos Labs and what they do there; it's connected through the water and air. So everything that they do there has this interconnected nature with the environment of the planet.</p> <p>I mean -- and it's really -- and it's -- and to me, what really needs to be addressed is the mission by the New Mexico Environment, the mission of what LANL is doing, not whether or not that we can allow them to have open burnings, or, no, we shouldn't allow open burnings, instead it's safer to do open detonations, and whether or not -- and these little small aspects of the procedures of what Los Alamos National Laboratories is doing. It should be like, what the heck are they doing? What are they doing there? It's not just nuclear weapons, I hear all these like, you know, weird wave guns and other types of like weapons and weapons of mass destruction that is being perpetrated at these labs. Really, I think that is what needs to be addressed, you know.</p> <p>When we were talking about open burning or open detonation, this thing is like -- you know, it's going up into the air, and that's -- you know, it's going to go out and go into like this area right here, and this is -- and it brings up another concept of this like environmental racism of that, okay, well, we'll just kind of forget what happens to the Espanola Valley, we'll just kind of overlook the travesties, the environmental injustice that is going on here because of those labs, because, you know, whatever these -- you know, these are like poor affected people who can't come in in the middle of a day to a meeting and talk about, you know, their lives and how -- how cancer is just like such an epidemic in this land.</p> <p>So like it's really -- I mean, the question of what is environmental justice and what should NMED -- which I think is a very interesting acronym when we take the letters apart, New Mexico Environmental Department, when we think about N-M-E-D -- and</p>		

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		<p>what should they be doing instead. I think one thing that they should do, and maybe they have -- in May, we have this thing coming up, the biennial review of the Nuclear Nonproliferation Treaty. I think that's something that maybe this Environmental Department should be focusing on and actually enforcing. You know, we're not -- this treaty that we've signed since the '70s says that we're not supposed to be building new nuclear weapons, and in my mind -- I mean, I've been told by many people in the labs that, no, we're not building nuclear weapons, what we're doing is we're just replacing these old ones with like new parts. In my mind, that's not -- that's still building new nuclear weapons. You know, maybe we're like just taking all the parts out of the old one and putting in new ones and still building these plutonium pits, and now we have, you know, billions of dollars going to Los Alamos Labs to renovate the plutonium pit production, which is what I'm talking about, the Chemistry and Metallurgy Research Replacement Building, another long acronym that kind of seems to go over my head, until like we actually -- or I sit down with people and actually figure out what that means. It's like we're going to streamline the capabilities of producing triggers for nuclear weapons. That's what it means in my mind. So, yeah, we need to enforce the Nuclear Nonproliferation Treaty. We need to start enforcing these treaties.</p> <p>And moreover than that, I think what we need to do is work on shifting the mission of the labs. That's, I think, what we need to do, as far as if we really care about our environment, if we really care about the health and safety of the people here in New Mexico, we need to shift the mission of the labs. We need to shift away from militarism in our research, our -- that's what's got me here, is that I come from the University of California, Berkeley, and it was really upsetting to me -- I was attending that, and I came into UC-Berkeley, because it was like I was good at math, and it was like that's what like got me into the prestigious university, and I always did well in math in high school, and I came into this school and find it's like the best minds, the best -- you know, the most successful -- you know, they are going to get the highest GPA, you take the most honored classes in math as a math major. The jobs that you have -- the most like economic success that you have is working at a place like this, building a new, more powerful bomb, and that was upsetting to me. So I want to shift the mission of the labs from militarism to environmentalism, from talking about, you know, economic dominance of the world, through our military might, through caring about the environment, and caring about and not destroying the environment with like -- you</p>		

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		<p>know, like the depleted uranium that is being used, that's a byproduct of these weapons production that we have been using all around the world, you know, and with our tank shells and radiating the word. I mean, that's something that needs to stop. You know, we need to shift from this mission of destruction to this mission of sustainability. We need to realize that we have a limited resource here on the planet, and we need to stop with destroying and taking, and we need to start to research the mission of sustaining a planet, being able to continue into the future, because, you know, here I believe that I'm -- I'm one of the people that is representing the youth here and representing the future.</p> <p>There is this saying that I've heard that I really enjoy, is that we don't inherent -- we don't inherent the planet from our ancestors, we are borrowing it from our children. So I think that's a really big issue, when we're talking about transforming the missions of the labs from this destruction to sustainability. I'm not talking about like having, you know, like five percent into, you know, sustainable and renewable energy when we're still doing 65 percent of the budgets on nuclear weapons. That's not what I'm talking about.</p> <p>I'm talking about a real shift. We need to shift from toxifying -- from poisoning the planet -- the mission of the research labs needs to shift from poisoning the earth to cleaning up the earth. We need to stop with the toxic things that the lab is doing. We shouldn't even be having this permit hearing in the first place. We shouldn't even be dealing with whether or not they can do these things -- whether or not they should be allowed to do this. We should -- this seems so clear in my mind that this is just a crime; this is criminal what they are doing to our planet, and we need to focus our energies in stopping -- we need to stop and we need to look back into what we have done in the past, to the fires, to the water spills, to the burning of the waste.</p> <p>I heard that the waste that was burned -- that was created from the bombs dropped on Hiroshima and Nagasaki, that that will burn -- that's what I was told, that that waste that was created in Area G, that was burned up and went up into the air. We need to stop the mission that is -- that has been going on for almost 65 years. We need to transform that into looking back to what we have done and cleaning that up. That's what I think that the minds, and the young minds that are trained at my university, my alma mater, need to shift into doing that kind of research.</p> <p>So we need to -- and that's why I'm here and that's what I'm here talking about, and I think that the time for like this technical debate about, you know, how many -- how</p>		

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		<p>much -- like how much radiation are they doing or, you know, what are the safe levels of radiation, and all these things, I think we need to stop, and we need to say no, we need to stop all levels of toxifying the environment, we need to stop all levels of this environmental devastation going on at the Los</p> <p>Alamos National Laboratories and we need to start doing the positive. We need to shift the spectrum from the negative into the healing space.</p>		
277	Gen.	<p>I'm 33 years old. I'm originally from San Ildefonso, just north of Ojo Caliente. I currently reside in the Santa Clara Pueblo with my wife and two children. I'm a husband, a father, a son, a brother, and an uncle.</p> <p>The reason I'm here is on behalf of future generations and out of respect to my pasados, which is Spanish for my ancestors. I'm here to speak on behalf of air quality, water, which includes the rivers and the acequia system, as well as the soil and the food which grows from it.</p> <p>The first point I will touch on is the public information repository. I feel that the need for a public information repository in hard copy is a necessity due to the fact that there are limited fiber-optic resources in our area. As an information technology specialist, I can tell you that the existing fiber-optic infrastructure in</p> <p>Northern New Mexico is extremely limited. What exists currently is overtaxed.</p> <p>Also, I can speak to the state of the majority of computers in most of the public areas, such as the libraries. With the new virus malware and spyware threats emerging on a weekly basis, the majority of the computers and libraries and other public areas are basically nonfunctional. Most of these institutions do not have a full-time IT person and usually rely on volunteers. So a physical repository is of the utmost importance.</p> <p>I'm also in support of the New Mexico Environmental Department's denial of LANL's permit application for open air burning.</p> <p>I'm in support of the need for more public participation in the cleanup decision making at LANL. I will be reading selected sections from Plans and Practices for Groundwater Protection at Los Alamos National Laboratory, Final Report, so that it may be submitted for public comment.</p> <p>Summary - The world's first nuclear bomb was developed in 1943 at a site near</p>	<p>Comment noted.</p> <p>See the Department's responses regarding the information repository, open burning, public participation, regulated units/alternative requirements, and groundwater protection in the document titled General Response to Comments.</p>	Yes

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		<p>the Town of Los Alamos, New Mexico. Designated as the Los Alamos National Laboratory in 1981, the 40 -square-mile site is today operated by Los Alamos National Security, LLC, under contract to the National Nuclear Security Administration and the US Department of Energy.</p> <p>Like other sites in the nation's nuclear weapons complex, the LANL site harbors a legacy of radioactive waste and environmental contamination. Radioactive materials and chemical contaminants have been detected in some portions of the groundwater beneath the site.</p> <p>Groundwater protection is an important issue because water resources in the LANL area of north central New Mexico are limited. Seven of Los Alamos County's 12 drinking water supply wells are located on the LANL site. Los Alamos County and the County and City of Santa Fe have water supply wells located along the projected flow path of groundwater leaving the LANL site. The Pueblo de San Ildefonso also lies on the pathways of the groundwater and the few surface streams that flow from the site to the Rio Grande, which supplies water to much of the state.</p> <p>Under authority of the US Environmental Protection Agency, the State of New Mexico regulates protection of its water resources through the New Mexico Environment Department.</p> <p>In 1995, NMED found LANL's groundwater monitoring program to be inadequate. Consequently, LANL conducted a detailed workplan to characterize the site's hydrology in order to develop an effective monitoring program. A legally binding consent order issued by NMED in 2005 establishes requirements and schedules for the monitoring program, which LANL is now developing, as well as a schedule for completing future medial actions by 2015.</p> <p>The study described in this report was initially requested by NNSA, which turned to the National Academies for technical advice and recommendations regarding several aspects of LANL's groundwater protection program.</p> <p>The DOE Office of Environmental Management funded the study. The study came approximately at the juncture between completion of LANL's hydrogeologic workplan and initial development of a site-wide monitoring plan.</p>		

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		<p>In addressing its statement of task, which is given at Sidebar 1.1, the committee considered LANL's groundwater protection program to be work in progress. The committee's findings are necessarily a snapshot in time, reflecting publicly available information through about April, 2007.</p> <p>Successful completion of the groundwater protection program will not be easy. The program is challenged by scientific and technical problems in understanding and quantifying LANL's sources of contamination and the migration of contaminants from those sources.</p> <p>Because groundwater is an important resource in the area, citizens are concerned about the dangers of its pollution by LANL. Some citizens groups seek assurances of essentially zero contamination.</p> <p>Reflecting citizens' concerns, state officials and regulators have imposed strict schedules and detailed regulations (for example, the consent order) on the program.</p> <p>Regardless of the difficulties that lie ahead, prudence and the law require that a groundwater monitoring system be established. In deliberating on the issues in its task statement, the committee came to the conclusion that it is technically feasible for LANL to establish a monitoring system that meets the groundwater protection requirements of the consent order.</p> <p>The findings and recommendations presented in this report are intended to help ensure the efficacy of LANL's work.</p> <p>There are four overarching findings that arose from the committee's study and that have relevance to essentially all parts of the task statement.</p> <p>Geochemistry - LANL demonstrated substantial progress in site characterization under the hydrogeological workplan. However, LANL's work in geochemistry has not kept pace with the work in hydrogeology.</p> <p>Geochemistry is central to understanding the extent to which contaminants move with groundwater; it is a tool for better understanding hydrogeological pathways; and it is essential for determining the degree to which groundwater monitoring samples are representative of actual groundwater.</p>		

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		<p>Mass balance - LANL needs better ways to demonstrate its considerable understanding – and eventually its mastery - of potential threats to the regional aquifer arising from site contamination.</p> <p>Specifically this means knowing the site's inventory of contaminants and where they are. Most contaminants are evidently still in or near the sources; a sizable fraction of some of them migrated into the vadose zone; and a small fraction are in the regional aquifer.</p> <p>This information can be quantified and presented succinctly by the method referred to as mass balance, which is introduced in Chapter 3.</p> <p>Uncertainty - LANL's groundwater protection program is proceeding in the face of substantial technical uncertainty - about the contamination sources themselves, pathways by which contaminants might reach potable water, and how contaminants can reliably be detected at near-background levels.</p> <p>Uncertainty is inherit in scientific knowledge, and work to address uncertainty can improve knowledge. LANL needs to do a better job of describing the uncertainties in its groundwater protection program to both scientific and public audiences. This includes fundamental conceptual uncertainty - things that are simply not known, such as the nature of some groundwater pathways - and measurement uncertainty, such as the viability variable of laboratory results for contaminants detected at very low levels.</p> <p>Peer review - The committee was not hesitant to accept LANL's motto: 'The World's Greatest Scientists Protecting America' at face value. However, like many publications from DOE laboratories, LANL reports typically fall in the area of non-peer-reviewed literature.</p> <p>LANL has produced massive amounts of report material in its groundwater investigations. The additional step of summarizing and publishing key portions as authoritative contributions to peer-reviewed scientific journals, as done with some information from the hydrogeological workplan, can demonstrate the scientific merit of the program. This in turn can help allay public concerns about LANL's ability to protect their groundwater."</p> <p>And just on a personal note, I'm here in support of the sustainable future in Northern</p>		

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		New Mexico, I'm in support of nonnuclear proliferation, and I will continue to dedicate significant time and resources towards the opposition.		
278	Gen.	<p>I'll start by continuing where Mr. Luis Pena left off, reading the Plans and Practices for Groundwater Protection at the Los Alamos National Laboratory, so that it could be submitted in the public comment.</p> <p><i>Findings and Recommendations to Address the Task Statement.</i></p> <p>The task statement and the outline of this report generally follow the sequence of issues one would consider in developing a groundwater protection program.</p> <p>The first set of questions to be addressed asked the committee to judge LANL's understanding of its major source of groundwater contamination and whether these sources have been controlled.</p> <p>The second set asked the committee to judge the scientific basis and scope of LANL's current (interim) groundwater monitoring program and, in particular, if it is adequate to provide early warning and response to potential groundwater contamination from LANL operations.</p> <p>The third set dealt with practicalities of conducting a monitoring program, including whether LANL is using sound scientific practices in assessing the quality of its groundwater monitoring data and if the data are properly qualified so that they can be interpreted correctly.</p> <p>In several instances, the committee's short answers to these questions were negative. Such findings do not necessarily indicate major deficiencies in LANL's groundwater protection program, but rather that the program is incomplete. Work remains to be done in order to satisfy completely the conditions questioned in the task statement.</p> <p>The committee's recommendations are intended to help LANL increase its effectiveness in completing its groundwater protection program. Chapter 6 of this report provides a complete summary of all of the committee's findings and recommendations, which are developed and described in details in Chapters 3, 4 and 5.</p>	<p>Comment noted.</p> <p>See the Department's responses regarding regulated units/alternative requirements, contractor documents, open burning, the information repository, environmental justice, and groundwater protection in the document titled General Response to Comments.</p>	Yes

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		<p><i>Sources and Source Controls.</i></p> <p>Radioactive or chemically hazardous wastes disposed of on site at LANL are the sources from which contaminants enter the soils, rocks, and water that comprise the hydrogeologic environment beneath the site. The laboratory has practiced on-site disposal of its wastes since the early 1940s. Disposal methods include the discharge of liquid effluents into canyons and the emplacement of solid wastes, mainly on mesa tops.</p> <p>In responding to its task statement, the committee found that liquid waste discharges, which LANL considers to be the source of the contamination currently detected in groundwater, are generally eliminated or controlled.</p> <p>Solid wastes in contaminants deemed by LANL to have less near-term potential to impact groundwater have received much less attention - the committee found that they are not well inventoried or controlled.</p> <p><i>Recommendations:</i> LANL should complete the characterization of major contaminant disposal sites and their inventories, for example, complete the investigation of historical information about these disposal sites with emphasis on radionuclides and chemicals likely to impact human health and the environment. Selected sites should be characterized by field analysis when historical information is insufficient to determine quantities of major contaminants disposed and to confirm the degree of transport that has occurred.</p> <p>LANL should devote greater effort to characterizing sources with significant inventories of contaminants (especially plutonium) that usually are considered to be practically mobile but still have the long-term potential to migrate in the presence of water.</p> <p>These and other findings and recommendations related to sources and their control are described in Chapter 3.</p> <p><i>Contaminant Pathways and the Interim Monitoring Program.</i></p> <p>LANL carried out its hydrogeologic workplan from 1998 to 2004 to better characterize the site's hydrogeology and potential pathways for contaminant transport in order to develop the basis for a site-wide groundwater monitoring</p>		

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		<p>plan.</p> <p>The committee found that the hydrogeologic workplan was effective in improving characterization of the site's hydrogeology.</p> <p>The task statement directed the committee to review LANL's current (interim) monitoring plan. In doing so, the committee found that the knowledge gained through the hydrogeologic workplan does not appear to have been used effectively in the development of the interim monitoring plan," cited LANL, 2006, a and c.</p> <p>The workplan is mentioned only in the introduction of the monitoring plan, and rationale for the siting of new wells in the monitoring plan is not grounded in the scientific understanding of the site evident in the Synthesis Report," cited as LANL, 2005a, "which summarized results from the workplan.</p> <p><i>Recommendation:</i> LANL should demonstrate better use of its current understanding of contaminant transport pathways in the design of its groundwater monitoring program. Tables in the monitoring plan that give the rationale for locating monitoring wells should include at least the general linkage between the proposed locations and the site's hydrology, or a section discussing the relation between well locations and pathway conceptualization should be added.</p> <p>The committee found that LANL's current conceptualization of the site's groundwater system into alluvial, intermediate-perched, and regional components, along with the importance of these components for understanding the flow system within and below wet canyons, is a major accomplishment. However, there is a lack of understanding of the inter-connectiveness of subsurface pathways between watersheds.</p> <p>While there is a general understanding that perched waters are probably redirecting contaminants from areas directly below canyons where they originally infiltrate to submesa areas and to other nearby canyons, the detailed knowledge to predict subsurface flow paths does not exist.</p> <p><i>Recommendation:</i> LANL should add a site-wide perspective to its future groundwater monitoring plans. This would include the following: Design</p>		

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		<p>additional characterization, modeling, and geochemical investigations to better understand potential fast pathways between watersheds. Increase the area of the regional aquifer that is monitored by drilling more wells to sample the intercanon areas underneath the mesas as well as more wells in the canyons. Provide additional monitoring locations in the southern area of the site and on Pueblo de San Ildefonso lands.</p> <p>These and other findings and recommendations related to contaminants pathways and LANL's current plan for monitoring are described in Chapter 4.</p> <p><i>Monitoring and Data Quality.</i></p> <p>Implementing a monitoring plan involves the practicalities of constructing groundwater wells and analyzing samples from the wells.</p> <p>Any monitoring activity faces a conundrum: If little or no contamination is found, does this mean that there is in fact little or no contamination, or that the monitoring itself is flawed?</p> <p><i>Sources and Source Controls.</i></p> <p>Radioactive or chemically hazardous wastes disposed of onsite at LANL are the sources from which contaminants enter the soils"</p> <p>In responding to the questions asked in the statement of task, which dealt with data quality issues, the committee found that LANL is using good practices in terms of having the proper quality assurance and quality control plans and documentation in place, but falls short of consistently carrying out all the procedures cited in the plans.</p> <p>Results of analyzing groundwater samples often do not carry the proper qualifiers according to good QA/QC practices. This especially applies to analytical results near or below the limits of practical quantitation and detection, near the natural background, or both.</p> <p>The difficulty here is that reported detection of contamination that is not statistically significant may be taken as real by regulators and other stakeholders - with concomitant and concerns and calls for remedial actions.</p>		

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		<p><i>Recommendations:</i> LANL should ensure that measurements of contaminants at concentrations that are at or near background levels or near analytical detection limits (i.e., method detection limits and practical quantitation levels) are performed and reported in ways that are sound.</p> <p>The LANL site office of DOE should take steps to ensure that LANL and site regulators agree on how all such data are to be handled, compiled, and reported.</p> <p>LANL should make more effort to ensure that data uncertainties are made clear to public stakeholders.</p> <p>During the study the committee was presented with information suggesting that many wells into the regional aquifer at LANL (R-wells) are flawed for the purpose of monitoring.</p> <p>The committee did not disagree, but rather found a lack of basic scientific understanding of the subsurface geochemistry that could help ensure future success.</p> <p>Evidence about the conditions prevalent around the sampling points (screens) in the compromised wells is indirect - relying on plausible but unproven chemical interactions around the screens, general literature data, analyses of surrogates, and apparent trends in sampling data that may not be statistically valid.</p> <p>The committee received little scientific information - for example, on a par with LANL's publications about vadose zone pathways," cited as VSG, 2005, "regarding the geochemical behavior of contaminants in the subsurface or effects of non-native materials (drilling fluids, additives, construction materials) on the geologic media to be sampled.</p> <p>Data from scientifically vetted (peer-reviewed) studies are necessary to authoritatively address concerns and uncertainties about how drilling and well completion processes might alter the native conditions around well screens and to ensure reliable monitoring activities in the future.</p> <p><i>Recommendation:</i> LANL should plan and carry out geochemical research on the interactive behavior of contaminants, materials introduced in drilling and well completion, and the geologic media.</p>		

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		<p>As a part of LANL's future plans for site-wide monitoring, laboratory and field work would include: Determining the nature of interactions among materials proposed for use in constructing monitoring wells and the types of geological media that LANL intends to monitor. Quantitative measurement of sorption or precipitation of contaminants onto the natural, added, and possibly altered constituents that would constitute the sampling environment of a monitoring well; and publication of results in peer-reviewed literature.</p> <p>The committee is not recommending open-ended research. Rather the work would underpin plans for future monitoring of specific areas of the site; contaminants of greatest concern in the area; geologic media expected to be sampled; and drilling fluids, additives, and other materials intended to be used in constructing the monitoring wells.</p> <p>These and other findings and recommendations related to the implementation of groundwater monitoring at LANL are described in Chapter 5.</p> <p><i>Closing Comments.</i></p> <p>LANL's groundwater protection program is at about its temporal midpoint, continuing for another eight years until 2015.</p> <p>The consent order establishes an enforceable process and schedule for the program. The committee hopes that the assessments, findings, and recommendations presented in this report will be useful in informing future technical decisions that will be made within the consent order process."</p> <p>I'd like to just comment about another chart that was recently released in December, which was before a secret document. It is titled "Generalized Hydrogeologic Cross Section for TA-54." It shows a direct fissure at the salt vent into the aquifer of our water. Why this was deemed as necessary to be secret, I don't know, except that maybe they didn't want people to know that.</p> <p>I live in Santa Clara Pueblo, which is directly adjacent to Los Alamos National Laboratories. I have two daughters, who I love dearly, many nieces and nephews, sisters and brothers, grandparents, aunties and uncles, elders of the community. It is very, very concerning to me that anything is allowed to be released into the environment without first being known the effects on human population, particularly the elderly and children</p>		

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		<p>and infants and women.</p> <p>We know that a lot of these chemicals released into the environment target reproductive organs. To me, this is also a matter of reproductive justice and my right to bear children in a healthy environment, the right for me to pass on knowledge to the future generations and not have to be concerned about birthing healthy babies. That comes as a given for a lot of people, but for us it's not the case.</p> <p>I have a garden that I work in in the summer. My daughters play in the ditch while I tend to the garden. I know this water comes from up in the mountains, from the Jemez, like three miles away from potential release sites. If I were to ask LANL what levels of tritium are safe for my three-year-old to be exposed to, for my five-year-old to be exposed to, would they be able to tell me? This goes with the hundreds of other chemicals and toxins being released into the environment presently.</p> <p>Why is it that my children, when they go to school, have to listen to bombs being detonated while they are at the playground when there is not a rain cloud in sight? Why is it that when I go walk in the mornings, at 5:00 in the morning watching the sun rise, I have to hear bombs being detonated? It's bad enough that I have to listen to them, I can't imagine being on the receiving end of them when they are trying to kill you.</p> <p>A lot of current standards for nuclear facilities across the nation, what they base their acceptable standards of exposure to workers is based on a 135-pound white adult male, sometimes known as the reference man. These standards do not protect women and children or elderly or people of color. Why is that, when it is these people that are the most vulnerable populations to begin with?</p> <p>I'm against any kind of releases into the environment without first studies being done about a broad range of safety issues, health risk assessments, but because of the national security umbrella, I think that they are allowed to do production on weapons without first determining this; whereas, any other corporation would need to determine these safety issues first.</p> <p>I'm in support of the New Mexico Environment Department's denial of LANL's permit application for opening air burning of hazardous wastes, especially since there is no -- I don't know how they determined that these -- that there is no environmental danger and it is not required for them to do air monitoring of these sites. They do soil samplings, is</p>		

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		<p>my understanding, but they don't do any air monitoring. So how do they even know what's going into the air if they are not doing that?</p> <p>I think there needs to be more community trainings. I've been educating myself on these issues for a year, and I feel like I maybe breathe the dust off some of those documents that are on the table.</p> <p>I'm also in support of a physical information repository. I'm a student of Northern New Mexico College, I'm in the elementary education program, and I'm also involved with the community organization Tewa Women United, which is working to help educate some of the youth in the area on some of these issues, and to have such a place would be extremely helpful in facilitating that, someone that's trained in looking up documents. As we saw this morning, there is a list of documents that maybe don't even specifically list what it is you're trying to look for, but if I had a question, and someone was at this repository and could tell me, "Oh, you need to look here," that would save me probably hours. I'm in the process of doing an independent survey of local libraries, and I can tell you what I've found just since I've been doing this, is at the Santa Clara Pueblo Community Library, I have gone on three different occasions and have been unable to open a lot of these attachments, the computer will freeze up and I'll have to start all over again, kind of what we saw this morning. When I go in the afternoons after 4:00 PM, which is when a lot of people get out of work, every single computer is used by a young person, either for their homework or pleasure or whatever they – whatever they want to be on the computer for, and I would probably have to wait, I don't know how long, to use one of those computers in after-school hours, which is also a conflict when other people get off work and we want to have access to this information.</p> <p>It feels -- the comments made this morning that everything -- alluding to the fact that everything is accessible virtually comes from the voice of someone with an elitist and has a highly privileged background, who does not know what it's like to live in a rural community. There were some places that just until recently just got internet access, as far as recently they got hooked up to the internet last year.</p> <p>It doesn't address how people with physical limitations, who cannot travel to these places, are able -- are going to be able to access these documents, short of a librarian downloading it for them. It just makes a lot of sense to have a physical and virtual one; it's just accessible to a lot more people, and to have a fully staffed person that would be</p>		

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		<p>able to explain some of these things for people that didn't know a lot about it.</p> <p>There needs to be a closer look at groundwater protection at LANL. The draft permit does not include a point of compliance for monitoring for groundwater contamination. Again, that goes back to my fear of what my girls are playing in the acequias and the ditches, and there needs to be some cleanup happening. According to the CDC biohazard report, we're the most contaminated site in the nation, more than the other top three combined. This information alone, to me, is enough to justify immediate cleanup instead of further prediction.</p>		
279	Gen.	<p>There is the contradiction of what is and what isn't, as far as how to be well financially or how to be well in your health and what's happening with both presences being there.</p> <p>As a sense of the detonations and things that are happening, a lot of it is -- I'd like to just symbolize that by this actual shattering that happens to us and who we are as a native people and how our culture is also broken into fragments. So here it goes. (Demonstrates with plate.) I hope it woke some people up. That's just to show that when we're cooking, baking, cleaning, doing our daily tasks, we hear these detonations, and we swallow air, we swallow our fears, and we say, "What's happening? Was it an accident? Was it a test?" They don't tell us. That's part of the secrecy of so-called national security, of a terrorist coming and knowing when they were going to be doing stuff or stuff might happen.</p> <p>So I guess what I'm also saying is that I'm tired of being a homeland war casualty, I'm a casualty of war because all of the things that are happening at the lab, the business that's going on up there. People really don't want to know. On one hand, they know they are getting paid to go up there, it's like a metal snake with metal coffins driving up there and driving back down. I can't get on the road, because there have been so many deaths and accidents on State Road 30 where I live, because of the traffic and how they zoom in and zoom out, like zombies, going to work and coming down and all the contaminants that are coming</p> <p>We have perspectives of that. In about 2006, '7, they did some sampling of the dust that accumulates outside and inside our homes, and it showed that inside our homes, there is an intensity -- a concentration of radionuclides that accumulate, and we breathe it, and only -- a lot of the radionuclide materials that are coming down from the lab, because of the nuclear business that's there, they are like -- they like have little tag marks of what's</p>	<p>Comment noted.</p> <p>Regarding open detonation, the subject in not addressed in the Renewal Permit other than to require the Permittees to submit the documentation necessary to address associated regulatory requirements</p> <p>See the Department's responses regarding open burning, seismic hazards, and the information repository in the document titled General Response to Comments.</p>	Yes

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		<p>created and what are manmade creations up there, because of the work they do and the chemicals they use, and that leads back to that detonations of open burning.</p> <p>We did a site visit up there, and talk about state-of-the-art high technology that's up there. They took us to the -- to the pad, the site where they do the detonations or the burns, and it was just like that, a metal -- I mean, a cement slab. They hoist the things up there and, wham, they drop it down, and they test it, and then they wash down the pad with water that comes back into our system. That's supposed to be state-of-the-art high tech. Yet, they don't want to be told now to do the cleanup, how to maintain the arsenal, and it's just crazy.</p> <p>So I was told to ask where are the minds and heads of people, where are they in what they do, and I -- and I think there was supposed to be a person here called Richard in the audience that could answer my questions about where the minds and heads of peoples are that do this type of work and not think about us people that are downwind from there and our children, the things that are happening.</p> <p>I'm a potter, I do pottery, and we have six generations that have actively done pottery, and the dust sampling test that happened, they also told us all the contaminants that are accumulated in the soils, we also come in greater contact with it, and a lot of the special-color clays that were up in our sacred areas in</p> <p>Los Alamos is not accessible, or they are highly contaminated, and we're not supposed to be in there getting them. So a lot of the cultural identities of who we are is being tested or eliminated, or we're made to feel invincible.</p> <p>I had a lot of documents here that follow up on that dust sampling test, I have that here, and then I also have declarations of women -- as a woman, Tewa woman being here, as a mother, and as a grandmother, and an aunt, a sister, and all our relations that are down here, how women are sacred. So the perspective that I'm giving today is coming as a woman in the area, and knowing that a lot of the chemicals, the biohazards, or just chemicals hazards that are coming down can pass our placenta, if we're carrying children in our wombs, our children to be, it can cause a lot of birth defects, and knock on wood, I guess, we haven't seen a lot of jellyfish babies yet in the area, but I did do a lot of visits in Russia with women in the Chernobyl area, our indigenous people there, and their death rates have already exceeded their birth rates.</p>		

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		<p>Here in the valley, we see a lot of the cancers of -- the ovarian cancers, prostate cancers, reproductive health systems, stillbirths, and miscarriages that are happening, and I just don't want to see a continuing of that.</p> <p>The detonations and the open burns that are just putting everything in the air and then coming back down, landing on us again, all the down-winders, and all the people as far north as Taos. The dust at Picuris was also -- it also found a lot of plutonium contaminants and the -- a lot of other chemicals that only come with the nuclear business, and things that are happening all in the name of those two contradictions of for your health or for your money.</p> <p>It's scary that money talks, and right now we're hearing the news that 5.5 million – not million -- billion dollars are going into upgrading and beefing up the nuclear business at Los Alamos. Here I thought getting into this struggle to make LANL accountable and clean up and getting them out of there and out of our sacred area, and they are ending up -- and Obama's administration is giving them three or four times the amount more -- more than the amount of money they requested. And they are like, who is benefiting? Who are the profiteers from what the lab is doing up there?</p> <p>They are surely not just research and development for commercial use in communities, like in our homes. I know they devised a little nuclear reactor that we could have in our homes, just like the microwave ovens, so I wouldn't put them past being created in the guise of stockpile stewardship and replenishing the supplies, keeping it safe, but a lot of the plutonium pits that are being produced up there, it's increasing, and so is the contamination, and it behooves us downwinders to really think about where the cancers are coming from and where the astmas are coming from and where the -- all the tiredness and all of the diabetes.</p> <p>Nobody mentions the connection between the nuclear industrial and diabetes, but it's there, and yet they say it's our diet, it's the way of -- it's how we're living, what we're doing and stuff, but there has been research that has shown that diabetes is related to the chemicals and biohazards and all the hazardous materials that are being created and released around in the areas.</p> <p>Also about education being the key to unlocking the wisdom of the people, I think it's -- it's good that what the ages -- that the supercomputer is up there at the lab and that the -- I think they are thinking of even creating a fourth tower so that the broadband and all</p>		

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		<p>those other systems can be down in the area, but it also comes with the contradictions of what kind of health is impacted with that. There are people that can't even sit near a computer screen and they get sick or diseased. I think we need a repository at Northern, with a staff to help us to read through documents. I noticed an uneasiness of when people stand up here and read the documents, some people like roll their eyes, that that's too much, just hand them the paper, and yet those stacks of data that we, as lay people, have to go through – I mean, you can't just download that and expect to read all that and know that. So I think we do need to get to the reality of having that paper, having the repository up -- up at the Northern College. So that would -- I would recommend that.</p> <p>Also, my recommendation -- and also speaking about -- speaking with Tewa women, is that we should deny that permit to open detonations and burns in the tech areas that we're talking about, Tech Area 16-388 and Tech Area 16-399. Like I said, I've done some preliminary trips up there, and on our trips, they even told us, "Don't get off the pavement, stay on the walk, wipe your shoes before you get back into the bus, don't touch that." That was our friendly tour of the facility. So I can imagine how many people are not told what is there and what's coming down, what we're breathing.</p> <p>So I think, as public people that are coming forward and telling our stories, I know I've buried a lot of people with cancers, I've had my great-aunts working up there as maids, cleaning the houses of the scientists, and the scientists thinking, "Oh, these are dumb Indians, they are not going to read the documents, they are not going to know, we don't have to give them precautionary gloves, suits, masks," when they are cleaning the wastes and things. And, yeah, again, money talks, when a tribe can apply for cleaning the facilities, have contracts, big money rolling in to do the janitorial services, and yet the people that are in those service fields aren't told that you're in the most highly contaminated building, you're breathing it, or to use precautionary masks, gloves, clothes, take them off before you go home. Like I said, those fine dust particles are coming in because of people that are tracking it from up there down.</p> <p>I guess I could go on and on in all the different years of seeing, knowing and feeling, and the fear that goes with knowing that what is being done up there is an upgrading of the business of 65 years of just being careless, just being wasteful, just being arrogant of the men thinking -- thinking that – the scientists are thinking that they have a right to be arrogant, because no one can test their ability to know the stuff, to know what they are</p>		

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		<p>doing. I think, as Tewa people, we have our human rights, our rights to be healthy, safe, and not full of fear of one day that the nuclear facility, the lab, is sitting and doing its four levels of chemical, biological, nuclear, laser, and everything up there, on the rims of a dormant volcano.</p> <p>The Jemez Mountains, when we went up there, there is a lot of construction happening up at Los Alamos, and all that digging is bringing up volcanic ash, basalt. You know, there is a volcano that's sleeping up there dormant, and the magma is moving, or else we wouldn't have geothermal activities up there, and all the shaking, all the seismic activities, the rumbling, the detonations, the Rio Grande fault line, all those things have to be considered when you're talking about giving permission for an upgrading of a nuclear war weapons production facility.</p> <p>I thank the New Mexico Environment Department for really taking to heart the task of trying to have oversight and accountability to a facility that has just been arrogantly going on their own and laughing at people for trying to put reigns on them when they declare national security as an issue, and here we are a homeland casualty of war.</p>		
280	Gen.	<p>And as a -- just to establish a pattern and practice of behavior with the Department of the Environment, as well as the DOE, last week, 4/16/2010, in the Albuquerque Journal, there was an article about the EPA. They had concerns over the Sandia radioactive and hazardous waste landfill. And what happened was that publicly -- the groundwater monitoring network was inadequate, that was hidden from -- from the public, according to the EPA internal documents. They had doubts as to the efficacy of the groundwater monitoring system. The record-keeping was discontinued between EPA and the Environment Department. An NMED spokesperson, Marissa Stone Bardino, talked about openness and transparency.</p> <p>And that's what I'd like to bring right now, as opposed to the lack of openness and the lack of transparency between the Department of the Environment, the EPA and, in this particular venue, Los Alamos. Los Alamos has 21 million cubic feet of hazardous and radioactive waste from their nuclear weapons production. This is called legacy waste. They want to increase production to 80 pits a year. They have no closure date for these pits as it currently stands. That's in violation of the law. They were supposed to have those closure dates 25 years ago. And there was supposed to have been a plan in place.</p> <p>They're engaged in open burning that releases dioxins into the atmosphere. And this is</p>	<p>Comment noted.</p> <p>See the Department's responses regarding regulated units/alternative requirements, open burning, environmental justice, contractor documents, the information repository, emergency preparedness, and financial assurance in the document titled General Response to Comments.</p>	Yes

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		<p>caused – and dioxins are directly related to thyroid dysfunction. They have a contamination pathway, for instance, liquid waste from outfalls into the canyons, causing surface contamination in the streams that enter the Rio Grande. This is occurring currently, and it has for the pits at Los Alamos. The question is -- is what are these requirements? The public does not know.</p> <p>To me, this is bureaucratic stonewalling at its very least. They never included the public when they altered the plans for groundwater monitoring as required by law under the -- the law is 40 CFR 270.42. Are we a banana republic whose government agencies can injure and endanger the citizens of New Mexico? The result is an ineffectual, inadequate monitoring in place and significant contamination.</p> <p>Thankfully, we have people who have alerted the public to these concerns, watchdog groups who will not allow the wolves to guard the henhouse. Bob Gilkeson, a hydrologist, who would not sign off on well monitoring at LANL because he knew they were faulty when he was contracted with LANL. And subsequently, his reputation -- they attempted to smear his reputation. He challenged the LANL to follow the guidelines under the RCRA, the Resource Conservation and Recovery Act, and they refused. This is a violation of law.</p> <p>Citizens Action director, attorney Dave McCoy, he fought for the release of all secret documents and is an expert witness whose objective is to stop open pit burning, detonation of weaponry and to clean up the nuclear waste sites.</p> <p>Doctor Michael Barcelona testified last week or two weeks ago in Santa Fe. A hydrogeochemist, he said there's a total lack of safeguards at these sites and the RCRA law should apply and they need to scrap their guidelines and start from scratch.</p> <p>We've had 60 years of deferring to the nuclear arms industry and their independent and wrong interpretation of the law. The time is over to defer it to the experts. It is now time to defer to the citizens of the State of New Mexico.</p> <p>What do we have to show by deferring to these experts over the past 60 years -growing contamination of our air, water and soil for eons? This is generational genocide, as it was stated at another testimony by Dave McCoy a week ago.</p> <p>I want to conclude by -- by quoting some thoughts that President Eisenhower mentioned as he was leaving office in 1961. He said, "We must guard against the acquisition of</p>		

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		<p>unwarranted influence, whether sought or unsought by the military industry complex." He stated, "Only an alert and knowledgeable citizenry can compel the proper meshing of the huge industrial and military machinery of defense without peaceful methods and goals or that security and liberty may -- so that security and liberty may prosper together." This has been prevented by the Department of the Environment, the DOE and the labs. They have not allowed the public to be fully informed, to be fully engaged. He also stated, "The prospect of domination of the nation's scholars by federal employment, project allocation and the power of money is ever present and is to be gravely" -- I can't quite read this. But I would assume he meant gravely monitored. And to paraphrase President Eisenhower, public policy should not be captive of a scientific technological elite, as it has become with the labs and the military in the state.</p> <p>And I listened to the testimony that was given earlier by the witnesses, particularly Mr. Cobrain from the NMED. And I've listened to the public testimony, which is extremely sobering, very enlightening. Terms like "environmental racism" come to mind. The mother who spoke with her child spoke very eloquently about her concerns. The lady who just spoke recently just now and her daughter spoke from the heart about what is happening to the people of this state. To me, it is not only unconscionable, but it is criminal to allow Los Alamos, the Department of the Environment, Sandia Labs and the military to continue business as usual. This is insanity. It's global insanity. It affects us and future generations indefinitely. The amount of plutonium, tritium and other radioactive substances in our water is – is mind-boggling at this point.</p> <p>I have been here for four years, from the state of Massachusetts, and I thought I wanted to live here. I no longer feel comfortable living in this city, because of what I have learned and witnessed. When Mr. Coburn spoke -- Cobrain, excuse me -- what I heard from his testimony was that there is no reliable groundwater monitoring network that meets the federal requirements. I also heard that it is totally unclear what requirements, if any, LANL or NMED is following. Totally vague.</p> <p>The alternative requirements are not only vague, and it appears that -- as though, to me, that there's a cover-up for LANL not to provide reliable groundwater monitoring, and the Department of the Environment's failure to -- to impose this groundwater monitoring. This has been going on for 25 years. And by law, this should be in place. How can we trust the state agency who has not protected us up to this point?</p>		

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		<p>And it's obvious to me from the testimony and the cross-examination by Mr. Gilkeson, the hydrologist, that there are dangerous contaminants and plumes moving towards the drinking wells. While LANL and NMED dither about, more and more contaminants are being released without an ongoing program for cleanup. This is unconscionable.</p> <p>The public comments are very sobering. They're very accurate. This is the testimony that we should be adhering to. We have had 30 years of obfuscation, lies, misrepresentation and lack of transparency/secretcy. They cannot be trusted.</p> <p>A public -- the public and the watchdog groups make sense. They're the ones that should set the agenda. This is called the land of enchantment. To me, it seems like the land of entrapment. For three years now, NMED has not protected our citizenry. They have colluded with Sandia Labs, Los Alamos, and Kirtland Air Force Base at the expense of the people.</p> <p>The term used -- bantered about, environmental racism, is so appropriate. Lack of transparency is so real. The public, as Eisenhower said in 1961, as he was leaving office, is captive to a scientific technological elite, in this case, LANL, NMED, the DOE and the military.</p> <p>I support NMED's denial of LANL's permit application for open air burning and hazardous waste. They've been on notice for 21 years that the public does not want them to use our air for disposal of these wastes. If LANL needs to continue to do this, they need to have confined burn facilities to capture these emissions that are infecting our population.</p> <p>LANL -- they have been lax in protecting the citizenry. LANL has been lax in enforcing. The DOE and LANL have been lax in installing these burn facilities before the final permit -- before the permit is finalized. NMED, DOE and LANL have been lax in allowing for public participation and public awareness by the use of secrecy, hiding of data, holding of public meetings, the lack of that.</p> <p>The DOE and LANL are required to establish an information repository where documents are readily available. They have not done this.</p> <p>I do object to NMED allowing the DOE and LANL to continue hazardous waste operations without an emergency management plan in place. They should also be, as the</p>		

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		<p>gentleman spoke earlier, a Superfund.</p> <p>LANL should be required to provide financial documents to ensure that funding is available to clean up these contaminated facilities. I support NMED's requirements that they meet all the financial assurance requirements for each of the 24 hazardous waste man</p> <p>The DOE, NMED have not been stewards of the environment. They have hid documents from the public. This TechLaw document, which was obtained under the Freedom of Information Act -- the NMED tried to hide this from the public. This was a document that was very critical of Sandia Labs and their open pits. But it was hidden from -- from the public for three years. NMED -- when Citizens Action tried to obtain these documents, they sued the Citizens Action. They spent \$100,000 in legal fees instead of going after the polluters. How can they be trusted? They had this declared -- the DOE had this declared as a national security document. And that was proved to be bogus. It was done to hide it from the public. They have also hidden 3,700 pages from the public. They hid this document so that Sandia Labs could cover their open pits, they could cover them with an earthen cover. And it took three years for that to be done. Totally inadequate, but they wanted to -- they wanted to prevent the public awareness and the hazards that this represented, in preventing safeguarding of our aquifer.</p> <p>This is what we're up against. The public is up against the military industrial community. And that represents our government, as well. They are not safeguarding us. And the best thing is to have the public participate, the public to respond, to listen to the public, because they have the information. They will not obfuscate, they will not lie, they will not deceive, because our health, our livelihood, our citizenry is at stake.</p>		
281	Gen.	<p>I grew up in Los Alamos. My family moved there in 1957. And while we were growing up in Los Alamos, we heard pretty much all the time on a monthly basis, whatever, that Los Alamos would never become a nuclear bomb manufacturing facility, that there would be nothing ever done there besides research and development. And now, of course, it is diametrically opposite of that. They are building nuclear weapons there. They're building components for nuclear weapons.</p> <p>So back when I was growing up there, their approach toward waste was "The hotter it is, the further out on the mesa we take it before we dump it." Well, now, we, obviously, have a copious stream of waste of all different varieties. And they're -- I find it</p>	<p>Comment noted.</p> <p>See the Department's responses regarding open burning, financial assurance, groundwater protection, and the information repository in the document titled General Response to Comments.</p>	Yes

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		<p>unconscionable that they are even asking for an open burn permit when there are definitely alternative technologies available to deal with that waste. I find it unconscionable that they want to truck that waste from one place to another. That's like a shell game. They're just moving it over here so that then they can move it over there and move it over somewhere else. When you get out on the highway and you encounter one of these nuclear waste hauling trucks, it makes me cringe to think what would happen if there were an accident. You know, why are we trucking this stuff when we have the -- when they have the technology to deal with it where it is? And go ahead and do it that way.</p> <p>I definitely support the New Mexico Environmental Department for -- for at least currently denying this permit. One of the things that -- one of the reasons that they say they've denied it is because they have no financial assurance that -- that anything could ever be done if there were a problem. I think that the folks that run the Los Alamos Lab shouldn't be allowed to leave any problems to the taxpayer to pay for. I think they should be forced to take some of the money that they are taking from us taxpayers in their for-profit venture and use it to create something like the Superfund. You know, shouldn't there be a fund out there that -- that can be tapped immediately if there's an accident, if there's a spill, if there's some kind of waste that gets loose? I feel like there should be. I think the Environment Department is absolutely correct in telling them that they need some kind of financial assurance.</p> <p>Okay. An example of -- of what I'm trying to get at is I have -- I've been living in this area for my whole life, basically, and I have gotten to know quite a number of Native Americans folks quite well, and I have been around them a great deal. And as a child, I did a lot of hiking, exploring around Los Alamos. We ran across all the time what was -- what were obviously some kind of ceremonial or sacred place that Native Americans had occupied or used at some point in time. And we -- we learned -- we learned about those things, and we learned to respect them, and we learned not to go out there and start digging things up and looking for artifacts and that kind of stuff. We learned to -- you know, when we ran across one of these sites, we were to just let it be, you know. It's not your stuff. It's not your place. So let it -- let it lie.</p> <p>And yet now, just in very recent history, I found out that they -- that Los Alamos dug up one of the largest ceremonial spots -- sites, and it's now Area G, and they're burying</p>		

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		<p>contaminated waste there.</p> <p>What? You know, why? How does that work? You know, what does that do for anybody? It -- you know, if they -- I -- I don't -- I just don't understand. The -- I'm sorry. That makes me very emotional, because I've been all over those mountains. I've been to -- in more places than you can even imagine. And I have a great deal of respect for the Native Americans who are the primary recipients of everything that comes down the hill from Los Alamos. And they are being damaged. They have been damaged. They are continuing to be damaged. They will be damaged in the future.</p> <p>The waste products and the general contamination from Los Alamos has to be contained. The -- I just feel like that we should divert all these funds from building more nuclear weapons and facilities to build more nuclear weapons to cleaning up the mess that's already there. Why can't we clean this up, you know?</p> <p>I mean, we have the technology to do it. We've got a whole town full of scientists who can help us out with more, newer, better technology to clean up this mess that they've created, that we've created, we've allowed them to create.</p> <p>I have -- as part of my background; I've been in the plumbing business. I am a solar contractor. I have a passion for the environment. I -- my mother was appointed to the first ever Clean Water Commission in Washington. So from my childhood on, I've learned about the environment and the need to protect it and the need to keep things, you know, as clean as we can.</p> <p>And I have been doing a little bit of research on the groundwater monitoring situation in Los Alamos, and the -- you know, from what I -- I was on the board of a water co-op, et cetera, et cetera. So I know something about wells, I know something about how they work, what they're -- what they should be doing. And it just totally blew me away when I discovered that in the process of drilling these monitoring wells in Los Alamos they've been using bentonite clay, which is designed -- which is used strictly for the purpose of sealing off aquifers. Well, how can you seal off an aquifer when you're trying to monitor it? Come on, folks. Let's wake up, you know. That's ridiculous.</p> <p>Then the other thing is I wanted to back Sofia in the -- the fact that an Internet or E-mail repository of information and ongoing information about what's going on with respect to this permit, which is -- my understanding it's to be issued for 10 years -- it has to be a</p>		

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		<p>physical repository. You can't exclude half of the general public, you know. And you're -- and by making it an Internet computer thing, you're excluding half of the general public. And that's the general public that is being affected -- directly affected by these waste products and by the potential open burning, and by everything that runs down the hill.</p> <p>And when I say runs down the hill, geologically, volcanoes contain some of the most porous rock formations known on the face of this planet, and</p> <p>Los Alamos -- you know, the Jemez Mountains is -- used to be considered the largest volcano on the planet, but it's not anymore, but it's a huge volcano.</p> <p>The rock formations underlying it are extremely porous. So literally everything they put on the ground in Los Alamos ends up down in the Rio Grande or down in the -- the Santa Clara or San Ildefonso or Ohkay Owingeh Pueblos. I mean, it just comes right on down. And I think that needs to be very, very well addressed, because you just can't put the stuff out on the ground and expect it to go nowhere and disappear. It ain't going to happen.</p> <p>And so I -- in conclusion, I just want to beg, plead with the New Mexico Environment Department to deny this permit for open burning. There have to be other ways. There are other ways. There -- you must deny this permit.</p> <p>I got off track when I got so emotional about my Native American friends. It's rare that a month goes by that I don't get notified of somebody dying in one of the pueblos. But my comment is this. I have lived off-grid for 30 years. I have collected my water off of the roof. If they're allowed to burn openly contaminated hazardous nuclear wastes, what am I going to do? Where am I going to get my water? I live in the East Mountains, and our water is very scarce out there. I do have a well that I supplement my rain catchment with, but it's -- it's very sketchy. I don't get much water out of it at all. So am I going to have to put up with contaminated water coming out of the sky, for crying out loud? Come on, folks. You got to stop this.</p>		
282	Gen.	<p>I'm commenting on behalf of the Loretto Community of Sisters and co-members.</p> <p>I will speak about the open-air burning of hazardous waste at the lab. First, some of the public comments in Albuquerque referred to radioactive contaminants. While the hazardous waste that is involved in the open-air burning is not radioactive, radionuclides</p>	<p>Comment noted.</p> <p>See the Department's responses regarding open burning, public participation, emergency</p>	Yes

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		<p>have been detected in the Rio Grande and on produce in gardens, so citizens are concerned about the cumulative effect of the operations at the lab. I hope that their comments will not be dismissed, but understood in the context of we've had enough.</p> <p>Many of the people who spoke in Los Alamos in favor of continuing the open-air burning are understandably fighting for their jobs, but LANL can train them for other cleanup jobs. Those of us who are fighting for better protection of our air, soil and water, are fighting for our health and for the health of future generations.</p> <p>The Loretto Community collected 587 signatures in New Mexico on the <i>Petition for Confined Burning Facilities at Los Alamos National Laboratory</i>.</p> <p>[It states] We, the undersigned, state:</p> <ol style="list-style-type: none"> 1. All people, plants and animals are intricately tied to the health of our air. 2. Historic and ongoing operations at Los Alamos National Laboratory threaten our cultural, spiritual and ecological survival. 3. Our local, state and federal government agencies have a duty to protect the public health and welfare by setting and enforcing laws and regulations that protect our air. 4. Healthy communities and ecosystems require clean, innovative and life-affirming science and technology that will benefit the economy, the future and the health of all. 5. We recognize and respect that air does not seek or uphold political, social, cultural or economic boundaries. <p>To ensure the good health of our air, we demand that in 2009 LANL stop all open burning of hazardous waste and install confined burn facilities that will limit hazardous air emissions.</p> <p>The Loretto Community also collected 182 signed comment letters about the draft hazardous waste permit for LANL. [The letters state]</p> <p>Dear Mr. Kieling:</p> <p>I make the following public comments about the February 2nd, 2010, revised draft hazardous waste permit for Los Alamos National Laboratory, which will</p>	<p>preparedness, seismic hazards, and financial assurance in the document titled General Response to Comments.</p>	

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		<p>allow the Department of Energy and LANL to handle one-quarter million pounds of hazardous waste each year during the ten-year permit.</p> <p>I support the NMED denial of LANL's permit applications for the open air burning of hazardous waste. I support NMED requiring DOE/LANL to install confined burn facilities before the permit is finalized as an alternative to open burning. The permit must include limits as to the type and amount of waste and the frequency of burns.</p> <p>Public participation must be early, often, meaningful, and continuous.</p> <p>The permit must include prescriptive requirements for NMED and DOE/LANL to provide enhanced participation as required by EPA for early, often, continuous, and meaningful contact with the public about both the compliance order on consent and the final LANL permit.</p> <p>I object to NMED allowing DOE/LANL to continue hazardous waste operations without meeting the emergency management, planning, preparedness and response requirements. NMED must conduct a full investigation into the recommendations of the expert reports and require their implementation before the permit is finalized.</p> <p>I object to NMED allowing DOE/LANL to continue hazardous waste operations without the necessary field studies and without a reliable network of seismometers. NMED must conduct a full investigation into the recommendations of these seismic reviews before the permit is finalized.</p> <p>I support NMED requirements in the revised draft permit that DOE/LANL must meet all of the financial assurance requirements for each of the 24 hazardous waste management units.</p> <p>There were more letters that were mailed or e-mailed directly to the New Mexico Environment Department from Loretto Sisters and co-members around the United States who are concerned about the open burning of hazardous waste at LANL, given the Loretto Community's 158-year history in New Mexico. I delivered the petitions and letters to the Environment Department on September 3rd, 2009. During this hearing, we have collected 80 more signatures so far on the petition for confined burning.</p>		

No.	Loc.	Comment	NMED Response	Δ
		<p>In 2004, New Mexico prohibited its residents from burning trash in burn barrels because trash burning is far more harmful to our health than previously thought. The pollutants produced by backyard trash burning can increase the risk of heart disease; aggravate respiratory ailments, such as asthma and emphysema, and cause rashes, nausea and headaches. Most of the waste burned in the open air at LANL is far more dangerous than what most people have been burning in their backyards. When I asked local citizens if they would like to sign the petition, many were appalled that open air burning is still taking place.</p> <p>LANL's reason for not using confined burning is that it takes time to get the permit for that. However, they have known for some time now that confined burning is preferred by the public and that they could have begun the process long ago. The Loretto Community recommends that LANL begin right away to request a permit for confined burning, beginning with the mobile unit, such as those provided by El Dorado Engineering. The mobile unit could be operational as soon as the permit is obtained. If a permanent confined unit is desired, the mobile unit can be utilized until a permanent unit is built.</p> <p>Northern New Mexico has already borne more than its share of contamination. Therefore, the Loretto Community requests NMED to require the hazardous waste to be transported to another site that can dispose of it safely, without exposing the public to toxins, until LANL obtains a permit for confined burning.</p> <p>We also request NMED to require that, after a permit for confined burning is granted, LANL continue shipping the very small amount of high explosive waste that cannot be burned in a confined unit. In his article for the Journal North, dated April 11th, 2010, Mr. Rees stated that there is some waste that cannot be shipped, but in the part of the testimony that I heard, none of the witnesses could answer questions about which wastes could not be shipped. If it is true that some cannot be shipped, then it should be kept at LANL until the permit for confined burning is granted. Mr. Rees also stated that emissions from open air burning is less toxic than a wood-burning fireplace, but emissions from wood burning is so toxic that burning is forbidden under certain weather conditions, so it is not a valid comparison.</p> <p>In the testimony given during these hearings, Ms. Vigil-Holterman stated that it would not be safe to transport some of the high explosive waste. However, under cross-</p>		

No.	Loc.	Comment	NMED Response	Δ
		<p>examination, she changed her statement to say that it would be less safe, because the standard includes minimizing potential exposure to the minimum number of people. However, in considering the potential exposure to the minimum number of people, the downwind citizen population that could potentially be exposed to airborne toxins should also be considered, as well as the number of citizens not living downwind who buy the produce from downwind farmers and gardeners.</p> <p>The tray with the ash after burning is not covered for a period of time until it cools. Therefore, there is the real possibility of some of that ash blowing off the trays and eventually migrating to downwind communities. Some of the ash can contain lead, mercury, arsenic, barium, silver or cadmium. The definition of national security needs to include having clean air, soil and water, as well as good health. We want the security of knowing that we are not being poisoned.</p>		
283	Gen.	<p>Public Participation must be "early, often, meaningful and continuous." NMED must require DOE/LANL to meet the enhanced participation requirements for early, often, continuous and meaningful contact with the public as specified by the EPA for both the Consent Order and the Final LANL Permit. This includes requiring DOE/LANL to establish both a physical Information Repository in the Espanola Valley as well as a virtual Information Repository in order that permit documents can be readily available to the public.</p>	<p>See the Department's responses regarding public participation and information repository in the document titled General Response to Comments.</p>	Yes
284	Gen.	<p>Emergency Management, Planning, Preparedness and Response. Over the past 10 years, serious deficiencies in the DOE/LANL Emergency Management and Response Division have been found by several government auditing agencies, including the DOE Inspector General, the Government Accountability Office and the Defense Nuclear Facility Safety Board. The expert reports described serious problems with LANL fire protection before the Cerro Grande Fire of 2000. Now new expert reports describe the ongoing failure to provide fire protection.</p> <p>I object to NMED allowing DOE/LANL to continue to manage hazardous waste without meeting the emergency management, planning, preparedness and response requirements. NMED must conduct a full investigation into the recommendations of the expert reports and</p> <p>require their implementation before the permit is finalized for the 26 hazardous waste</p>	<p>See the Department's responses regarding emergency preparedness in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		management units.		
285	Gen.	Need better Emergency Management, Planning, Preparedness and Response. Over the past 10 years, serious deficiencies in the DOE/LANL Emergency Management and Response Division have been found by several government auditing agencies, including the DOE Inspector General, the Government Accountability Office and the Defense Nuclear Facility Safety Board. The expert reports described serious problems with LANL fire protection before the Cerro Grande Fire of 2000. Now new expert reports describe the ongoing failure to provide fire protection. We object to NMED allowing DOE/LANL to continue to manage hazardous waste without meeting the emergency management, planning, preparedness and response requirements. NMED must conduct a full investigation into the recommendations of the expert reports and require their implementation before the permit is finalized for the 26 hazardous waste management units.	See the Department's response regarding emergency preparedness in the document titled General Response to Comments.	Yes
286	Gen.	This has been an issue that has received a great deal of attention due to audits done on the Los Alamos Fire Department and LANL's response capability. It is apparent that there is a lack of understanding of what the regulations require. The Fire Department is a separate entity from the Laboratory. The DOE/Laboratory has an agreement with them to provide assistance in a time of need. Training is provided to the Fire Department to better enable them to be safely responsive to any emergencies anywhere within the Laboratory. The waste management operations represent only a very small component of that responsibility. The regulations at 264.37 require the facility to "attempt" to make arrangements with fire, police and local medical facilities. It is incumbent upon the facility to familiarize those entities with "...layout, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes." LANL has done all these things and maintains a constant training and familiarization program for the Fire Department to maintain a high level of facility awareness. That is facility wide. The waste management portions of the Laboratory represent only a small percentage of the buildings and areas occupied by the Laboratory. These waste storage and treatment areas are the focus of this permit and should not be confused with operations that are outside the scope of it.	See the Department's response regarding emergency preparedness in the document titled General Response to Comments.	Yes
287	Gen.	Seismic Hazard on the Seismically Active Volcanic Pajarito Plateau. A 2007 report	See the Department's response	No

No.	Loc.	Comment	NMED Response	Δ
		<p>described a 50% increase in the seismic hazard at LANL. The 2007 report identified many deficiencies in the knowledge of the seismic hazard but the necessary studies are not being performed. The 2007 report identified the failure of DOE/LANL to install and operate a reliable network of seismic instruments (seismometers) to accurately monitor the seismic hazard from ground motions. The current network consists of only seismometers at three locations that are not kept in calibration.</p> <p>I object to NMED allowing DOE/LANL to continue to manage hazardous waste without the necessary studies of the seismic hazard and without a reliable network of seismometers. NMED must conduct a full investigation into the recommendations from these seismic reviews before the permit is finalized for the hazardous waste management units.</p>	regarding seismic hazards in the document titled General Response to Comments.	
288	Gen.	Need study of Seismic Hazard. We object to NMED allowing DOE/LANL to continue to manage hazardous waste without the necessary studies of the seismic hazard and without a reliable network of seismometers. A 2007 report described a 50% increase in the seismic hazard at LANL. The 2007 report identified many deficiencies in the knowledge of the seismic hazard but the necessary studies are not being performed. The 2007 report identified the failure of DOE/LANL to install and operate a reliable network of seismic instruments (seismometers) to accurately monitor the seismic hazard from ground motions. The current network consists of only seismometers at three locations that are not kept in calibration. NMED must conduct a full investigation into the recommendations from these seismic reviews before the permit is finalized for the hazardous waste management units.	See the Department's response regarding seismic hazards in the document titled General Response to Comments.	No
289	Gen.	Please install a reliable calibrated network of seismometers at the LANL hazardous waste management units as part of the final permit requirements.	See the Department's response regarding seismic hazards in the document titled General Response to Comments.	No
290	Gen.	NMED needs to set forward the testing and experimental regulations upon which it relies in the permit. NMED is interpreting those regulations too broadly in excluding hazardous waste left after projects at RCRA facilities.	Comment noted	No
291	Gen.	Interface of the Permit with the Consent Order. In Part 11.1 the statement is made that	See the Department's response	No

No.	Loc.	Comment	NMED Response	Δ
		<p>"Nothing in this permit Part shall be construed to constitute a change to the Consent order." Additionally, 11.2.1 states "If any additional SWMUs or AOCs are discovered while the Consent Order is in effect, corrective action for such units shall be conducted under the Consent Order." Under alternative closure requirements in subpart 264.110(c), those RCRA regulated disposal units that were in operation after the date of regulation can be rolled into the CME/CMI process for corrective action. It is the intention of the NMED and LANL to combine all of the underground regulated units and SWMUs at TA-54 Area G for a comprehensive cleanup/closure of the site. A great deal of time and effort has been expended on this issue and since no permit is being applied for or issued for these units, the issue should be left to corrective action under the Consent Order. When the Consent Order expires then the future monitoring and any other activities tied to those units should be rolled into a post closure care permit that can be worked out at that time and amended to the current permit. With the corrective action yet undecided and the full investigation yet incomplete it is non productive to consider post closure care at this point. It would appear to be more productive for NMED to develop a technical guidance document that provides facilities an outline of how the regulator will apply corrective action to those sites where it is applicable. If the Consent Order is a good example then it could be used as boiler plate for such an endeavor. The document could be tailored to meet specific sites with unique circumstances but it would go a long ways to making this process consistent. It would also have the benefit of making it possible to refer to sections in that document rather than putting in long sections in a permit. Since the permit can not change the Consent Order, there are no units in the permit that require corrective action, and the public is unable to alter the language that comes from the Consent Order (prohibits public input as required for permitting activities), I submit that this section should be removed from the permit and maintained in the Consent Order.</p>	<p>regarding the relationship between the Permit and the Consent Order in the document titled General Response to Comments.</p>	
292	Gen.	<p>Based on these experiences and other observations, I find it necessary to oppose issuing the current draft and ask that the New Mexico Environment Department [NMED] convene a public meeting to answer the fundamental question, "Does NMED have the capability to administer this permit in a fair, impartial, effective and efficient manner?" Until this question is satisfactorily answered, the permit should not be issued. NMED's performance over the past 13 years in attempting to deal with this renewal suggests that the agency has failed to act fairly, impartially, effectively or efficiently in this regard.</p>	<p>#1 – The Department’s management has acted no differently with regard to the LANL Permit than any other hazardous waste permit issued by the agency. A number of Department managers have left</p>	No

No.	Loc.	Comment	NMED Response	Δ
		<p>Since NMED chose not to respond to my previous questions, I think it is vitally necessary that these issues be addressed to better serve all involved.</p> <p>Points that should be covered in such a hearing include but are not limited to:</p> <ol style="list-style-type: none"> 1. Are there any past associations of NMED management with LANL, the Department of Energy [DOE], and/or public interest groups that might affect their impartiality? 2. Can NMED demonstrate regulatory consistency between what it expects of LANL and of other NMED-regulated entities within the state? 3. NMED has legal obligations to respond within a reasonable time to documents provided to it by LANL. What is the NMED record on responding to LANL in a timely manner? It is my understanding that the signing of the consent order resulted in the clock being "reset" to zero for those items that LANL had previously provided to NMED but upon which no action had been taken. Is this correct and has the clock been reset at other times to improve NMED's timeliness record? 4. It has been 13 years since LANL started submitting documents to NMED for this permit renewal, which was to have been completed by NMED 10 years ago. How does NMED justify this time lag? Would NMED allow a permittee to be 10 years late on a submission? 5. What are the criteria for including documents in the administrative record? 6. How is cost effectiveness factored into NMED's requests? 7. The more complicated documents become, the more room there is for error and misunderstanding by both state inspectors and permittees. How does NMED strive for clarity in the permit? 8. What have the costs been to date for LANL, DOE, and NMED in getting the permit to the current status? 9. What resources are required for NMED to administer the permit and how are they funded? 10. Has NMED considered turning RCRA permitting back to the Environmental Protection Agency? If not, why not? 11. With the delays and other problems associated with the current permit renewal, 	<p>the agency to work for LANL. The Department is not aware of any management that have worked or associated with public interest groups. The Permit is distinguishable in the amount of its public interest.</p> <p>#2 – While LANL is unique in many respects, the Renewal Permit is consistent with all other hazardous waste permits issued by the agency.</p> <p>#3 – The Consent Order has notice dates to which the Department has agreed to. In the past five years the Department has achieved 90% of the notice dates. This is a performance measure of the Department reported to the State legislature. Also, the Hazardous Waste Fee Regulations have review times which the Department has met since the implementation of the regulations in August 2006. These are the only environmental regulations that have such requirements.</p> <p>#4 – The length of time it has taken the Department to finalize the Renewal Permit is due to numerous factors, including; the</p>	

No.	Loc.	Comment	NMED Response	Δ
		<p>what are NMED's plans for improving the permitting process?</p> <p>12. What were the results of the 35-40 closed meetings over five months with those who had requested a hearing on the previous permit draft?</p> <p>13. I was specifically told I could not participate in the meetings on the draft permit because I had not requested a public hearing. However, San Ildefonso Pueblo, which did not request a public hearing, was involved in those meetings. What is the reason for the discrepancy in allowed participation?</p> <p>14. The participants in the closed meetings considered the meetings to be negotiations on the permit. What qualifies a person or group to be a party to the permit so that they can be involved in negotiations of the actual language of the permit?</p>	<p>complex nature of the hazardous waste activities at LANL, inadequate permit applications, the changes to those activities in the last ten years, the technically inadequate responses provided by LANL, the numerous LANL permit modifications that the Department has processed over that period, the extraordinary amount of public interest in the LANL permit and corrective action activities, the approximately 2,200 corrective action sites at LANL being addressed by the Department, the focus on corrective action and issuance of the Consent Order, and LANL has 26 hazardous waste activities or permitted units addressed by the revised draft Permit.</p> <p>In the past ten years the Department has processed the closure of TA-16-88 Container Storage Unit (CSU), TA-16-387 Open Detonation Unit, TA-16-394 Open Burn/Open Detonation Unit, TA-16-401 Open Burn/Open Detonation Unit, TA-16-406 Open Burn/Open Detonation Unit, TA-16 Incinerator, TA-16 Material</p>	

No.	Loc.	Comment	NMED Response	Δ
			<p>Disposal Area P, TA-21-61 CSU, TA-50-1 Room 59 CSU, TA-50-37 Controlled Air Incinerator, TA-50-37 Room 115 CSU, TA-50-37 Room 117 CSU, TA-50-37 Room 118 CSU, TA-50-114 CSU, TA-54 Area L Treatment Tanks, and TA-55-4 B38 CSU.</p> <p>#5 - The administrative record includes all correspondence and submittals associated with the facility. This also includes comments made by the public.</p> <p>#6 - The Resource Conservation and Recovery Act and the New Mexico Hazardous Waste Act do not authorize us to consider cost effectiveness.</p> <p>#7 - The more detail and specificity provided in the permit provides for less interpretation and makes it clear as to the requirements the permittee must follow. Clear requirements ensure that both the Permittee and the Department understand the requirements and will cause no or less uncertainty of the requirement.</p> <p>#8 - The Department can only address the costs that it has incurred to process the Renewal</p>	

No.	Loc.	Comment	NMED Response	Δ
			<p>Permit. The Department keeps financial records for the previous three years.</p> <p>#9 - The Department annual provides an invoice to LANL that show actual costs through fees incurred by the Permittees.</p> <p>#10 - The Department is authorized to administer the hazardous waste program by EPA. In a March 4, 2009 letter, EPA stated that its reviews have found that NMED is implementing a program consistent with its authorization. In addition, EPA reviews the program through mid-year and end-of year reviews and has found it to be consistent with the Departments authorization.</p> <p>The Department is not considering giving the program back to EPA. The Department administers the program and is meeting the requirements as provided through EPA authorization.</p> <p>#11 - The Department does not plan to alter the permitting process as it follows the regulatory requirements and is consistent with the authorization</p>	

No.	Loc.	Comment	NMED Response	Δ
			<p>provided by EPA. Also see #4 above.</p> <p>#12 - The results are a revised draft permit that was issued for public comment on July 7, 2009.</p> <p>#13 - San Ildefonso is a sovereign government located adjacent to LANL which can be directly impacted by activities at LANL. Their standing is different than the public. In addition, Executive Order 2005-004, <i>Statewide Adoption of Pilot Tribal Consultation Plans</i>, requires executive agencies to engage with the tribes on issues. Also, the Department has a standing MOU with San Ildefonso regarding environmental issues.</p> <p>#14 - The participants in the meetings for the LANL permit were parties that requested a public hearing and opposed the permit as provided for in 20.4.1.901.A(4) NMAC.</p>	
293	Gen.	<p>The fundamental question in the permitting process for a Resource Conservation and Recovery Act [RCRA] permit for the Los Alamos National Laboratory [LANL] is "Is the New Mexico Environment Department [NMED] capable of upholding its obligations under the delegation of RCRA authority to NMED from the Environmental Protection Agency [EPA]?" Based on past performance, the answer is "No!" Without a fundamental change in how NMED evaluates, reviews, and issues permits for federal facilities, NMED should voluntarily turn back its authority to the EPA for its</p>	<p>Comment noted. See the response to Comment 292 above.</p>	No

No.	Loc.	Comment	NMED Response	Δ
		<p>management of RCRA permitting for federal facilities.</p> <p>The basis for these concerns follows:</p> <ol style="list-style-type: none"> 1. The draft permit was issued for public comment on August 27, 2007 or about NINE years late. The re-permitting process began in 1996 for a permit set to expire in November 1999. A draft permit for comment should have been issued in 1998 to give time for public comment and drafting of the permit for issuance in 1999. Update: <i>It took NMED nearly 2 years to come out with a revised permit. Should a final permit ever be issued, it will be over 10 years late.</i> 2. The eleven-year [so far] permitting process involved 1.5 MILLION pages of administrative record to date with more to come. NMED must be incredibly risk averse to spend so much time requiring so much of an applicant and then reviewing all this material in order to make a decision. Such risk aversion and subsequent information requirements are sure to cause confusion in any applicant. Update: <i>NMED 's permitting process is now at thirteen years and counting.</i> 3. For self-inflicted burdens such as 1.5 million pages of material [500 boxes if put into binders], NMED does not have the staff to properly review and write permits in a timely manner nor is NMED likely to get State funding to have the huge staff required for such a permitting process. Update: <i>The administrative record must now be at 1.6 to 1.7 million pages and is still growing.</i> 4. The costs to LANL and the State for such a process are likely to be in the tens to hundreds of million dollars - mostly wasted taxpayer money. Update: <i>The costs continue to mount.</i> <p>Please provide what NMED considers to be staffing needs to properly manage permits in this manner, what would the costs be and where this funding would come from. Please provide what the costs have been for this permit for both LANL and NMED.</p> <p>The NMED effort for writing the RCRA permit for Sandia National Laboratory Albuquerque [SNLA] should be compared to that for the LANL permit and made public. Since SNLA and LANL are similar institutions as far as complexity of hazardous waste permitting, there should not be a huge discrepancy in permitting effort. If there is, then why is one federal institution singled out over the other?</p>		

No.	Loc.	Comment	NMED Response	Δ
		<p>Please provide any plans for changes to the RCRA permitting process for federal facilities for future permitting efforts.</p> <p>Additionally, on page 17 of the NMED fact sheet announcing this public comment period, NMED "requires the Permittees to close MDAs G, H, and in their entirety under this permit." Since Area G is primarily devoted to radioactive waste, what is the NMED's authority to make such a requirement? Has the Nuclear Regulatory Commission delegated such authority to the State? Please provide under which authority such a requirement can be put on the permit. Provide NMED's proposed solution to radioactive waste disposal at LANL if Area G were closed and an evaluation of the impacts of such a decision. Update: <i>I will not pursue this item any further at this time.</i></p> <p>In summary, without a fundamental change in the RCRA permitting process by NMED for federal facilities, NMED should voluntarily turn back RCRA permitting authority to the EPA. NMED would still have a strong advisory role but would be relieved of the burden of permitting which has caused great anxiety, anguish and expense to both NMED and LANL. The public would benefit from improved timeliness, better clarity of the process and likely a higher quality permit to protect the employees and public.</p> <p>Update: <i>Since these comments were not addressed in writing during this round of the permitting process, which is in violation of NMED's stated policy, and rendered moot by NMED when the July 6, 2009 draft was issued, it becomes clear that a public hearing is required to determine if NMED is capable of administering RCRA, as it applies to LANL. Therefore, I formally request that a public hearing be held to discuss whether NMED is able to administer RCRA permitting at LANL in a fair, impartial, effective, and efficient manner.</i></p>		
294	Gen.	The fact sheet, which is 111 pages long with a 570-page addendum, indicates failure to focus on what's important and prioritize. Whether planned or not, a fact sheet of 681 pages is guaranteed to confuse and obfuscate what is happening. It does not clearly communicate.	Comment noted	No
295	Gen.	On pages 7-18 of the fact sheet addendum, there is a lot of discussion over abandoned or removed sanitary septic tanks that served primarily residential units and other low risk facilities. NMED is concerned that there might be RCRA constituents present, and the	Comment noted. Each of the sites described in the Addendum of the Fact Sheet are	No

No.	Loc.	Comment	NMED Response	Δ
		<p>permittees must demonstrate that they are not there or are in such low concentrations as to be of no concern. However, one could have the same concern over the many thousands of current, abandoned, and removed sanitary septic tanks in New Mexico. It is quite likely that virtually all have received household chemicals, paint thinners, and paints from normal usage and thus could show RCRA constituents in their drain fields. Has NMED exhibited the same zeal in requiring owners at all other sanitary septic tanks to determine there are no RCRA constituents in or near their tanks? NMED should demonstrate that they have required the same rigor of all owners of sanitary septic tanks to ensure regulatory consistency throughout the state. If NMED cannot do that, they should reduce their requirements to those they expect of the rest of the state.</p>	<p>Areas of Concern (AOCs) not identified in the existing LANL Permit. The intent of the Addendum was to provide justification for inclusion of these AOCs in the list of sites that require corrective action (Attachment K). However, the list is for tracking purposes only. All corrective actions are covered under the March 1, 2005 Order on Consent.</p> <p>RCRA and New Mexico's Hazardous Waste Act require comprehensive environmental protection at hazardous waste facilities large enough to require a permit. The Hazardous Waste Bureau does not issue permits or regulate household septic tanks. The Department has other programs responsible for household septic tanks that strive for comprehensive environmental protection.</p>	
296	Gen.	<p>On pages 21 and 22 of the addendum [to the fact sheet], NMED requires the permittees to investigate a 1940s borrow pit location and a concrete block manufacturing site for RCRA constituent contamination. Again, in the name of regulatory consistency, NMED should demonstrate they require the same level of investigation at all borrow pit locations and places where concrete has been made in the State of New Mexico or reduce the requirements in the permit to those they place on the rest of the state. It appears NMED is unwilling or unable to consider cost benefit when it comes to</p>	<p>Comment noted.</p> <p>RCRA and New Mexico's Hazardous Waste Act require comprehensive environmental protection at hazardous waste facilities large enough to require a permit. The Department or other</p>	No

No.	Loc.	Comment	NMED Response	Δ
		investigations at LANL.	departments within the State have other programs responsible for borrow pit locations and places where concrete has been made that strive for comprehensive environmental protection.	
297	Gen.	The draft permit has numerous inconsistencies requiring correction, particularly in the use of character fonts, numeral notation, regulatory citations, cross references, date notation, paragraph numbering, formatting, and the use of italics.	The Department concurs.	Yes
298	Gen.	The draft permit has numerous references to figures (particularly in Attachment A) and other sections of the permit requiring correction.	The Department concurs	Yes
299	Gen.	The draft permit has numerous typographical errors requiring correction.	The Department concurs	Yes
300	Gen.	Request for Public Hearing and Negotiations - SRIC and NRDC request a public hearing on the Revised Draft Permit. Further, and prior to any notice of public hearing, pursuant to 20.4.1.901. A.4 NMAC, SRIC and NRDC request that NMED, the Permittees, and other parties conduct negotiations to attempt to resolve issues related to the Revised Draft Permit.	Comment noted	No
301	Gen.	Nuclear Watch New Mexico opposes the draft Permit as currently formulated for the reasons described in its comments (but not necessarily limited to just those comments). Nuclear Watch requests a public hearing on the July 6, 2009 draft LANL RCRA permit.	Comment noted	No
302	Gen.	Request a public hearing.	Comment noted	No
303	Gen.	I am requesting a public hearing as described in my letter, and I consider this subject of the highest concern to the citizens of New Mexico.	Comment noted	No

No.	Loc.	Comment	NMED Response	Δ
304	Gen.	<p>As a 30+ year resident of Northern New Mexico, I have been following the renewal process as administered by the New Mexico Environment Department (NMED) for some time, and frankly, I have grave concerns about NMED's performance in the process. I am aware that LANL's submittal of renewal documentation to NMED dates back 13 years, and NMED was to have completed the permit renewal process 10 years ago. I find it incomprehensible that the administrative record now includes over a million pages yet the permit renewal remains incomplete.</p> <p>The cost of NMED's performance failure both to the US taxpayer in terms of the total LANL effort required to respond to NMED to date, as well as to the New Mexico taxpayer in terms of NMED's lack of timeliness, is unconscionable and inexcusable.</p> <p>I hereby request a public hearing to discuss the NMED permitting process and NMED's ability to administer RCRA permitting for LANL and similarly complex facilities in this state. The people of New Mexico and all interested parties deserve the opportunity to determine whether NMED is serving them well in managing RCRA permitting and whether they would be better served were NMED to relinquish the RCRA permitting authority to the Environmental Protection Agency.</p> <p>I am a retiree from the University of California and a concerned private citizen of the state of New Mexico. Thank you for your consideration of this request for a public meeting. I look forward to your prompt response.</p>	Comment noted	No
305	Gen.	<p>Thank you for the opportunity to comment on the July 6, 2009 version of the revised draft Resource Conservation and Recovery Act [RCRA] permit for renewal of the current Los Alamos Scientific Laboratory [LANL] RCRA permit.</p> <p>In reviewing the timeline for this permit as provided in your fact sheets, it seems quite apparent that there is something fundamentally wrong with the New Mexico Environment Department [NMED] permitting process that allows a permit renewal to be 10 years behind schedule. If this were a new permit, I can understand that some delay might be inevitable as something new was being created. However, this is a renewal of an existing permit which, by extension, has been valid for 20 years or 10 years beyond its expiration date and 3 years beyond the change of the operating</p>	Comment noted	No

No.	Loc.	Comment	NMED Response	Δ
		<p>contractor.</p> <p>This delay calls into question NMED's ability to properly manage RCRA permitting for large facilities in New Mexico. Therefore, I request that a public hearing be held to discuss NMED's permitting process in order to assess NMED's ability to successfully manage RCRA permitting for complex facilities. The permit should not be issued until NMED can successfully demonstrate its ability to manage the permit. No matter how good or bad the permit may be, if the regulator is incapable of managing it properly, the permittees and the citizens of New Mexico will be poorly served. Items to be discussed include but are not limited to:</p> <ol style="list-style-type: none"> 1. Why the delay has been so long to renew an existing permit? 2. What is needed to effectively manage the permit? 3. What resources are needed to manage the permit? 4. NMED's ability to get the needed resources. 5. Should NMED relinquish its authority to manage RCRA and give the authority back to the Environmental Protection Agency? <p>For the record, I am retired and I live at the address listed on this letter. I represent myself as a private citizen as I no longer have any professional affiliation with Los Alamos National Lab, or the Department of Energy. My interest in this subject comes from a career of more than forty years in research and development of materials and in the management of large and complex facilities and operations involving hazardous as well as special nuclear materials.</p> <p>My work experience at the Laboratory and on special assignments at the request of the DOE at the Rocky Flats Plant were always conducted in a manner that minimized risk to people, property, and the environment while adhering to all applicable laws and regulations. My experience also convinced me that positive interaction between the Laboratory and the regulators leads to positive cost effective results.</p> <p>It is my great hope that issues involving the renewal of the LANL RCRA Permit can be resolved and all parties can proceed in a safe and efficient manner.</p>		
306	Gen.	I did not receive the mailed notice of these hearing until Saturday, April 5 th . The notice	Comment noted	No

No.	Loc.	Comment	NMED Response	Δ
		was mailed on April 4 th . This is not OK!		
307	Gen.	Citizen Action requested on September 3, 2009 that a time extension for public comment be granted for review of the Draft Permit as reissued.	Comment noted	No
308	Gen.	<p>Citizen Action is requesting an extension of the public comment period for the Los Alamos National Laboratory Resource Conservation and Recovery Act (RCRA) Draft Part B Permit (LANL draft permit). CA has participated in numerous technical and administrative proceedings before the NMED involving the Sandia National Laboratories (SNL) Resource Conservation and Recovery Act (RCRA) Draft Part B Permit and the SNL Chemical Waste Landfill (CWL) post closure permit. CA is very interested in the substantive requirements of the LANL draft permit and the post-closure care of the hazardous waste units at LANL in comparison to the SNL RCRA Draft Part B Permit (SNL draft permit) and also for the cumulative potential for impacts on public health and the environment from both permits.</p> <p>The importance of the LANL draft permit to CA constituents and affiliated environmental organizations is underscored by reports in the popular media and scientific literature revealing the existence of large plumes of hexavalent chromium and high explosives contamination traveling in the groundwater from LANL toward municipal wells of the cities of Los Alamos and Santa Fe. There is contamination flowing from LANL to the Rio Grande River that is a source of drinking water for residents of Albuquerque, New Mexico.</p> <p>During the first submission of the LANL permit and subsequent negotiations, CA was involved in time-consuming analyses of both the CWL and the SNL draft permit that reduced available time for full review of the LANL draft permit. CA currently has a scheduled meeting with the NMED regarding the cross-comparison of the 2 permits and that comparison will affect the CA comments for both the LANL and SNL draft permits especially with respect to consistency of application of the requirements of RCRA at both LANL and the SNL. The meeting will provide important information for comment on the LANL draft permit but the meeting is scheduled for after the September 5, 2009 closure date for submission of public comments for the LANL draft permit.</p> <p>Because of the volume and complexity and the changes made to the revised and reissued LANL draft permit; the issuance of a new 570 page addendum to a revised and reissued</p>	<p>Comment noted</p> <p>See the Department's response regarding groundwater protection in the document titled General Response to Comments.</p>	No

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		NMED Fact Sheet that is 108 pages in length; and records that are not included in the Administrative Record, the Department needs to recognize that an extension of the public comment period is necessary and appropriate.		
309	Gen.	<p>"Alternative Requirements" Do Not Protect Groundwater. Many reports over the past five years have described the overall failure of the DOE/LANL to protect the precious groundwater resources from contamination by LANL sources of chemical and nuclear wastes. The Environmental Protection Agency (EPA), the DOE Inspector General and the National Academy of Sciences (NAS) have written detailed reports that describe the major problems in the DOE/LANL groundwater protection practices and lack of compliance with the regulations.</p> <p>I object to the revised LANL draft permit that relies on "alternative requirements" for groundwater protection. The NAS Final Report described the "alternative requirements" in the March 1, 2005 NMED/LANL Consent Order as an important example of the failure of the LANL groundwater protection practices. The use of "alternative requirements" has not worked. For example, dangerous and fast-moving hexavalent chromium was discovered in the regional aquifer over 5 1/2 years ago in wells directly west of the Buckman wells. Santa Fe pumps over 40% of its drinking water from the Buckman wells. No one knows the extent or direction of the Hexavalent chromium plume - work done under "alternative requirements" in the Consent Order. In order to protect our precious drinking water, NMED must require DOE/LANL to strictly comply with the groundwater requirements of 40 CFR 264, Sections 90 through 101.</p>	See the Department's response regarding regulated units/alternative requirements in the document titled General Response to Comments.	No
310	Gen.	Do not allow "Alternative Requirements." The NAS Final Report described the "alternative requirements" in the March 1, 2005 NMED/LANL Consent Order as an important example of the failure of the LANL groundwater protection practices. In order to protect our precious drinking water, NMED must require DOE/LANL to strictly comply with the groundwater requirements of 40 CFR 264, Sections 90 through 101 and not use "alternative requirements."	See the Department's response regarding regulated units/alternative requirements in the document titled General Response to Comments.	No
311	Gen.	The unsettled state of the LANL well monitoring network is a reason for an extension of public comment. The public was informed that federal stimulus money would be available for 17 new monitoring wells to be placed at LANL. Seven (7) other LANL unidentified monitoring wells at LANL are planned for plugging and abandonment. CA and the public will require sufficient time, <i>after public notice and opportunity for review</i>	See the Department's responses regarding regulated units/alternative requirements and groundwater protection in the document titled General Response	No

No.	Loc.	Comment	NMED Response	Δ
		<p><i>and comment</i> for the new location and depths of the LANL monitoring wells (see 40 CFR 270.42 Appendix I) to consider the new monitoring wells in relation to the LANL draft permit sections for ground water monitoring and long term monitoring and maintenance for post closure care and corrective action.</p>	<p>to Comments.</p> <p>The public comment period ended at the conclusion of the Permit hearing. There will be opportunity for public comment associated with the remedy selections for sites at the Facility where the remedy may be different than complete removal of waste and contaminated media at the site.</p>	
312	Gen.	<p>I (we) provide the following public comments about the lack of groundwater protection requirements in the proposed Hazardous Waste Permit for Los Alamos National Laboratory (LANL).</p> <p>The Environmental Protection Agency (EPA) has designated the Espanola Basin as a sole source aquifer, meaning that the Espanola Basin is the sole drinking water source for the area between the Jemez and Sangre de Cristo Mountains, running from Tres Piedras to the north, to almost Galisteo to the south.</p> <p>Since operations began in 1943, LANL has buried over 21 million cubic feet of radioactive, hazardous and toxic wastes in unlined pits, trenches and shafts dug into the volcanic tuff. The LANL groundwater monitoring network has been under development since 1998 and has yet to provide reliable and representative samples of groundwater from the regional aquifer.</p> <p>I am particularly concerned about the lack of detection and compliance groundwater monitoring for the "regulated units," Areas G, Hand L, at Technical Area 54 (TA-54). I quote the March 19, 2010 written testimony by James Bearzi, Bureau Chief of the NMED Hazardous Waste Bureau:</p> <p style="padding-left: 40px;">“... groundwater contamination has already been detected beneath the regulated units at TA-54” p. 62.</p> <p>Groundwater beneath LANL discharges to the springs at the Rio Grande. Albuquerque residents are already drinking water from the Rio Grande and Santa Fe residents will begin next spring.</p> <p>It is time to get back to basics. NMED must require LANL to install wells drilled only</p>	<p>See the Department’s responses regarding groundwater protection in the document titled General Response to Comments.</p>	No

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		<p>with air. These wells must be able to detect contamination and provide the necessary information in order to implement corrective action, or "cleanup," in an efficient and cost effective manner. Already too much taxpayer money has been wasted drilling defective wells, collecting and analyzing samples from defective wells and reporting data to the public that is unreliable.</p> <p>I urge you to protect the NM groundwater for us now and for all who come after us!</p>		
313	Gen.	<p>I request that Judge Alarid, the Hearing Officer for the proposed LANL RCRA Part B Permit make the following findings:</p> <ul style="list-style-type: none"> -The air-rotary drilling method used for the LANL monitoring wells shall not use organic foam drilling additives for any part of the borehole unless temporary or permanent casing is installed to prevent the organic foam from 1). leaking into the regional aquifer and 2). leaking into any perched zones of saturation where well screens are installed. -The drilling record shows that organic foam and water may prevent the detection of perched zones of saturation and possibly, even the water table of the regional aquifer. Therefore, the preferred drilling method is air rotary with only the use of air as a drilling fluid. The use of organic foam or polymer drilling additives shall be only in borehole intervals where drilling only with air is not possible. -The findings in reports of the National Research Council (AR 30802) and the Environmental Protection Agency (AR 14175 and Sept 30,2009 report with no AR) <p>The network of monitoring wells installed or proposed for the regional aquifer at Technical Area 54 (TA-54) at Los Alamos National Laboratory (LANL) are shown in the attached Figure 4 from the Katzman Testimony Exhibit 4 at the public hearing for the LANL proposed Part B Permit. Except for well R-23i, all of the monitoring wells displayed on Figure 4 are installed in the regional aquifer. Well R-23i is a well with two screens that are installed in perched zones of saturation.</p> <p>The first regional aquifer monitoring wells at TA-54(e.g., wells R-20, R-21, R-22, R-23 and R-32) were installed as an activity of the LANL Hydrogeologic Workplan. Well R-23i was also installed as an activity of the LANL Hydrogeologic Workplan. The drilling methods used for all of the Hydrogeologic Workplan monitoring wells allowed large</p>	<p>Comment noted.</p> <p>See the Department's responses regarding regulated units/alternative requirements and groundwater protection in the document titled General Response to Comments.</p>	No

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		<p>quantities of organic and/or bentonite clay drilling muds to flow into the geologic formations where the well screens were installed. The organic and bentonite clay drilling muds were used with the approval of the New Mexico Environment Department (NMED) Hazardous Waste Bureau (HWB).</p> <p>Wells R-20, R-22 and R-32 were a multiple-screen design where no-purge water samples were collected with a Westbay sampling system. The proposed LANL Part B Permit does not allow the Westbay no-purge sampling systems in monitoring wells installed for the Permit. The NMED required the rehabilitation of monitoring wells R-20, R-22 and R-32. The rehabilitation required the removal of the Westbay sampling systems and installation of pumps to purge water samples from one or two screened intervals.</p> <p>During cross-examination at the Part B Permit Hearing, Mr. James Bearzi, Chief of the NMED HWB admitted that the attempt to rehabilitate wells R-20 and R-32 was not successful and the only use for the two wells was the measurement of water levels. In fact, the attempt to rehabilitate wells R-20 and R-32 was a mistake because the information existed that the two wells could not be rehabilitated before the rehabilitation was attempted. The expensive and unsuccessful rehabilitation activities for wells R-20 and R-32 were a misspending of tax payer money.</p> <p>In 2009, a field study was performed to investigate the feasibility to rehabilitate well R-22. The rehab activities are described in LANL report LA-UR-09-4936 (August 2009). The Westbay sampling system was removed from the multiple-screen well so that the source of the persistent measurement of tritium contamination in the no-purge water samples collected from the deepest screen (screen #5) could be determined. Pumping a large volume of water from screen #5 determined that the tritium contamination persistently detected in the no-purge water samples was because of the cross-flow of tritium contaminated groundwater during the drilling and construction of the multiple screen well.</p> <p>In addition to tritium, the no-purge water samples collected from screen #5 also contained a large number of RCRA hazardous organic constituents over a period of several years. The detected organic contaminants were listed in Table A-40 in the LANL <i>Characterization Well R-22 Geochemistry Report</i> (LA-13986-MS, September 2002). Table A-40 is attached to this public comment. The RCRA hazardous</p>		

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		<p>constituents detected in screen #5 were also from cross-flow of contaminated groundwater during the drilling and well construction activities. The aquifer zone(s) at the location of well R-22 that are contaminated with tritium and organic contaminants are not known but must be investigated by the installation of additional monitoring wells.</p> <p>The attached figure from LANL Report LA-UR-04-677 (September 2004) is a summary of the Schlumberger geophysics for well R-22. The figure shows two aquifer zones with high permeability that are not monitored by well R-22. The two zones are located below screen #2 and above screen #3 in the approximate depth intervals of approximately 1030 -1065 feet below ground surface (ft bgs) and 1085 -1135 ft bgs. In addition, the lithologic log in the LANL Well R-22 Completion Report (LA-13893-MS, February 2002) describes an aquifer zone with high permeability in the depth interval of 1188 -1237 ft bgs. The three aquifer zones described in this paragraph must be investigated for the presence of contaminated groundwater by the installation of monitoring wells.</p> <p>The 2009 field study determined that actively pumping water from screen #1 in well R-22 resulted in water samples that more closely resembled the expected chemistry of formation groundwater than the water samples produced over the period of nearly nine years from the Westbay no-purge sampling system. The improvement was no surprise. Also, the improvement from an arbitrary score of 44% in 2007 for no-purge samples to an arbitrary score of 88% in 2009 for samples collected after purging does not prove that the water samples collected in 2009 are reliable and representative for the detection of contamination from MDA G to the regional aquifer. The scores are arbitrary because they were derived from the badly flawed assessment methodology in the LANL <i>Well Screen Analysis Report-Revision 2</i> (WSAR-2) (LA-UR-07-2852, May 2007).</p> <p>The great uncertainty in the assessment methodology in the WSAR-2 was the finding of 1). the National Research Council in the 2007 Final Report <i>Plans and Practices for Groundwater Protection at the Los Alamos National Laboratory</i> and of 2) the four reports written over the years from 2005 to 2009 by the Environmental Protection Agency National Risk Management Research Laboratory in Ada, Oklahoma (EPA Kerr Lab). The pertinent excerpts from the EPA Kerr Lab report about the poor reliability of the WSAR-2 to determine LANL monitoring wells produced reliable and</p>		

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		<p>representative water samples are pasted below:</p> <p>Using criteria established in this report [i.e., the WSAR-2], an undesirable component of uncertainty will persist regarding screen impacts because it is not possible to understand all possible mineral-contaminant interactions solely by evaluating water chemistry (p.4).</p> <p>Recommendations to Reduce Uncertainty</p> <p>Due to uncertainties in the mineralogical alterations induced by the drilling additives, uncertainty in the utility of aqueous chemistry assessments for the determination of whether samples are fully representative of aquifer conditions, and the lack of appropriate data for the assessment of water quality immediately upgradient of the impacted characterization wells, it is recommended that additional laboratory/field studies be designed to reduce uncertainty and validate the results of the WSAR [Le., the WSAR-2] (p. 5).</p> <p>The NMED approval letter for the WSAR-2 also described the great uncertainty for the badly flawed assessment methodology in the WSAR-2. The pertinent excerpt from the approval letter is pasted below:</p> <p>NMED notes that the conclusions obtained in the Report [i.e., the WSAR-2] were derived mainly from analysis of extent data in the literature, possibly under conditions different from the Los Alamos National Laboratory's site (the site). The absence of critical site-specific data, such as adsorption properties, reaction kinetics and microbial activities, implies that there would be uncertainties and limitations in using the methodology developed in the Report to assess the quality of groundwater samples collected from monitoring wells installed at this site. NMED is especially concerned about the uncertainty with respect to monitoring certain potential contaminants of concern, such as the highly adsorptive radionuclides. NMED therefore suggests that the Permittees consider conducting proper laboratory and field studies to address the uncertainty regarding whether or not the monitoring wells installed as the monitoring network are capable of providing reliable data to monitor potential releases of the highly adsorptive radionuclides from operation of the Laboratory to groundwater (p.1-2).</p> <p>The proper laboratory and field studies to address the uncertainty in the assessment</p>		

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		<p>methodology in the WSAR-2 were never performed. First, the NMED made a mistake to approve the WSAR-2 given the great uncertainty in the assessment methodology. Second, the NMED made a mistake to "suggest" LANL perform the proper laboratory and field studies to reduce the uncertainty. Instead, the NMED should have ordered LANL to perform the proper laboratory and field studies.</p> <p>In fact, now it is very important for the NMED to order LANL to perform the proper laboratory and field studies for the entire network of monitoring wells displayed on Katzman Testimony Exhibit 4 because the NMED has not required LANL to use drilling methods that prevent organic drilling foam from flowing into the sampling zones of any of the monitoring wells. The well completion reports for monitoring wells R-37, R-39 and R40 show that organic drilling fluids were allowed to flow into the sampling zones in the three wells. Allowing the organic foams to contaminate the sampling zones is a serious mistake that can be prevented by temporarily or permanently installing steel casing to seal off the part of the borehole above the regional aquifer that was drilled with organic foam.</p> <p>The 2005 EPA Kerr Lab Report on the LANL well drilling practices described the need to install casing to seal off the zones in the borehole that were drilled with foam. The pertinent excerpt from the 2005 report is pasted below:</p> <p style="padding-left: 40px;">Drill boreholes using no bentonite or organic additives within screened intervals. Additives may be used in intervals above the target monitoring zone if a telescoping construction is used and the hole is adequately cleaned before drilling the final footage within the interval to be screened. Although this may require the use of significant quantities of water to control heaving in the saturated zone, the effects of potable water are minimal and can be mitigated during well development. This will likely necessitate the use of single-screen well completions. Such constructions allow for more effective development and greater confidence in both the chemical data and estimates of hydrogeologic parameters (p.10).</p> <p>In addition, the EPA Kerr Lab recommended for LANL to install monitoring wells with only one well screen. The NAS Final Report also recommended for LANL to install monitoring wells with one screened interval and to prevent drilling additives</p>		

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		<p>from being present in the monitoring zone. The pertinent excerpt from the NAS report is pasted below:</p> <p><i>Recommendation: LANL should design and install new monitoring wells with the following attributes:</i></p> <ul style="list-style-type: none"> • <i>A borehole drilled through the monitoring zone without the introduction of drilling muds or additives (i.e., use air or water),</i> • <i>One screened interval that targets a single saturated zone, and</i> • <i>A carefully planned design (length and depth) of the well screen, which is confirmed with information collected in the drilling process (p. 69).</i> <p>The continuing practice of drilling with organic foam and large amounts of water is unnecessary and must stop.</p> <p>The boreholes for monitoring wells may be drilled using only air as a drilling fluid. Many test holes and monitoring wells at LANL were drilled using only air as a drilling fluid. Characterization wells R-9 and R-12 are two examples of where the boreholes were drilled through the entire distance of the vadose zone and into the top of the regional aquifer with only the use of air as a drilling fluid.</p> <p>-For well R-9, the total depth of the borehole that was drilled using only air as a drilling fluid was 710 feet below ground surface (bgs). The water table of the regional aquifer was at a depth of 688 ft bgs.</p> <p>-For well R-12, the total depth of the borehole that was drilled using only air as a drilling fluid was 847 ft bgs. The water table of the regional aquifer was at a depth of 805 ft bgs.</p> <p>Current drilling practices are allowing organic foam to flow into the sampling zones in the monitoring wells. The testimony of the NMED Environmental Scientist Jersey Kulis at the LANL Proposed Part B Permit Hearing described the NMED acceptance of drilling boreholes for the LANL monitoring wells with organic foam. The pertinent excerpt from the Kulis testimony is pasted below:</p> <p>[c]ertain drilling additives, for example, foaming agents, may be used in the drilling interval above the expected groundwater table. In the last 100 to 150 feet above the</p>		

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		<p>water table, and below the water table, only municipal water may be used as a drilling additive (p.6).</p> <p>However, there are many reports are evidence that stopping the use of organic drilling foams at a distance of 100 to 150 feet above the regional aquifer is not preventing the organic foam from flowing down the open borehole and into the regional aquifer. The NMED must require LANL to install temporary of permanent steel casing in borehole intervals that are drilled with organic foam.</p> <p>LANL monitoring wells R-36 and R-42 are two examples where organic foam was used for drilling through most of the vadose zone. However, stopping the use of drilling with organic foam at a distance above the water table of the regional aquifer did not prevent the foam from flowing into the regional aquifer and impacting the water samples collected from the single-screen monitoring wells.</p> <p>The pertinent excerpt from the well R-36 completion report (LA-UR-08-2610 April 2008) is pasted below:</p> <p style="padding-left: 40px;">The R-36 borehole was drilled using dual-rotary air-drilling methods. Drilling fluid additives used included potable water and foam. Foam-assisted drilling was used only in the vadose zone; no drilling fluid additives other than small amounts of potable water added to the air were used within the regional aquifer. Additive-free drilling provides minimal impacts to the groundwater and aquifer materials. The borehole was successfully completed to total depth using casing-advance drilling methods (p. v).</p> <p>Figure 5.1-1 in the well R-36 completion report shows that the use of organic foam stopped at a depth of 700 feet below ground surface which was a distance of only -50 feet above the water table of the regional aquifer. The fact that the organic drilling foam has impacted the chemical quality of water samples collected from well R-36 is documented in the LANL 2009 Interim Facility Wide Groundwater Monitoring Plan (the Interim Plan) (LA-UR-09-1340, May 2009). The pertinent excerpt from the 2009 Interim Plan is pasted below:</p> <p style="padding-left: 40px;">Minor presence of residual organic drilling products is steadily clearing up. Continue to monitor in accordance with the 2009 Interim Plan and evaluate the stability of water-quality parameters over a longer period of record (p. F-60).</p>		

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		<p>The pertinent excerpt from the well R-42 completion report (LA-UR-09-0217 January 2009) is pasted below:</p> <p style="padding-left: 40px;">The R-42 borehole was drilled using dual-rotary air-drilling methods. Drilling fluid additives used included potable water and foam. Foam-assisted drilling was used only in the vadose zone; no drilling-fluid additives other than small amounts of potable water added to the air below 790 ft depth, which is 128 ft above the top of regional saturation. Additive-free drilling provides minimal impacts to the groundwater and aquifer materials. The borehole was successfully completed to total depth using casing-advance drilling methods (Executive Summary).</p> <p>The fact that the distance of 128 ft did not prevent the organic drilling foam from impacting the chemical quality of water samples collected from well R-42 is documented in the LANL 2009 Interim Facility Wide Groundwater Monitoring Plan (the Interim Plan) (LA-UR-09-1340, May 2009). The pertinent excerpt from the 2009 Interim Plan is pasted below:</p> <p style="padding-left: 40px;">Minor presence of residual organic drilling products is steadily clearing up. Continue to monitor in accordance with the 2009 Interim Plan and evaluate the stability of water-quality parameters over a longer period of record (p. F-62).</p> <p>Given the record of organic drilling fluid contamination in the water samples produced from wells R-36 and R-42, it is a disappointment that NMED did not require LANL to either 1) install steel casing in the borehole interval drilled with organic foam or 2) drill boreholes without the use of any drilling additive other than air.</p> <p>Monitoring wells R-39 and R-40 at TA-54 are additional examples of where the organic drilling foam has flowed into the sampling zones. The pertinent excerpt from an NMED memo (AR 32132) about well R-39 is pasted below:</p> <p style="padding-left: 40px;">1) Section 2.2.1: This section (of the Well R-39 Completion Report) states that a foaming agent was not used during the drilling sequence between 707 feet (ft) to total at 896 ft below ground surface (bgs). Review of the open-hole borehole video</p>		

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		<p>log, taken 011 November 13, 2008, shows that an abundance of foam was present from 706 ft to the water table at 820 ft bgs. In the video, the foaming agent was recorded floating on the water table. The Report states on page 4 that only four gallons of foam was used at 707 ft bgs and that no additional foam was used past this depth.</p> <p>At well R-40, the organic foam was allowed to flow into the screened interval in the regional aquifer and also into two screened intervals installed in perched zones of saturation. Figure 3.1-1 in the well R-40 Completion Report (AR 32366) shows that organic foam was used for drilling through the upper perched zone and to a depth of 750 ft bgs which is only -10ft above the water table of the second perched zone of saturation and -100 ft above the water table of the regional aquifer.</p> <p>The pertinent excerpts from the well R-40 completion report that describe the impacted water samples produced from well R-40i installed in the upper perched zone are pasted below:</p> <p>The first perched groundwater recovered from R-40i was 12 gal. bailed on January 12, 2009. The sample was characterized as light brown and emitted a slight sulfur odor (p. 12). [Note: the light brown color and slight sulfur odor are evidence that the organic drilling foam is creating a new mineralogy in the sampling zone with strong properties to mask the detection of LANL contaminants.]</p> <p>At the end of the aquifer testing in R-40i, water-quality parameters were turbidity at 1 NTU and TOC at 11.22 mg/L. Turbidity was below the development threshold of 5 NTUs, <i>but TOC was above the development threshold of 2 ppm (mg/L) due to the presence of drilling foam</i> [emphasis added] (p. 13). [NOTE: The drilling foam caused error in the permeability value measured by the aquifer test. In addition, the presence of drilling foam at the time of the aquifer test is evidence that the well development activities did not remove the drilling foam and that the drilling foam was present in the sampling zone of well R-40i for a period of six months before additional well development activities were performed to remove the residual foam. The six month period allowed large changes in the mineralogy of the screened interval. There is a need to replace well R-40i with a monitoring well installed using only air as a drilling fluid.</p> <p>The amount of organic drilling foam that was allowed to flow into the deeper perched</p>		

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		<p>zone and into the sampling zone in the regional aquifer is not known but both screened zones in well R-40 may be impacted because the borehole was not sealed to prevent this from happening.</p> <p>The Consent Order (AR 16255) does not allow installation of wells with screens installed in a perched zone of saturation and also in the regional aquifer. The pertinent excerpt from the Consent Order is pasted below:</p> <p style="padding-left: 40px;">X.B DRILLING METHODS</p> <p style="padding-left: 40px;">Groundwater monitoring wells and piezometers must be designed and constructed in a manner which will yield high quality samples, ensure that the well will last the duration of the project, and <i>ensure that the well will not serve as a conduit for contaminants to migrate between different stratigraphic units or aquifers</i> [emphasis added] (p. 194).</p> <p style="padding-left: 40px;">A variety of methods are available for drilling monitoring wells. While the selection of the drilling procedure is usually based on the site-specific geologic conditions, the following issues shall also be considered:</p> <ul style="list-style-type: none"> • Contamination and cross-contamination of groundwater and aquifer materials during drilling shall be avoided. (p. 194). <p style="padding-left: 40px;">The design and construction of groundwater monitoring wells shall comply with the guidelines established in various EPA RCRA guidance, including, but not limited to:</p> <ul style="list-style-type: none"> • U.S. EPA, <i>RCRA Groundwater Monitoring: Draft Technical Guidance</i>, EPA/530-R93-001, November, 1992 (p. 194). NOTE: The requirements in the <i>EPA Draft Technical Guidance</i> are pasted below: <p style="padding-left: 40px;">Extreme care should be taken when drilling into confining units so that the borehole does not create a pathway for the migration of contaminants between upper and lower hydraulically separated saturated zones (p. 4-10).</p> <p>LANL monitoring wells R-37 and R-40 are two examples of where the NMED has approved drilling methods and well construction practices that have allowed cross-flow of groundwater from perched zones of saturation into the regional aquifer. The NMED</p>		

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		<p>has not enforced the requirement in the Consent Order to prevent the cross-flow.</p> <p>Organic drilling foams may prevent the detection of perched zones of saturation.</p> <p>The drilling record for LANL monitoring well R-40 is an example of where the use of organic drilling foam in the second borehole prevented the detection of the upper perched zone of saturation which was detected in the first borehole that was drilled using only air as a drilling fluid. The pertinent excerpt from the R-40 completion report (AR 32366) is pasted below:</p> <p style="padding-left: 40px;">Because of injection of municipal water and foaming agent in the second borehole, the perched groundwater encountered at 594 ft bgs in the first borehole was obscured (p. 3).</p> <p>Drilling with water may prevent the detection of perched zones of saturation. The drilling record for LANL monitoring well R-37 is an example of where the water used for drilling the third borehole prevented the detection of a perched zone of saturation. The perched zone was detected in the second borehole this borehole was abandoned because it was unstable. The excerpts pasted below from the well R-37 completion report (AR 31964) document that water used for drilling the third borehole prevented the detection of the perched zone of saturation:</p> <p>In the third borehole, the perched water zone was not apparent because of injecting large amounts of municipal water to aid drilling (p. 18).</p>		
314	Gen.	<p>I am providing the following public comments about the lack of groundwater protection requirements in the proposed Hazardous Waste Permit for Los Alamos National Laboratory (LANL).</p> <p>Chris Busby, a British physical chemist, has studied radioactivity extensively and says that, "the ingestion of radioactive materials through food and water has effects quite distinct from those of external exposure." Internal exposure can create multiple hits on a single cell within hours. This means that unlike external exposure, when radioactivity is ingested, in food or water, it is up to 100 times more toxic to human beings and will cause cells to mutate and create cancers and tumors.</p> <p>It is important to note that most studies of the toxicity of radioactivity have only been done on high levels of radiation. Chris Busby and other scientists have been following</p>	<p>See the Department's responses regarding regulated units/alternative requirements and groundwater protection in the document titled General Response to Comments.</p> <p>Regarding radionuclides, the Department agrees that exposure to radionuclides can present a threat to human health. The Permit does not address radionuclides except as it pertains</p>	No

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		<p>the effects of ingestion of radioactivity AND the effects of low levels on life. Much of the arguments for the supposed safety of radioactivity are based on studies done on high levels of radioactivity (and only externally).</p> <p>As a woman and mother who has lived in Santa Fe for 30 years, I am one of many I know who live in the area who have developed thyroid issues. This is one of the effects of radioactivity. I understand that those who actually live on the mesa near Los Alamos are even worse off.</p> <p>The 40-square mile LANL Facility is located in the Espanola Basin. The Environmental Protection Agency (EPA) has designated the Espanola Basin as a sole source aquifer, meaning that the Espanola Basin is the sole drinking water source for the area between the Jemez and Sangre de Cristo Mountains, running from Tres Piedras, to the north, to just outside of Galisteo, to the south.</p> <p>Since operations began in 1943, LANL has buried over 21 million cubic feet of radioactive, hazardous and toxic wastes in unlined pits, trenches and shafts dug into the volcanic tuff. The LANL groundwater monitoring network has been under development since 1998 and has yet to provide reliable and representative samples of groundwater from the regional aquifer.</p> <p>I am particularly concerned about the lack of detection and compliance groundwater monitoring for the "regulated units," Areas G, Hand L, at Technical Area 54 (TA-54). I quote the March 19, 2010 written testimony by James Bearzi, Bureau Chief of the NMED Hazardous Waste Bureau:</p> <p style="padding-left: 40px;">" ... groundwater contamination has already been detected beneath the regulated units at TA-54" p. 62.</p> <p>Groundwater beneath LANL discharges to springs along the Rio Grande. Albuquerque residents are already drinking water from the Rio Grande and Santa Fe residents will begin next year.</p> <p>To protect our community and others NMED must require LANL to install wells drilled only with air. The wells must be able to detect contamination and provide the necessary information in order to make informed decisions about corrective action, or "cleanup." The necessary information is not available to determine if the wastes can be left in place or whether they must be excavated. Execution of these decisions must be done in an</p>	<p>to mixed hazardous waste.</p>	

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		<p>efficient and cost-effective manner that is protective of human health and the health of all things. Already too much taxpayer money has been wasted drilling defective wells, collecting and analyzing samples from defective wells and reporting data to the public that is unreliable. Please work to protect the lives of our children, and our grandchildren and their grandchildren. Our quality of life depends on your actions. It is time to hold LANL accountable.</p>		
315	Gen.	<p>I am very concerned about ground water contamination. I am aware that groundwater contamination has already been detected beneath the regulated units at TA-54.</p> <p>I am concerned about taxpayer money being wasted drilling defective wells, collecting and analyzing samples and reporting data that is unreliable.</p> <p>LANL needs to be a “good citizen” and consider the consequences of its activities and effects on the people who live in and around Santa Fe.</p>	<p>See the Department’s responses regarding regulated units/alternative requirements and groundwater protection in the document titled General Response to Comments.</p>	No
316	Gen.	<p>Within the last two weeks, we have also collected 49 signed comment letters regarding the lack of groundwater protection requirements in the proposed hazardous waste permit for the Los Alamos National Laboratory. The letter is addressed to John E. Kieling, Program Manager, Hazardous Waste Bureau, New Mexico Environment Department.</p> <p>In Re: Lack of Groundwater Protection Requirements in Proposed Hazardous Waste Permit for Los Alamos National Laboratory.</p> <p>Dear Mr. Kieling:</p> <p>I provide the following public comments about the lack of groundwater protection requirements in the proposed hazardous waste permit for Los Alamos National Laboratory.</p> <p>"The Environmental Protection Agency has designated the Espanola Basin as a sole-source aquifer, meaning that the Espanola Basin is the sole drinking water source for the area between the Jemez and Sangre de Cristo Mountains, running from Tres Piedras, to the north, to almost Galisteo, to the south.</p> <p>Since operations began in 1943, LANL has buried over 21 million cubic feet of radioactive, hazardous and toxic wastes in unlined pits, trenches and shafts dug into the volcanic tuff. The LANL groundwater monitoring network has been under development since 1998 and has yet to provide reliable and representative</p>	<p>See the Department’s responses regarding regulated units/alternative requirements and groundwater protection in the document titled General Response to Comments.</p>	No

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		<p>samples of groundwater from the regional aquifer.</p> <p>I am particularly concerned about the lack of detection and compliance groundwater monitoring for the 'regulated units,' Areas G, H and L, at Technical Area 54. I quote the March 19th, 2010, written testimony by James Bearzi, Bureau Chief of the NMED Hazardous Waste Bureau:</p> <p style="padding-left: 40px;">'Groundwater contamination has already been detected beneath the regulated units at TA-54.'" That's on page 62.</p> <p>Groundwater beneath LANL discharges to the springs at the Rio Grande. Albuquerque residents are already drinking water from the Rio Grande and Santa Fe residents will begin next spring.</p> <p>It is time to get back to basics. NMED must require LANL to install wells drilled only with air. These wells must be able to detect contamination and provide the necessary information in order to implement corrective action, or 'cleanup,' in an efficient and cost-effective manner. Already too much taxpayer money has been wasted drilling defective wells, collecting and analyzing samples from defective wells and reporting data to the public that is unreliable.</p> <p>I delivered these letters to NMED this morning. I would like to submit the receipts for these letters as Loretto Community Exhibit Number 3. There are more letters that were mailed or e-mailed directly to NMED.</p>		
317	Gen.	<p>For Citizens Action (CA) and other members of the public to adequately comment on the draft permit, we must have full access to parts of the administrative record that are currently unavailable. Because of the lack of availability of the full administrative record, CA and the public are unable to adequately make <i>informed</i> comment on the LANL draft permit. CA requests that the NMED extend the public comment period for the LANL draft permit for at least 90 days after provision is made for furnishing the full administrative record for the LANL draft permit. Failure to furnish the full administrative record is not in accordance with due process requirements or public participation requirements of RCRA or NMAC.</p> <p>Currently missing from the administrative record are secret technical documents held in the NMED HWB Library that are relevant to the LANL draft permit. One such document is a January 9, 2002 TechLaw Inc. report relevant to Material Disposal Area</p>	<p>See the Department's responses regarding contractor documents in the document titled General Response to Comments.</p> <p>Regarding the three Environmental Protection Agency (EPA) Kerr Laboratory technical reports, the commenter provides insufficient description of the reports to know whether or not they are in the Bureau's LANL</p>	No

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		<p>(MDA) G, TA-54 that discusses numerous other documents related to groundwater flow and radionuclide transport in the vadose zone beneath Area G. The report is critical of the technical deficiency of a LANL computer code used for modeling of contaminant flow and transport through the complex geology associated with LANL. The code was apparently used by LANL but not subjected to a rigorous, independent review by the NMED.</p> <p>Numerous and unknown other TechLaw, Inc. reports exist for LANL that have similarly been kept secret and that are not referenced or presented to the public for review within the administrative record. If a lawsuit were to be filed for the LANL draft permit, such secret documents, paid for by taxpayers funds, could be available under subpoena and discovery powers of the court and could result in great delay of the approval of the LANL draft permit if the permit were remanded for consideration of such secret reports.</p> <p>Three significant technical reports issued by the Environmental Protection Agency (EPA) Kerr Laboratory regarding the reliability of the well monitoring network at LANL are not on the NMED website or included in the administrative record. Those reports should be considered within the permit as part of the administrative record just as were the National Academy of Science (NAS) reports. Those reports would also have bearing on the plans for monitoring wells that will be part of the post closure monitoring network and the use of alternative requirements.</p>	<p>administrative record. Generally, if the three technical reports are not referenced in a Permittees' submittal, and EPA did not submit the reports to the Bureau, the reports would not necessarily be in the Bureau's LANL administrative record. If the commenter wishes to supply the reports to the Bureau, they will be reviewed for relevancy and possibly placed in the record.</p>	
318	Gen.	<p>It is difficult to determine what the criteria are for NMED to include something in the administrative record. The first item in the 412-page list is titled "Is cobalt of any significance in the treatment of milk anemia with iron and copper?" from a technical journal in 1938. The early part of the list [prior to 1989] is unnecessary because it lists early documents that would be included, summarized, or provide background to reports provided to NMED as part of the environmental characterization program. This is another indication of how NMED cannot determine what is important and how to manage a permit for LANL. If NMED cannot provide the documentation to show the same level of administrative recording for other permits, all the extraneous material should be removed. NMED must be consistent to be fair. Documents provided to NMED and from NMED to stakeholders are correctly in the administrative record.</p>	<p>The Hazardous Waste Bureau's administrative record policy includes a requirement that submittals to the Bureau associated with any particular hazardous waste facility must include copies of all referenced documents. The Bureau applies this policy consistently to all permitted hazardous waste facilities.</p>	No
319	Gen.	<p>The revised and reissued LANL draft permit does not contain all regulated units that operated at LANL. MDAs G, Hand L are the only regulated units listed. Other</p>	<p>See the Department's response regarding regulated</p>	No

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		<p>regulated units that received hazardous waste after July 26, 1982 are MDA P, TA-16 and the SWMU 16-021(c) (also called the 260 outfall) settling pond (a RCRA impoundment). Although not a regulated unit, MDA B at TA-21 is undergoing excavation, MDA B lacks any groundwater monitoring wells for post-closure care.</p> <p>In the 2007 NAS Final Report on LANL Groundwater Protection Practices, the LANL scientists identified that of the nine (9) MDAs have significant potential for groundwater contamination with radionuclides. Accordingly, there is also potential for groundwater contamination by hazardous contaminants regulated by NMED. The monitoring well networks of all nine of these units are inadequate to provide protection of the groundwater. No attention is called to these dangerous, large inventory legacy waste dumps by the permit although they are listed in the 2005 Consent Order. The public will require additional time to review these units after their insertion into the LANL draft permit. There are the unlined dumps TA21--A, B, T, U and V, and TA50-MDA C. MDA AB at TA49 will receive two (2) new monitoring units, but the public has been given no information as to where the monitoring wells will be located.</p>	units/alternative requirements in the document titled General Response to Comments.	
320	Gen.	<p>The revised draft Permit identifies three categories of permitted units at the facility--indoor units, outdoor units and regulated units. (Section 9.1). The regulated units are identified as “material disposal areas G, H, L.” (<i>Id.</i>; Table J-1). The term “regulated unit” is used throughout the revised draft Permit. The Permittees oppose the designation of the entirety of “material disposal areas G, H, L” as regulated units because it is inconsistent with the applicable regulatory requirements and is inconsistent with the history of the facility and the 2005 Compliance Order on Consent (Consent Order). Each material disposal area is made up of all the associated SWMUs and AOCs in that area, so, for example, MDA G consists of all the subsurface SWMUs and AOCs at Area G.</p> <p>Technical Area 54 (TA-54) Areas G, H and L include solid waste management units (SWMUs) and regulated units. 40 CFR §264.90 defines regulated units as a “surface impoundment, waste pile, and land treatment unit or landfill that receives hazardous waste after July 26, 1982.” Based on the definition in §264.90, the only regulated units at TA-54 are Shaft 124 and Pit 29 at Area G, Shaft 9 at Area H, and a number of shafts and surface impoundments at Area L because these are the only discrete units that accepted hazardous waste after July 26, 1982. Pursuant to regulatory requirements and</p>	See the Department’s response regarding regulated units/alternative requirements in the document titled General Response to Comments.	No

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		<p>the intent to close those units under RCRA, LANL has consistently submitted closure plans that have identified the pits and shafts as discrete hazardous waste units. All of the other units at TA-54, including MDAs G, H, and L, have been identified as SWMUs by both LANL and NMED. The LANL SWMU report, required by EPA, and Module VIII to the current RCRA Permit, identified the units that had received hazardous waste before 1982 and mixed waste before 1990 as solid waste management units subject to corrective action. The Consent Order removed all the corrective action requirements for the SWMUs and AOCs from the current Permit to place them in a separate enforceable document (the Consent Order). Corrective action for the SWMUs is to be completed under the Consent Order.</p> <p>Corrective action at LANL SWMUs and Areas of Concern (AOCs) is being conducted pursuant to the Consent Order, which meets the statutory and regulatory requirements for 1) corrective action under RCRA for releases of hazardous waste or hazardous waste constituents; 2) corrective action for releases to groundwater; and 3) groundwater monitoring, groundwater characterization and groundwater corrective action requirements for regulated units under 40 CFR Subpart F and for miscellaneous units under 40 CFR Subpart X and 4) additional groundwater information required in RCRA Part B permit applications. (Consent Order Section III.A). The Consent Order requires LANL to submit a Corrective Measures Implementation Plan, which will be equivalent to a closure plan under the RCRA regulations and Part 9 of the revised draft Permit. (Fact Sheet at 5).</p> <p>The Consent Order includes corrective action requirements for TA-54. (Consent Order Section IV.C specifically identifies work to be undertaken at MDAs G, H, and L). Areas G, H and L contain SWMUs, AOCs and regulated units. 40 CFR§264.110(c) allows alternative closure for regulated units “situated among” SWMUs and AOCs as long as the alternative requirements are set out in a permit or in an enforceable document. The regulated units (as identified above) in Areas G, H and L are co-located or situated among SWMUs and AOCs and the Consent Order is an enforceable document. NMED has agreed that alternative closure is applicable to the regulated units.</p> <p>Section 9.3 states that the closure of the regulated units will be done under the Consent Order using alternative closure requirements in accordance with 40 CFR 264.110(c).</p>		

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		<p>In order to be consistent with the Consent Order and the administrative record, the regulated units should be specifically identified as Shaft 124 and Pit 29 at Area G, Shaft 9 at Area H and Shafts 1, 13-17, 19-34 and Impoundments B and D at Area L. The specifically identified regulated units are situated among SWMUs and AOCs at Areas G, H, and L and are thus eligible for alternative closure.</p>		
321	Gen.	<p>EPA recommends that after the draft permit is final/effective that the open detonation units be added expeditiously to the permit.</p>	<p>The Department concurs – The Renewal Permit includes a requirement that the Permittees submit within 180 day of the effective date of the Permit the documents necessary to regulate the open detonation units, <i>i.e.</i>, interim status units.</p> <p>Added permit language at Permit Section 1.4.1:</p> <p><u>For the interim status units listed in Table J-1 that the Permittees do not choose to operate, the Permittees shall submit to the Department within 180 days of the effective date of this Permit either a notice of intent to close in accordance with a current closure plan, or a revised closure plan. These documents shall indicate that the closure of these interim status units shall be initiated in accordance with 40 CFR § 265.113(a) no later than 270 days of the effective date of this Permit.</u></p> <p><u>For the interim status units listed</u></p>	Yes

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			<p><u>in Table J-1 that the Permittees propose to permit, the Permittees shall submit to the Department 180 days of the effective date of this Permit a permit modification request in accordance with 40 CFR § 270.42 that includes all applicable information required at 40 CFR §§ 270.10, 270.11, 270.14, and 270.23 for each unit.</u></p>	
322	Gen.	<p>SRIC and NRDC object to various sections (9.2.2.1, 11.4, 11.4.1.1, 11.4.2.1, 11.4.2.2, and 11.12.5.9) of the Revised Draft Permit which set a risk level of 10^{-5}. Scientific and health data clearly show that a risk level of 10^{-6} is more protective of public health and is a reasonable and achievable risk level. Given the multiple carcinogens that are used at LANL, a risk level of 10^{-6} should be included throughout the permit.</p> <p>There is substantial support for this risk level in agency practice. For example, in both cancer and non-cancer assessments, the U.S. Environmental Protection Agency (EPA) has defined 1 in 1,000,000 excess risk as a <i>de minimis</i> risk level (Caldwell et al 1998; Clean Air Act Amendments 1990; Fiori and Meyerhoff 2002; U.S. EPA 1991; Castorina and Woodruff 2003).</p> <p>For non-cancer risks such as birth defects, respiratory disease, and organ toxicity, EPA presumes that there is a threshold below which there is a negligible risk of adverse health effects from a lifetime of environmental exposure. The risk estimate is called the oral reference doses (RfDs) and inhalation reference concentrations (RfCs) (U.S. EPA. 1999. Integrated Risk Information Service (IRIS) Glossary of JRIS Terms. Available: http://www.epa.gov/iris/gloss8.htm).</p> <p>For cancer assessments, it is generally accepted that there is no known "safe" level, or threshold level of exposure to the vast majority of cancer-causing agents. That is, the only "safe" exposure is no exposure. The approach the EPA uses to quantify the risk associated with a given level of exposure is to develop a dose-response curve, where the default assumption is that the slope of the curve is linear unless substantial data can</p>	<p>The Department disagrees - The risk level of 10^{-5} in the Renewal Permit is consistent with Department, New Mexico Water Quality Control Commission, and New Mexico's Environmental Improvement Board's policy. NM's groundwater quality standards are based on the same risk level. The Department feels that the Renewal Permit is not the appropriate mechanism to alter that risk level.</p> <p>Furthermore, the target risk level in the Renewal Permit falls within the U.S. EPA's range of acceptable levels. EPA discusses what that agency considers appropriate risk levels in a March 16, 1998 memorandum titled <i>Risk-Based Clean Closure</i>. In that memo EPA states "EPA</p>	No

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		<p>demonstrate otherwise.</p> <p>Unfortunately, we also note for the record that EPA's standard assessment approach often underestimates risk to children and other susceptible populations. Children's health and risks associated with in utero, perinatal, or childhood exposures have been identified as critical public health issues. Simply adjusting for differences in dose between children and adults based largely on body weight or size is not adequate for protecting children from environmental cancer risks. Exposures to hazardous agents during early life stages may lead to long-term and even permanent damage, such as possibly increasing risks for later developing cancers. It is for these reasons that EPA issued its <i>Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens</i>, which outlines the specific susceptibilities and preferable approaches for preventing exposure to carcinogens during early life (U.S. EPA. <i>Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens</i>, U.S. Environmental Protection Agency, Washington, DC, EP A1630/R-03/003F, 2005).</p>	<p>generally considers protective media cleanup standards for human health to mean constituents concentrations that result in the total residual risk from any medium to an individual exposed over a lifetime falling within a range from 10^{-4} to 10^{-6}, with the cumulative carcinogenic risk not to exceed 10^{-4} and a preference for cleanup standards at the more protective end of the risk range.”</p>	
323	Gen.	<p>The Permittees object to the financial assurance requirements set forth in Sections 2.13 (Cost Estimates for Closure and Post-Closure Care), 2.14 (Financial Assurance for Closure and Post-Closure Care), 2.15 (Liability Requirements) and 2.16 (Incapacity of Operators, Guarantors, or Financial Institutions) and as referenced throughout the revised draft Permit and Attachments. The provisions require LANS, as the private co-operator of LANL, to provide cost estimates and financial assurance for closure and post-closure care and to provide liability insurance for sudden and accidental occurrences. The financial assurance requirements set forth in the revised draft Permit conflicts with EPA guidance on the RCRA exemption for publicly-owned facilities, are not consistent with Public Law 106-113, Section 220 and conflict with the 2005 Compliance Order on Consent (Consent Order).</p> <p><u>RCRA EXEMPTION</u></p> <p>RCRA Subpart H establishes financial assurance requirements for closure and post-closure care for owners or operators of hazardous waste facilities. 40 CFR §264.140(c) specifically exempts States and the Federal government from the financial assurance requirements of Subpart H. State and Federally-owned RCRA facilities are exempt from the financial assurance requirements because “government institutions are</p>	<p>The Department disagrees.</p> <p>See the Department’s response regarding financial assurance in the document titled General Response to Comments.</p>	Yes

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		<p>permanent and stable, and have as their reason for being the health and welfare of their people.” (45 FR 33198 (May 19, 1980). Because of the permanency and stability of State and Federal governments, they are “more likely and more able to carry out their closure and post-closure responsibilities.” <i>Id.</i> As EPA explained in promulgating the exemption, “State and Federally-owned facilities will always have adequate resources to conduct closure and post-closure care activities properly.” <i>Id.</i> Unlike owners of private facilities, Federal and State governments have the financial strength and incentive to cover the costs of closure and post-closure care.</p> <p>Although NMED recognizes that §264.140(c) exempts DOE from financial assurance requirements, NMED has taken the position that LANS, as the private co-operator, is required to provide financial assurance. NMED is improperly focusing on the status of the Permittees as either a Federal entity or a private entity rather than on the fact that LANL is a Federally-owned facility. The EPA has consistently stated that the exemption applies to publicly-owned facilities, with the emphasis being on the ownership of the facility. The Preamble to Subpart H states that publicly-owned facilities, meaning State and Federally-owned facilities, are exempt from the financial assurance requirements. (45 FR 33198). In the EPA training manual on RCRA financial assurance, the EPA states that the requirements of Subpart H “are not, however, applicable to state and federally owned or operated facilities. (§§264/265.140.c).” (RCRA Training Module, EPA530-K-02-0181, Oct. 2001). The EPA directive on State authorization to handle mixed wastes states that “Federal facilities that handle mixed waste are not required to demonstrate financial assurance.” (OSWER 9441.1987). In an audit report, the EPA Office of Inspector General stated that “Federal and state owned RCRA facilities are not required to establish financial assurance.” (“RCRA Financial Assurance for Closure and Post-Closure”, Report No. 2001-P-007, March 30, 2001).</p> <p>NMED’s position that LANS is required to provide financial assurance is contrary to EPA guidance and is not consistent with the rationale underlying the exemption. The EPA has stated that a private sector co-operator at a publicly owned facility is also exempt from the financial assurance requirements. In a January 5, 1983, letter from John Skinner, UPEPA Acting Director of Solid Waste, the EPA stated “that where one party (the owner or operator) is an exempted party because it is a State or Federal government unit, the other, private sector party need not comply with the Subpart H</p>		

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		<p>requirements.” In promulgating the regulations for solid waste disposal facilities, which also include a financial assurance exemption for publicly-owned facilities, EPA stated that “the financial assurance exemption extends to cases in which a [landfill] is owned by a State or Federal government entity and operated by a private party or local government (or operated by a State or Federal government entity while owned privately or by a local government.” 56 FR 50978 (Oct. 9, 1991). Exempting private co-operators of publicly-owned facilities is consistent with the purpose of financial assurance and with the rationale for the exemption. The purpose of the financial assurance requirements is to ensure that “owners and operators of TSDFs will have sufficient funds to properly close and maintain the site. EPA promulgated the financial assurance requirements to ensure that owners and operators could not default to federal funds because they are unable or unwilling to cover significant closure or post-closure costs.” (RCRA Training Module, EPA530-K-02-0181, Oct. 2001). Because the State or Federal government is liable for closure and post-closure costs as an owner or operator of a publicly-owned facility, and because the rationale for the exemption is that the governments will have the necessary means to complete closure and post-closure care, there is no reason to require a private owner or operator to provide financial assurance.</p> <p>In the context of a pre-emption argument, the United States Supreme Court refused to make a distinction between the Federal government as the owner of a Federal facility and the private contractor as the operator of the facility. The Court, in interpreting the possible application of state worker’s compensation laws to the Portsmouth Gaseous Diffusion Plant, stated that, “[a]s an initial matter...we consider whether the federally owned Portsmouth facility is...shielded from direct state regulation even though the facility is operated by a private party under contract to the United States.” <i>Goodyear Atomic Corp. v. Miller et al.</i>, 486 U.S. 174, 180 (1988). The Portsmouth facility was a Federally owned nuclear production facility operated by a private contractor. The Court stated that nuclear production facilities “are authorized by statute to carry out a federal mission, with federal property, under federal control.” <i>Id.</i> at 181. The Court found that federal pre-emption protected the facilities from direct state regulation, “even though the federal function is carried out by a private contractor.”</p> <p>LANL is a Federally-owned facility that is carrying out a Federal mission, on Federal property, under Federal control. NMED has recognized that DOE is exempt from</p>		

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		<p>financial assurance requirements. LANS, as the co-operator of a Federally-owned facility, is also exempt from financial assurance. Pursuant to the EPA preamble, which bases the rationale for the exemption on the fact that the particular facility is publicly owned, the LANL facility is exempt because it is a publicly owned facility. Therefore, because the Facility is exempt and because the expectation supporting the exemption is that DOE will have the means to pay for closure and post-closure costs, there is no reason to require LANS to post financial assurance.</p> <p>There is no basis for making the distinction between a Federally-owned facility and a private contractor that NMED is making for purposes of financial assurance. Making such a distinction ignores the underlying rationale for the exemption, which is that State and Federal entities will have the means to pay for closure and post-closure care. Since EPA has determined that State and Federal entities have such funds, there is no basis to impose additional financial assurance on the private operators.</p> <p>NMED attempts to justify imposing financial assurance requirements on LANS by arguing that the closure of the MDAs may be frustrated by funding shortfalls. (Fact Sheet at 28). As discussed below, LANL is required by the Consent Order to close the MDAs by 2015. The Consent Order has numerous mechanisms, which NMED has shown that it is willing to use, to ensure that the requirements of the Consent Order are met. The Consent Order includes provisions for stipulated penalties and NMED has the authority to undertake enforcement action if it believes that DOE is not complying with the Consent Order. Despite NMED's statements in the Fact Sheet, the work under the Consent Order is proceeding and funding continues to be made available. There is no evidence that DOE intends to discontinue funding of the corrective action measures required for the MDAs under the Consent Order. The crux of NMED's argument is that DOE is not providing funding at the level the Department would like to see. However, that is not a valid justification for imposing financial assurance requirements on LANS when the EPA guidance applies the exemption to publicly-owned facilities and includes private co-operators in the exemption and where there is no evidence that EPA was incorrect in assuming that the Federal government will have adequate resources to provide for closure and post-closure care.</p> <p>In addition, DOE has made a commitment to undertake closure and post-closure care of DOE owned facilities nationwide. As part of the long-term stewardship of the nuclear</p>		

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		<p>weapons facilities, DOE has committed to comply with the applicable requirements under RCRA and other laws for the closure and post-closure care of the facilities.</p> <p>Finally, NMED’s reliance on the Hearing Officer’s report in the WIPP proceeding is misplaced because it does not have any precedential value. Following the imposition of the financial assurance requirements against the private co-operator of WIPP, the Permittees appealed the requirements to the United States District Court. Prior to a decision on the appeal, Congress passed a Federal statute exempting the WIPP facility, including both DOE and DOE contractors, from the RCRA financial assurance requirements. 114 Stat. 536 (Public Law 106-246). Congress passed a similar provision for Sandia National Laboratories. 118 Stat. 440 (Public Law 108-199). Following the passage of Public Law 106-246, then Secretary of the Environment Pete Maggiore stated that “the standards and regulations upon which the Permit was based have changed and the State of New Mexico may no longer impose upon DOE’s contractors the financial assurance requirements.” (Letter from Pete Maggiore to Dr. Inez Triay, August 9, 2000). After the Public Law was passed, WIPP voluntarily dismissed the appeal on August 18, 2000. There has not been a definitive ruling by either a State or Federal Court on the applicability of financial assurance provisions to private contractors at Federally-owned facilities.</p> <p>PUBLIC LAW 106-113, SECTION 220</p> <p>Congress has exempted the Federal Government and its contractors at facilities designed to manage transuranic waste from financial assurance requirements under RCRA. 113 Stat. 1501A, App. E Sec. 220, Public Law 106-113. Section 220 states:</p> <p style="padding-left: 40px;">Exemption for Waste Management Facilities Owned or Operated by the United States. No form of financial responsibility requirement shall be imposed on the Federal Government or its contractors as to the operation of any waste management facility which is designed to manage transuranic waste material and is owned or operated by a department, agency, or instrumentality of the executive branch of the Federal Government and subject to regulation by the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.) or by a State program authorized under that Act.</p> <p>LANL is owned and co-operated by DOE, which is a department in the executive branch of the Federal Government and is subject to regulation by NMED pursuant to the</p>		

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		<p>State hazardous waste management program, which is a state program authorized by the Solid Waste Disposal Act. LANS is a contractor to the Federal Government. Portions of the LANL Facility that are governed by the RCRA regulations are waste management facilities designed to manage TRU waste and therefore the exemption under Section 220 applies to those portions of the LANL Facility and both DOE and LANS are exempt from the RCRA financial assurance requirements. The language of Section 220 is consistent with the exemption in 264.140(c) and demonstrates that Congress intended the financial assurance exemption to apply to contractors of the Federal Government at specific types of waste management facilities.</p> <p>CONFLICT WITH THE CONSENT ORDER</p> <p>Section 2.13.1 of the draft RCRA permit, Closure Cost Estimates, requires LANS to</p> <p style="padding-left: 40px;">“submit closure cost estimates for each regulated unit listed in Table J-1 (<i>Active Portion of the Facility</i>) in Attachment J (<i>Hazardous Waste Management Units</i>) at the time of the submission of the Corrective Measures Evaluation (CME) report in accordance with Permit Section 9.3 and §VII.D.4.b.v of the Order. The Permittee LANS shall include the final cost estimate of the selected remedy in the submittal of the closure plan (<i>i.e., Corrective Measures Implementation Plan</i>) for the regulated units listed in Table J-1.”</p> <p>The revised draft Permit identifies the regulated units as “material disposal areas G, H, L.” (Attachment J, Table J-1; Section 9.1). Section 2.14 states that “[f]or Material Disposal Areas G, H, and L, the Permittees shall identify the instruments for financial assurance for closure in the associated Corrective Implementation Plans.”</p> <p>The Consent Order specifically states that it is the sole mechanism and only enforceable document for establishing and enforcing corrective action requirements for SWMUs and AOCs at the Facility. (Consent Order, Section III.W.2). The Consent Order also states that the RCRA permit will not include any corrective action requirements, nor any other requirement that is duplicative of this Consent Order.” (Section III.W.4). Section 11.1 of the revised draft Permit is consistent with the Consent Order and states that NMED and the Permittees have agreed to the Consent Order “which requires the Permittees to conduct corrective action at all solid waste management units (SWMUs) and Areas of Concern (AOCs) at the Facility to fulfill the requirements of 40 CFR §264.101. The Consent Order is an enforceable document pursuant to 40 CFR §§264.90(f), 264.110(c),</p>		

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		<p>and as defined in 40 CFR §270.1(c)(7). Nothing in this Permit Part shall be construed to constitute a change to the Consent Order.” Section 9.3 states that the closure of the regulated units will be done under the Consent Order using alternative closure requirements in accordance with 40 CFR 264.110(c).</p> <p>The provisions of Sections 2.13, 2.14, 2.15 and 2.16 of the revised draft Permit are inconsistent with the Consent Order because they create duplicative requirements and establish a second enforceable document for corrective action. The Consent Order includes the three MDAs in all of the Consent Order processes, including the pre-CME, CME and CMI requirements. The specific pits and shafts that the Permittees have identified as regulated units come under the Consent Order because they are co-located with the SWMUS and AOCs and alternative closure is therefore allowed under 40 CFR §264.110. (<i>See Comment on Regulated Units</i>). The revised draft Permit states that closure of the regulated units shall be in accordance with the Consent Order. The Consent Order specifically states that compliance with the Consent Order constitutes compliance with Subpart F and Subpart F includes a requirement for financial assurance at §264.101. The Consent Order does not create or carve out an exception for financial assurance but states that all of Subpart F is met. Therefore, by including closure cost estimates and financial assurance for the regulated units in the draft Permit, NMED has included duplicative requirements and created a second enforceable document for corrective action because the cost-estimates are clearly based on the CMI, which is a Consent Order requirement.</p> <p>In summary, the exemption applies to publicly-owned facilities and is not limited to a State or the Federal government as a permittee.</p>		
324	Gen.	<p>LANL is a federally owned and operated facility with a contractor as a co-operator. The Federal Government owns all of the structures, property and equipment. The facility is run by federal tax payer dollars controlled by the Department of Energy. All operations at the Laboratory are overseen by the Department of Energy. Being so, the Laboratory is not subject to financial assurance. Section 264.140(c) under Applicability states "States and the federal government are exempt from the requirements of this subpart." Placing the burden of financial assurance on the Laboratory would take tax payer dollars away from important work and place them in a trust that will never be needed. The clean up of the past operations and current permitted operations is guaranteed by the</p>	See the Department’s response regarding financial assurance in the document titled General Response to Comments.	Yes

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		federal government. Placing multi millions of dollars in a useless trust will cause clean up activities to slow for that money in all likelihood will have to come from that budget. This would also place the laboratory in jeopardy of not making its commitments under the "Consent Order". Since this requirement clearly does not apply to LANL it should be deleted from this permit.		
325	Gen.	Financial Assurance Requirements. DOE/LANL do not want to provide the financial documents that say they will have funding available in order to cleanup the contaminated facilities at LANL when they are done using them. I support NMED requirements in the revised draft permit that DOE/LANL must meet all of the financial assurance requirements for each of the 26 hazardous waste management units.	See the Department's response regarding financial assurance in the document titled General Response to Comments.	Yes
326	Gen.	We support Financial Assurance Requirements. We support NMED requirements in the revised draft permit that DOE/LANL must meet all of the financial assurance requirements for each of the 26 hazardous waste management units. Because DOE/LANL do not want to provide the financial documents that say they will have funding available in order to cleanup the contaminated facilities at LANL when they are done using them, we do not trust that they will do the cleanup without NMED's requirement.	See the Department's response regarding financial assurance in the document titled General Response to Comments.	Yes
327	Gen.	<p>SRIC and NRDC support financial assurance requirements of the Revised Draft Permit. Permittee Los Alamos National Security, LLC (LANS), co-operator of LANL, meets the applicability requirements for financial assurance of 40 CFR § 264.140. As a matter of law, the permit must require financial assurance and permittee LANS must meet those requirements.</p> <p>Additionally, SRIC and NRDC respectfully suggest that the cost estimates for financial assurance provided in Attachment M are likely too low, especially because of the inadequacies regarding performance standards, disposal requirements, and decontamination requirements described above. The cost estimates should be revised to reflect the costs of those provisions.</p>	See the Department's response regarding financial assurance in the document titled General Response to Comments.	Yes
328	Gen.	So I've been listening to the discussion this morning about the financial assurances, and I just wanted to say that the citizens of New Mexico -- that we need financial assurance, which the lab will clean up all the waste it has left. We need to know that the funds will	See the Department's response regarding financial assurance in the document titled General	Yes

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		<p>be available to remove the contamination from the sacred lands of the pueblo people that are now under the management of DOE, because this hazardous and radioactive waste is leaking into the Rio Grande, which is the primary drinking water source now for Northern and Central New Mexico.</p> <p>We need to talk about and keep in mind that the issue is our health, the issue is cancer. There have been significant cancer clusters reported in Los Alamos County and around Los Alamos County, and we're all being affected. Our health is being affected by this material. And for DOE and the lab to fail to take full responsibility for it and make it their priority to run a really, really clean ship, it's hypocritical and disingenuous and it leaves one to feel really distressed and with no faith that there's any possible benefit in anything that's going on up there.</p> <p>So we need the financial assurances because DOE has not always cleaned up its legacy wastes, in particular Area G must be cleaned up totally, not just the aboveground waste, but the below-ground waste.</p> <p>And finally, DOE already has nationwide over \$3 billion of waste jobs that haven't been done. So the financial assurances are very important, I believe, for the citizens of New Mexico.</p>	Response to Comments.	
329	Gen.	<p>I am currently an employee of the Los Alamos National Laboratory (LANL). My comments presented here are my own and should not be construed to represent LANL's position. I have worked in the environmental compliance and permitting field for RCRA Hazardous Waste since 1979. I served as a Program Manager for the State's Hazardous Waste Program and then as the Bureau Chief of that program, the underground storage tank program, and superfund program at the then Environmental Improvement Division. I worked for two years as a hazardous waste consultant for LATA working on a contract that provided services to the Department of Energy Complex. I have been employed at LANL since 1993 working on compliance and permitting for waste management projects.</p> <p>I wish to take this opportunity to say that in general the proposed permit for LANL is a positive step. It is important that each waste storage, treatment and disposal (TSD) site in New Mexico receive a permit. Permitting requirements need to be consistently applied to all TSD facilities across the state. The requirements need to be based on the regulations and provide clear and consistent guidance for facilities to operate under and</p>	<p>Comment noted.</p> <p>The commenter does not specify which requirements in the Renewal Permit are too prescriptive, address inappropriate issues, or are redundant.</p> <p>See the Department's response regarding open burning in the document titled General Response to Comments.</p> <p>Regarding the corrective action requirements in the Renewal Permit, they pertain only to</p>	Yes

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		<p>for the regulator to enforce. The draft permit as proposed goes a long way to meet that standard.</p> <p>GENERAL COMMENTS</p> <ul style="list-style-type: none"> • The permit as drafted is too prescriptive. A permit should provide the compliance envelope for a facility and not how it must operate. There is little to no flexibility in the permit thereby making it extremely complex, long, very time consumptive in its development and difficult to implement and enforce. It leads to a lot of "grey" areas that require interpretation and clarification. Also with great detail comes the need for a very active permit modification process that poses undue hardships for the facility and the regulator both having limited resources. • The permit contains many sections that are redundant of other documents and agreements or are just not permitting issues. This permit as applied for by LANL was to permit storage locations at TAs-3, 50, 54 and 55 as well as treatment by cementation at TA-55 and by Open Burning at TA-16. There are a myriad of sections within the permit that go well beyond that scope. Many of these have no basis in the regulations. • The applicability of various elements of the revised final draft is questionable. The RCRA permitting process is met to address any treatment, storage or disposal operations for defined hazardous waste at a facility. The regulations offer a number of exemptions, some because certain operations are addressed by other environmental regulations. • Removal of the Open Burning Part 6 and its associated information/data throughout the draft permit and its attachment is not justified. It creates a huge impact on the facility operations, laboratory mission, safety and protection of the public health and environment. I will address this more thoroughly in the specific comment section. • Over half of the draft permit text is devoted to Corrective Action which is already covered by the "Consent Order" which was negotiated with NMED/DOE/LANS. That is a binding document with hard deadlines and stipulated penalties. Any changes made by mistake or as a result of the 	<p>releases from permitted hazardous waste management units as stated in the Permit and do not pertain to the sites being addressed by the Consent Order unless so specified. The corrective action requirements are currently identical in the two documents but they need not stay identical.</p>	

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		<p>permitting process places these two documents in conflict and the Laboratory in an untenable position of trying to maintain compliance. Part of the permitting process is offering the public the opportunity to comment on the draft document. If the "Consent Order" is unchangeable then the public can not offer changes as part of this permitting process or if changes are made then the two documents will be in conflict. The public, as can be seen by comments and proposed testimony, feels that since this issue has been placed in the permit that it is appropriate for them to submit comments on it and the associated groundwater monitoring. That is understandable. If the order and other agreements are immutable then they have no place in the permit.</p>		
330	Gen.	<p>Regarding environmental justice, I urge you to know and remember that poor people cannot afford to move out of toxic environments or buy expensive air and water filters. In fact, none of us should have to buy these filters. As you may know, there is an epidemic of cancer and diseases such as asthma and other immune system disorders.</p> <p>Real prevention of disease involves not producing these toxic chemicals in the first place; however, if they do exist, they need to be safely and carefully contained. The precautionary principle should be applied.</p> <p>I would also like to see NMED be more timely and diligent and deny Los Alamos National Lab (LANL) the permit to continue burning hazardous waste in the open air. This is because LANL has been a blatant polluter of our air, water and earth. Fining LANL does not seem to be effective, per their neglect of environmental stewardship.</p> <p>Denying the permit is one way to protect us. Please put an end to their negligence, please ...</p>	<p>See the Department's response regarding environmental justice in the document titled General Response to Comments.</p>	No
331	Gen.	<p>First of all, the elimination of a physical information repository, in accordance with the requirements of 40 CFR 124.33(c) and which was agreed to in prior negotiations with parties, represents a lack of good faith on the part of NMED in addressing environmental justice principles, which the current administration has committed to.</p> <p>The majority of poor and people of color communities do not have the hard and software computer resources, nor the technology skills, to deal with the sheer size of information that these types of documents require. Removal of the information</p>	<p>Comment noted.</p> <p>See the Department's responses regarding the information repository and environmental justice in the document titled General Response to Comments.</p>	Yes

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		<p>repository will have a negative impact on participation and meaningful involvement. I think we experienced that this morning. What a wonderful example.</p> <p>The US Census Bureau, Current Population Survey of October of 2009, reports that New Mexico -- that in New Mexico, 65 percent of individuals three years and older live in a household with internet access. However, when they break it down by selected characteristics, the percentages go way down. For instance, only 47.9 percent of Hispanic households have access to broadband internet. Statistics for Native Americans were not reported. Based on our socio-indices, we can assume that this percentage would be even lower.</p> <p>Clearly, a physical information repository at an institute of high learning, which is more than willing, would facilitate participation and meaningful involvement. These are environmental justice principles addressed in President Clinton's and Governor Richardson's Executive Orders on Environmental Justice.</p> <p>The New Mexico Environment Department also led a series of environmental justice listening sessions several years back in which many of these same issues were reported, and there was a list of recommendations that can also be accessed on the NMED website.</p> <p>The library internet survey that has been presented as an exhibit, although interesting, is hardly a justification for not providing a physical information repository. The amount of time it would take just to access the documents, much less read them and then pay the 10 or 25 cents per page to copy them, would make it a prohibitive effort. The 10 or 25 cents per copies are quotes from the Springer Library.</p> <p>I would also bring your attention to the fact that the survey, although mentions in the intro Mora County, there is no area in Mora County that is actually reported on the Excel sheet that we had. Being a resident of Mora County, and a resident of Wagon Mound, the only access we have in Wagon Mound would be the school; and that, unfortunately, those areas are not always open to the public, there are a lot of restrictions with it, and, again, the issues of copying. Again, we had an excellent example today of the connection here at the casino. In Mora County, we don't even have that.</p> <p>As a matter of fact, I worked in the Wagon Mound Public School District and was assigned to Valmora when I left from that school eight years ago, and the school did not</p>		

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		<p>have access to the internet because they were in a little dip that prohibited that. We do not know how many computers they may have throughout Mora County, or any of the survey does not lend itself to that, nor does it really lay out the methodology used to obtain this information. So the chances of Mora County residents driving to Mora to have limited, if any access, would be prohibitive.</p> <p>Both Executive Orders on Environmental Justice direct interagency collaboration and planning within their particular agency. Does DOE and Los Alamos have environmental justice provisions, rules and/or procedures?</p> <p>An information repository seems like a small gesture that would cost little, considering the disparate and cumulative risk towards the communities that HOPE represents have been historically subjected. An information repository in a location like Northern New Mexico Community College would provide equipment, support for analyzing, interpreting and duplication of materials. There has been an interest in the college in developing and providing services to surrounding communities in order to do research, training, develop classes and databases to inform community and policy makers about environmental issues associated with Los Alamos.</p> <p>Language is also an issue, as 66 percent of residents of Rio Arriba speak a language other than English, as reported by the census. The repository should be available in the appropriate languages of the impacted communities as requested. This is also reinforced and ordered through the executive orders.</p> <p>A proposal that has been made for cross-examination of community members also flies in the face of environmental justice principles promoted by the executive orders. Cross-examination of community members would have a chilling effect on public participation. Cross-examination of technicians, sociologists, lawyers, et cetera is customary. Again, this does not reflect an effort by the applicants or NMED to offer EJ - to honor EJ principles.</p> <p>The permit application has had and may have further negative consequences and undue exposure risks for vulnerable communities, in particular children, whose organs are not yet fully developed. Poor, rural and communities of color already face many problems and barriers with regard to health, health care access, economics, and environmental, cultural access to education, training and information and other social risks related to</p>		

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		<p>environmental justice.</p> <p>Restorative justice considerations. The traditional and spiritual ways of life in indigenous nations here and around Los Alamos have been interrupted historically for centuries without compensation or protective measures, much less nation-to-nation diplomacy. Addressing and considering the issues of cumulative and disparate risk to vulnerable communities requires additional measures and actions by the Department of Energy, Los Alamos, and other federal and state agencies to address outstanding and continuing issues as a result of historical and environmental and social injustices.</p> <p>When dealing with issues of restorative justice in communities of color, we must also examine the effects of racial discrimination, also known as racism; and in particular institutionalized forms of racism that impact planning and zoning, legal options, access to education, and of course the regulatory processes.</p> <p>If we -- an absence of looking at these issues, basically, it leads us to where we are today, 30 years of a nuclear cycle legacy that has left us death, destruction and cancers and other diseases in the uranium belt, in the mining and milling of uranium, and which feeds the nuclear cycle developed at Los Alamos and tested for years in New Mexico. Most of us denote New Mexico not as the Land of Enchantment, but rather the national sacrifice state for nuclear power.</p> <p>There is a need for health studies -- let me just add a little bit, also, in this. About two years ago, the community of Wagon Mound went through a permit process with the solid waste regulations and in the revision of the solid waste regulations, and in that particular revision, the New Mexico Environment Department lawyer pretty much sided with industry in that issues of race and ethnicity should not be considered, just as NMED fought for many years against the consideration of social issues and concerns of communities.</p> <p>We know from the court decision -- the New Mexico Supreme Court decision on Rhino that the practice of NMED to rely solely on technical issues has been challenged. I would also like to, for the record, just identify the fact that in that particular hearing, NMED strongly opposed the use of race or ethnicity in protecting vulnerable and communities of color, using Adarand and Gerrard as cases as justification that race could not be considered. When one looks at those cases, it's clearly just an opinion, as</p>		

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		<p>they do not necessarily prohibit the use of race.</p> <p>I believe it is convenient for the legal system to try and promote the concept of a colorblind law, but I think it is outrageous for us to be expected to be color-deaf and also color-mute.</p> <p>There is an also a need for health studies to be done in the tri-county area. The State Department of Health has done some studies in which it reports that there are three to seven times higher levels of uranium in the urine of New Mexico citizens than the national level.</p> <p>We need further studies to identify the sources of contamination and how other areas of the state are impacted. We need more health studies to identify our risk with respect to hazardous waste. There is a need for studies to assess the risk to children, and, in particular, women's health, and in particular reproductive health.</p> <p>We would also want to stress the need for increased monitoring in Northern New Mexico based on air dispersion. Soil and water contamination must also be studied and monitored. Testimony during the WIPP permit application for remote and -- remote-handled waste documented testimony of suspected exposure from the ash created during the Cerro Grande fire in Los Alamos in communities as far Golondrinas and Ocate, New Mexico.</p> <p>Residents of Wagon Mound have also testified at solid waste and hazardous waste hearings of their concern that hazardous waste may make its way to a private landfill near their community. The private landfill owner for a time held a special waste permit, which allowed for over 7,000 cubic tons of contaminated ash from the Cerro Grande fire to be taken to this private landfill. This is an issue of environmental injustice. Why should one of the poorest counties in New Mexico bear the risks of contaminated material from one of the wealthiest counties in New Mexico? Residents of Rio Arriba and other communities surrounding Los Alamos are concerned and have also testified about these issues.</p> <p>The Concerned Citizens of Wagon Mound and Mora County also carried out a survey in the villages of Mora County and found that folks reported high levels of cancers, asthmas and allergies in a county that has little industry. Residents are concerned with the wind patterns that flow in the direction of Mora County from Los Alamos.</p>		

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		<p>The New Mexico Environment Department must also exhibit a higher level of review, consciousness and accountability with regard to public participation, notice and hearing. From our past experience in New Mexico, whether the residents of Chaparral or Wagon Mound or Native Nation, what government agencies see as public notice and participation, i.e., listening sessions, scoping meetings, and other public forums, are at times at odds with each other. HOPE reports that they did not find these meetings clear, informative or effective. Oftentimes, these meetings serve merely a numerical purpose, but its effect was questionable. Often, it is not clear what the meetings are about, nor how communities can interact with this process. These meetings are oftentimes carried out in cooperation with industry and permit applicants, giving communities the wrong impression, and without offering the same support to community organizations.</p> <p>I will use again an example from Wagon Mound, where NMED facilitated a community meeting in the parish hall of the village with a private landfill in the region. The landfill owner provided the food and had the presence and work of five staff of the New Mexico Environment Department, who do the publicity and facilitated the meeting and, of course, recorded it. Although they neglected to invite the Concerned Citizens of Wagon Mound and Mora County, a community which they knew to be active in Wagon Mound, and which has led a struggle against the private landfill owner's efforts to obtain a special waste permit for now a decade. Nor did they offer the same resources to the Concerned Citizens of Wagon Mound and Mora County.</p> <p>Communities in the south, Chaparral, Mesquite and Sunland Park, have all questioned how so-called scoping meetings were promoted and facilitated and how results were reported in hearings. When one submits a public service announcement, it is an important consideration of where they are placed. Are KUNM and KANW appropriate radio stations for the impacted communities which are in the tri-county area of Los Alamos?</p> <p>As offered by the NMED, the EPA Title VI guidance with respect -- is just that, guidance. We would again hope that in a state that has hosted environmental justice listening sessions, has a Governor's Executive Order on Environmental Justice that we would go a little bit above suggested guidance.</p> <p>It would also be helpful to have a list of recipients of the notices and letters that were sent out by the New Mexico Environment Department. Was this list of EJ communities</p>		

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		<p>identified or was the list of EJ communities identified during the New Mexico Environmental Department listening sessions on environmental justice also sent notice and letters?</p> <p>These particular listening sessions basically developed a huge list of community organizations and individuals throughout the state, and it seems that, again, if the agency has -- if there is interagency -- even within an agency, interagency collaboration and discussion, it seems that that would be a list that would be available to NMED bureaus. This testimony is supported by the New Mexico Environment Department's mission statement, which is to protect the health of the environment, the people of this state, state solid waste regulations, President Clinton and Governor Richardson's Executive Orders on Environmental Justice, President Clinton's Executive Order 13045, and an opinion in the so-called Rhino decision, a State Supreme Court ruling in favor of considering social concerns in permitting decisions, in addition to relying solely on technical considerations.</p> <p>It would appear that the information repository is a social concern, that it has been clearly requested, and is deemed important to the communities that HOPE represents. This represents a unique case where a significant interest has been shown and testified to by the impacted communities and has been part of a negotiating process.</p> <p>We urge you to direct the applicant to establish a physical repository, as well as a virtual copy, and additionally we support denial of this permit.</p>		
332	Gen.	<p>I remember when you used to walk into this room, and you couldn't even come in because there would be so many people here, and wanting to know – wanting to know what was happening, wanting to understand what was going on. For many years, we fought, from the very beginning, to establish what we thought would be an access to Los Alamos, which was the Citizens Advisory Board, a Citizens Advisory Board that would be made up of community representatives, and we found that this was an avenue to be able to have community input, and there was a Citizens Advisory Board that was established. Unfortunately, most of the community representatives were pushed off. The sad part about that is that we find ourselves in the same place that we did 20 years ago, once again asking for the same things that we've been asking for all along, for community representation, access to information within our communities, not always located within the universities.</p>	<p>Comment noted.</p> <p>See the Department's responses regarding the information repository and environmental justice in the document titled General Response to Comments.</p>	Yes

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		<p>You know, I have no problems in putting the information at -- you know, at the community -- at the college. What I do have, you know, a problem with is that most of our people do not always go to the college. You have a lot of community organizations and community service centers that a lot of people do use, and I can't understand, for the life of me, why this hasn't happened. It isn't up to you to decide whether we use it or not. The responsibility is, is that it's placed there, so that we can have access to it.</p> <p>The other thing I can't understand is that -- is coming here and trying to figure out what is it that you want from the community, because the community has historically at these meetings come and told you what they want, but you have consistently come and told us what we need. It's always that you need this. It's not what we need, because if you would have listened to us, what we need is for, one, our lifestyles not to be impacted by any kind of contamination, which means our livestock, our times of growing, because most of these communities do have gardens, they live on their gardens.</p> <p>I'm sure everybody here knows about Chimayo chili, you know, the famous Chimayo chili. You know, there is the water. You know, so what we -- what we want is for our lifestyles, of which we depend on, because we're not urban, of which we depend on, not to be impacted.</p> <p>We would also want the respect that many of these things be available to us in our communities. That means -- our communities, that means the service centers that we have access to it. You know, you complain -- you know, we always hear about Los Alamos has the best educational system in the whole state, and yet Espanola has the highest drop-out rate. Has anybody figured out why? Do you know that DOE has appropriations, special appropriations, for the educational system?</p> <p>Not only do I come here to say that today, but I said this more than 15 years ago. You know, it just annoys me -- and I didn't want to get up here and really come out really ugly, because I can, but I just want to get to a point. When we talk about environmental justice, what does environmental justice really mean? How are we going to penetrate our communities to have a -- to have a voice within this process that has some substance? Because, you know what, we don't. And until the makeup is different, we're not going to. And until you understand the high rates of cancer that we have in our communities and how we're affected by many of the things that go on -- and I already know, don't tell me, you can't blame that on Los Alamos. We've heard it. But Los</p>		

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		<p>Alamos has never -- or the state has never gotten to a point where they can come down and do some studies.</p> <p>We had a hearing back in I think -- I think it must have been 1998 or '99, I can't remember, but we had a bunch of congressional people down here that came to a hearing. It happened that Domenici happened to put it together for us. At that time, it was really sad, because we had a lot of people that were really sick, a lot of people.</p> <p>So -- you know, so I came here today, and I -- you know, I wasn't going to say anything, because the sad part of it is, is that many of our people work on both sides, and that's what this community is. The Espanola Valley has a lot of people that work at Los Alamos, and we have a lot of people that now live in the Espanola Valley, and it's a shame that many of our educational systems and our things are still not up to par, not even the half what they should be in terms of what at Los Alamos it is.</p> <p>When you can tell me where the balance is between what is going on in that community and what is going on in this community, when there can be a balance between our educational systems and our business systems and all of the others, then -- you know, then I think people would be willing to hear, and I think you would have people from the communities that are not frustrated by the fact that they try to come here and understand and nobody wants to listen.</p> <p>So when you get ready to put down those things and you take them to our communities, then we can teach our own people how to, you know, read some of that information, or at least have a basic understanding of what you're saying, you know, and we wouldn't have to be here fighting all the time. Because you know what, at the end, nobody is going to win.</p> <p>So, you know, I just wanted to say, you know, I feel that we do need to have these facilities and access to our -- to the information. We also need for the state to pay closer attention to some of our communities that in the last fire that we had, where the contamination really fell, was on many of our communities, like Chimayo, like the Espanola Valley, like Tesuque, and all the rest. So, you know, I think there is some -- some responsibility on behalf of the state to protect our interests and not always to compromise it.</p>		
333	Gen.	I've been through these weeks of testimonies many times myself, and -- and over and	Comment noted.	Yes

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		<p>over it's the same issue in New Mexico, right? We're kind of like -- we are the national sacrifice state when it comes to the nuclear cycle, from the uranium milling and mining that has happened in this country to the processing and the technology of Sandia Labs and Los Alamos, and as well as the testing here, and not to mention, of course, all of the things that other people have talked about in terms of the risk to our health, to our -- all our natural resources.</p> <p>I did technical testimony last week on behalf of HOPE, and today I basically am testifying in behalf of the Concerned Citizens of Wagon Mound and Mora County, of which I am the president -- board president. In Wagon Mound, people are particularly upset because Mora County doesn't have any industry, yet through a survey that we did throughout the county a few years ago, we found that the residents there have a -- 17 percent of the respondents said that they were experiencing some types of cancers or going through some types of cancers. So again, if we don't have industry, where is all of this coming from, no?</p> <p>We are also the recipients not only of a lot of ash that came from the Cerro Grande fire in 2000, but we're also the recipients of a private landfill there of 7,000 cubic tons of contaminated ash from Cerro -- from the Cerro Grande fire. Again, a classic case of environmental racism, no?</p> <p>The poor -- one of the poorest counties in the state, as well as the nation, carrying the risk of -- that comes with the contaminated ash that went to Wagon Mound. And we'll never know what will happen with that ash there. We're -- we decided that we wanted to keep it there. We did win a court case rescinding a special waste permit that that private landfill had gotten, when we decided not to push the courts to take back to Los Alamos those 7,000 cubic tons of contaminated ash, because we didn't want -- we figured at this point, I guess, it's better off underground, although the science of that is -- is questionable.</p> <p>So again, people are very concerned about their health. People are very concerned about the lack of transparency. Almost every day in the news we hear about all the documents that Sandia Labs hasn't released all the documents that Los Alamos hasn't released.</p> <p>When I first moved to Albuquerque and raised my children in the Mountain View community of Albuquerque, one of the most contaminated communities or areas in Albuquerque -- it has thirty-six EPA-regulated sites, two Superfund sites, all -- any kind</p>	<p>See the Department's responses regarding the information repository and environmental justice in the document titled General Response to Comments.</p>	

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		<p>of industry that you want to talk about. And the air quality reg. -- board that someone mentioned a while ago in Albuquerque, the only one, by the way, that exists beyond the NMED, has basically always fallen in its mission to protect the people's health.</p> <p>As a matter of fact, they issued a permit to a cement plant that was opening up just across the street from the kids' community center, right? But our children are never quite as valuable sometimes. Poor community children are never quite as valuable. And so again, I think it's really an issue of environmental racism, and the way that New Mexico has been treated, the armed powers in this country feel that this is a state that can be taken advantage of, that could -- whose water can be contaminated, whose air can be contaminated, all the natural resources, as well as the people can be contaminated.</p> <p>President Clinton issued an Executive Order on Environmental Justice that was subsequently issued also in another Executive Order here in New Mexico by Governor Richardson, and it's pretty sad because there -- I did ask the question the other day -- no one actually answered it, or maybe it wasn't in anyone's role at that particular time to answer -- but I've never seen any EJ documents from the Department -- from the DOE or from Los Alamos. I don't know if there are any documents that they have in terms of how they will deal with the Environmental Justice Executive Order directives that came out from those two executive orders, which really did direct all the agencies of the federal government -- and the state Executive Order also directed agencies to look at those issues. So it's pretty sad to sit and listen the few hours that I've had the opportunity to do that over the last few weeks to really over and over hear the NMED, which is entrusted to protect the health of the people and the environment of New Mexico, to really back away from providing any kind of public notice, real public notice, and public -- and opportunities for real public participation.</p> <p>And most specifically blatant is the resistance to provide a physical repository. I think that that is going to be the stamp of environmental racism you all will carry with you if you don't at least do that, because that's the basic minimum you can do when you're poisoning people and not -- and offering no transparency. So I just wanted to make sure that we hit upon that again.</p> <p>I also want to talk about this whole idea of informing people through E-mails. I think I did provide testimony on that. Again, it was very disappointing, the surveys that were presented by the parties to kind of justify why they wouldn't provide a physical</p>		

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		<p>repository, when very little research shows you that in New Mexico about 50 percent -- and that's a failing grade, by the way, in the schools, right -- that only 50 percent actually have access to a computer with fast Internet access.</p> <p>But when you look at specifically Hispanic or Chicanos or whatever people decide to call themselves, only 47 percent of people in New Mexico have that access. There aren't any statistics for Native Americans. So is there a compliance here in terms of trying to with -- between government and industry to keep people uninformed? Because that is like the lowest common denominator when you want to get public participation and public notice out, just doing E-mails. That -- that's not getting any -- anyplace. And by the way, since I have testified, I hope I'll be on the list and will in the future be receiving any kinds of notices having to do with -- with LANL. I've testified on WIPP, and I don't think I've ever received any notices from WIPP.</p> <p>I guess I'll finish with just again referring to the Concerned Citizens of Wagon Mound and Mora County, there was a person that would have been here tonight but wasn't able to make it so I came in their place. It's real easy for government officials and highly paid lawyers that represent industry to come here and again present different sciences, no? And it's like the Spanish saying goes, "Cada cabeza es un mundo." You got 10 scientists; you've got to have 10 different perspectives on anything, right? So it's really all about whose science has the power, really. But New Mexico in Mora -- in Wagon Mound, we don't even have -- we have a volunteer fire department. That's the only type emergency response or any kind of safety that we have within a 40-mile radius, right? The closest doctor we have is in Springer, which is 21 miles, and nobody really likes that doctor, so they travel to Las Vegas. And I don't know if you've listened to the news lately. Almost everybody -- probably about 50 percent of the people that go to Las Vegas, to the hospital there end up with infections, and most of them end up dying, unfortunately. We've had a lot of deaths in Wagon Mound because of infection. And so -- and then we could always go to St. Victims Hospital, as it's called, because they also have a lot of issues with health care and how it's given to maybe people that are having to travel long distances to get there, right? So all these issues are issues for us.</p> <p>We don't have a HAZMAT -- or should I say the closest HAZMAT that we have is 70 miles. So there's just no help for our community in terms of dealing with -- whether it be WIPP trucks going through or ash that comes from Los Alamos fires or ash that gets</p>		

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		<p>buried five miles from our community, and we have no way to protect ourselves from any of these risks that were laid on us.</p> <p>So again, on behalf of the Concerned Citizens of Wagon Mound and Mora County, I urge you to deny the open burn permit and stop exposing and burning the State of New Mexico with unnecessary risks for the nuclear arms race. And we urge you, we urge you, to do a little bit of something to respond to the environmental justice executive orders, and at the minimum, at the minimum, because that's minimum, is provide a physical repository. Granted, it may make transparency an issue, but it will definitely make public participation and notice a lot easier.</p>		
334	Gen.	<p>I'd like to first begin by thanking the New Mexico Environment Department, Concerned Citizens for Nuclear Safety, and Nuc Watch New Mexico for standing up for the rights of the citizens against the operations of the Los Alamos National Laboratory, which from a citizens' perspective and from a perspective of one who has been very concerned about the environmental travesty of the laboratory being on a hill, at the top of a watershed, in a wind-swept zone, of the people who live downwind and downstream from Los Alamos. I've been engaged in this concern for many years. It feels like the citizens of New Mexico really are -- have a very small voice when it comes up against this big environmentally -- this environmental catastrophe that has been happening at the top of the mountain on the hill since 1945.</p> <p>I would like to bring to the attention that a lot of citizens of New Mexico have been injured from -- from this environmental travesty over the years in the name of the military and in the name of protecting the United States citizens abroad. And today we are at tax day, and there is a huge amount of taxes -- of the citizens' taxes that are being spent to further military interests throughout the world. If the logic behind the open burning is to protect the soldiers abroad, and it is known that the toxins going into the air have the potential -- a very high potential of injuring United States citizens, the question is really; what is the US military protecting? If it isn't protecting the citizens who live inside the borders of this country, the United States citizens living in the United States, what is the purpose of a military going abroad to protect us?</p> <p>And when it comes to a situation where a government knowingly is doing harm to its own citizen base, there is a kind of very unpleasant name for that called genocide. And</p>	<p>Comment noted.</p> <p>See the Department's responses regarding environmental justice and groundwater protection in the document titled General Response to Comments.</p>	No

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		<p>it -- it has been apparent to me over the years that the National Nuclear Security Administration, the Department of Energy, has targeted New Mexico as a place where the activities of the nuclear weapons complex have kind of have a free run to be here, because it's really basically, you know, the Hispanic and Native American people who live here, and it seems to me that this is a case of -- when the environment is being ignored and the surroundings of these people, that it is a racist activity that I call environmental racism. Environmental racism is a cousin of what could be considered genocide.</p> <p>So I would just like the people who decide about what's going to happen with the burning up there to bring that into consideration, to think about, you know, really, who is being hurt, why they are being hurt, why the government is allowing them to be hurt, and maybe come up with a different approach to really understanding what it means to take care of our citizens of the United States of America, what is true national security.</p> <p>So I'm sorry if I'm going on a little too long, but my intention is to continue the reading of the Plans and Practices for Groundwater Protection at the Los Alamos Laboratory, the Final Report.</p> <p>LANL's efforts to understand the role of geochemistry in contaminant migration have not kept pace with efforts to understand hydrology. The committee found a lack of basic, site-specific geochemical data to support LANL's assumptions about the relative immobility of important contaminants - especially radionuclides - along transport pathways and judged that LANL underestimated the value of both field and laboratory geochemical measurements.</p> <p><i>Recommendation:</i> LANL should increase its attention to geochemistry within the context of its site characterization work. LANL scientists should conduct more field and laboratory studies to measure basic geochemical parameters such as sorption coefficients with the goal of testing and verifying their conceptualizations of subsurface hydrogeochemical processes.</p> <p>The following finding and recommendations reflect the committee's evaluation of the Interim Facility-wide Groundwater Monitoring Plan (LANL 2006c), which was requested in the Statement of Task.</p> <p>The Hydrogeologic Workplan has been effective in improving characterization</p>		

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		<p>of the site's hydrogeology. However, the knowledge gained through the workplan does not appear to have been used effectively in the development of the interim monitoring plan. The workplan is mentioned only in the introduction of the interim plan, and rationale for the siting of new wells in the interim plan is not grounded in the scientific understanding of the site evident in the Synthesis Report and other publications such as the Vadose Zone Journal.</p> <p><i>Recommendations:</i> LANL should demonstrate better use of its current understanding of contaminant transport pathways in the design of its groundwater monitoring program. Tables in the monitoring plan that give the rationale for locating monitoring wells should at least provide a general linkage between the proposed locations and the site's hydrology, or a section discussing the relation between well locations and pathway conceptualizations should be added.</p> <p>LANL should take a site-wide approach to monitoring the intermediate and regional aquifers. Further, the interim should summarize the ways in which the information from related studies will be used for updating the plan.</p> <p>The current description of the conceptual models (in Appendix A of the plan) is useful, but it should be improved.</p> <p>First and foremost would be a description of potential pathways, both surface and subsurface, that connect the sources (listed in Appendix A) with the groundwater that is being monitored.</p> <p>LANL should examine the potential for approaches that both optimize the monitoring network and incorporate uncertainty into its design."</p> <p>I would encourage LANL to take seriously that there are people who live downwind, downstream, and take the utmost consideration in protecting them.</p>		
335	Gen.	<p>I've been involved in working on the nuclear issues in New Mexico for just about 30 years, and I've been involved in quite a few permit hearings for various projects, both hazardous and mixed waste projects around the state.</p> <p>I would comment that Los Alamos is the DOE facility that has the most number of potentially affected people of color in the whole DOE complex, and that this is</p>	<p>Comment noted.</p> <p>See the Department's responses regarding environmental justice and groundwater protection in the document titled General Response</p>	No

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		<p>significant in terms of environmental justice. That doesn't necessarily mean that the people absolutely closest to the laboratory are necessarily -- that that is necessarily the environmental justice community, but the surrounding areas certainly are.</p> <p>I have seen the attitude of the Environment Department toward environmental justice over this period of time, and I have to say that I have not been impressed positively at all; that it seems to have ranged, in my opinion, from ignorance to contempt in terms of their approach to environmental justice. I would hope that there would be a change -- I don't have much hope for it, because, as I said, after 30 years of going to these hearings, I really haven't seen any improvement.</p> <p>I have seen the Environment Department create laws -- or help to create the definition of environmental justice community in the law that essentially eliminates virtually all the affected communities from this category. So -- and I have had personal interactions with high officials in the Environment Department, where they have actually come right out and expressed their contempt for environmental justice.</p> <p>So I would like to see this change during this permit hearing, but I -- as I said, I don't have a lot of hope.</p> <p>I'm going to read some material from this book, which is Plans and Practices for Groundwater Protection at the Los Alamos National Laboratory, Final Report.</p> <p><i>Detailed Findings and Recommendations</i></p> <p>Findings and recommendations to assist LANL in addressing remaining gaps in pathway conceptualizations and improving its monitoring plans are as follows:</p> <p style="padding-left: 40px;">The current conceptualization of the LANL flow system into alluvial, intermediate-perched and regional components, along with their importance to understanding the flow system within and below wet canyons, is a major accomplishment by LANL scientists. However, there is a lack of understanding of the interconnectiveness of pathways between basins.</p> <p style="padding-left: 40px;">While there is a general understanding that perched waters are probably redirecting contaminants from areas directly below canyons, where they originally infiltrate, to submesa areas and to other nearby canyons, the</p>	<p>to Comments.</p>	

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		<p>detailed knowledge needed to predict subsurface flow-paths does not exist.</p> <p>Lack of understanding of these phenomena, coupled with rapid flow in the alluvium and apparent rapid flow facilitated by perched waters, was central to the surprise over detection of chromium near the water supply wells.</p> <p>An improved knowledge of these inter-watershed processes is needed to design an effective, early warning monitoring program.</p> <p><i>Recommendation:</i> LANL should add a site-wide perspective to its future groundwater monitoring plans. This perspective would include the following:</p> <p>Design additional characterization, modeling, and geochemical investigations to better understand potential fast pathways between watersheds.</p> <p>Increase the area of the regional aquifer that is monitored by sampling inter-canyon areas from mesas or using directional wells from canyon bottoms.</p> <p>"Provide additional monitoring locations in the southern area of the site and on Pueblo de San Ildefonso lands.</p> <p>Develop more applications of geophysical techniques to supplement information provided by well drilling and sampling, especially for understanding vadose zone pathways.</p> <p>As LANL's site characterization and monitoring programs mature, well locations should be derived from a quantitative spatial analysis of monitoring well locations to identify areas with the greatest uncertainty in plume concentrations, using geostatistics or other methods, possibly coupled with flow and transport modeling.</p> <p>Mathematical models are essential tools for both codifying current knowledge and identifying knowledge gaps. Although LANL is using a numerically sophisticated multiphase model for vadose and regional groundwater modeling, it is not yet possible to predict with confidence when, where, or if a contaminant</p>		

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		<p>might appear in the regional aquifer. This is due largely to an exceptionally complex vadose zone.</p> <p>Studies show that most of the mass of many contaminants is likely still in the vadose zone on the way down from the release location to the regional aquifer.</p> <p><i>Recommendation:</i> LANL should increase its efforts to develop and use quantitative methods to describe contaminant pathways through vadose zone and into the regional aquifer, as follows:</p> <p style="padding-left: 40px;">Mathematical models that incorporate the uncertainties from alternative conceptual models should underpin plans for design and operation of the site-wide monitoring system. Characterization of the vadose zone begun under the Hydrogeologic Workplan should continue with emphasis on new results from characterization and monitoring being used to test and improve the mathematical models.</p> <p>To support an evaluation of the effectiveness of the monitoring system to provide early warning of potential impacts on the regional aquifer, LANL should quantify, to the extent possible, the inventory and current implication of the contaminants disposed of in the major waste sites.</p> <p>Large waste disposal sites in the dry canyons and on dry mesas have not received as much attention as wet canyons and wet mesas because they presumably lack an aqueous driver to move contamination. The presumed dry locations have received minimal characterization with regard to the presence, strength, and potential impact of aqueous drivers.</p> <p>In some of these, surface disturbances have led to unexpected increased infiltration breaks. LANL provided few data to justify assumptions about the relative immobility of wastes at these sites.</p> <p><i>Recommendations:</i> LANL should confirm the integrity (lack of surface disturbances or conditions leading to increased infiltration) of the major disposal sites in the dry canyons and mesas.</p> <p>LANL should schedule regular subsurface surveillance beneath disposed waste on dry mesas and in dry canyons.</p>		

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		<p>LANL's present conceptualizations of the regional aquifer lead to very different pictures of how contaminants in the aquifer might behave. If there is low connectivity between layers within the aquifer, the contaminants might remain near the top of the regional aquifer and most likely discharge in the springs near the Rio Grande.</p> <p>On the other hand, high connectivity could result in the contaminants spreading vertically and more likely entering the deep screened intervals of regional water supply wells.</p> <p>Recommendation: LANL should continue efforts begun under Hydrogeologic Workplan to characterize the regional aquifer. More large-scale pumping tests and improved analyses of the drawdown are needed to establish a scientifically defensive conceptual model of the aquifer, i.e., leaky-confined, unconfined, or layered.</p> <p>LANL's efforts to understand the role of geochemistry in contaminant migration have not kept pace with efforts to understand hydrology. The committee found a lack of basic, site-specific geochemical data to support LANL's assumptions about the relative immobility of important contaminants - especially radionuclides - along transport pathways and judged that LANL underestimated the value of both field and laboratory geochemical measurements.</p> <p><i>Recommendations:</i> LANL should increase its attention to geochemistry within the context of its site characterization work. LANL scientists should conduct more field and laboratory studies to measure basic geochemical parameters, such as sorption coefficients, with the goal of testing and verifying their conceptualizations of subsurface hydrogeochemical processes.</p> <p>The following findings and recommendations reflect the committee's evaluation of the Interim Facility-wide Groundwater Monitoring Plan (LANL 2006c), which was requested in the statement of task.</p> <p>The Hydrogeologic Workplan has been effective in improving characterization of the site's hydrogeology. However, the knowledge gained through the workplan does not appear to have been used effectively in the development of the interim plan. The workplan is mentioned only in the introduction of the</p>		

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		<p>interim plan, and rationale for the siting of new wells in the interim plan is not grounded in the scientific understanding of the site evident in the Synthesis Report and other publications such as the Vadose Zone Journal (2005).</p> <p><i>Recommendations:</i> LANL should demonstrate better use of its current understanding of contaminant transport pathways in the design of its groundwater monitoring program. Tables in the monitoring plan that give the rationale for locating monitoring wells should at least provide a general linkage between the proposed locations and the site's hydrology, or a section discussing the relation between well locations and pathway conceptualizations should be added.</p> <p>LANL should take a site-wide approach to monitoring of the intermediate and regional aquifers. Furthermore, the interim plan should summarize (e.g., in Section 1.6) the ways in which the information from related studies will be used for updating the interim plan. The current description of the conceptual models (in Appendix A of the plan) is useful, but it should be improved.</p> <p>First and foremost would be a description of potential pathways, both surface and subsurface, that connect the sources (listed in Appendix A) with the groundwater that is being monitored.</p> <p>LANL should examine the potential for approaches (Minsker, 2003; EPA, 2006) that both optimize the monitoring network and incorporate uncertainty into its design.</p>		
336	Gen.	<p>I represent the Southwest Network for Environmental and Economic Justice.</p> <p>The Southwest Network is a coalition of grassroots groups that's housed here in Albuquerque. There are 61 organizations that are affiliated -- grassroots group that are affiliated through our network, and about 15 of those organizations are located in the City in the State of New Mexico -- City of Albuquerque in the State of New Mexico.</p> <p>As some of you may be aware or not aware, I've been actually chair of the National Environmental Justice Advisory Committee to the US Environmental Protection Agency for eight years at one point under the Clinton administration, and then under the Bush administration for several years, and most recently under the Obama administration. I've stepped down. I've chaired the Environmental Justice Advisory</p>	<p>Comment noted.</p> <p>See the Department's responses regarding environmental justice, the information repository, and open burning in the document titled General Response to Comments.</p>	Yes

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		<p>Committee in December of this year. And my term would have expired in 2012.</p> <p>I'm very familiar with the issues in Los Alamos. I'm also very familiar with environmental justice issues not only in Northern New Mexico, but throughout the State of New Mexico, throughout the Southwest and up and down the Mexico/US border, and the important issues that -- that many government industry -- government entities, industry, municipalities, in some cases and others, and the kind of not-so-good situations many a times that our communities or communities surrounding these facilities have been impacted by.</p> <p>We're here today in support of HOPE and HOPE's recommendation and the other groups and the other parties around two very specific issues. One is the repository. And I just wanted to let the committee members know the repository is not something that's spanking brand new to us either. When I say "us," I mean those that -- that are in our organization that are affiliated to the Southwest Network.</p> <p>We have a community repository in Tucson, Arizona. And that's actually -- that particular repository was a struggle that took place from a group called TCE, Tucsonians for a Clean Environment, over the water contamination issue in Tucson, is one of the largest TCE contaminated sites in the US. And the community requested, along with -- several years back, along with the Southwest Network, requested that a repository be put up and housed in the community. And today, as we're here making these comments, that repository is located in the community in Tucson. It's housed in a facility, in a health clinic, that's -- that the repository itself has a library, as an open place where community members, students from universities, others from -- government entities and others can come and do that. So -- so we're here to -- to support the request for a community repository.</p> <p>Now, what I would say along with that, though, is that -- that it's our opinion that all materials should be put in the repository. That's -- that's materials that the community has -- has developed, whether they're leaflets and newspaper articles, whether they're surveys that the community has done, amongst other community members, whether they're government documents, whether they're state documents, whether they're federal government documents, whatever that they should be. Based on -- on these -- on these issues, we think it's vital not only for -- for people that are -- that are presently amongst us, for our generations to come, to also have access to materials so that in some cases</p>		

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		<p>some of the things that have been taking place don't happen again, so we can all kind of learn from that. So -- so the repository is something that -- that we hope that takes place.</p> <p>The open burning of hazardous materials – you all may or may not know I come from the South Valley of Albuquerque. Environmental issues or environmental justice issues is not new to my community, unfortunately. And it's not the impacts of many of those environmental hazards from a health perspective and others that have impacted not only the South Valley of Albuquerque, but the City of Albuquerque and others in the Southern New Mexico, Central New Mexico and in Northern New Mexico. So again, permitting for -- for burning, for open burning, we believe, is not -- is not the way to go about doing this. No?</p> <p>From a preventative standpoint, if we don't create the hazardous waste, then we don't have to worry about, quite frankly, where we're going to get rid of it at. But since we are talking about hazardous waste, in fact, that that's already there, then very clearly we don't support open burning.</p> <p>I do want to say that through the National Environmental Justice Advisory Committee under – under the new administrator for the USEPA, under the new secretary for the Department of Energy, and for the others, and for the Obama administration and for the president himself, very clearly, before the election, and now that President Obama is President Obama, that his administration very clearly has put environmental justice as one of the top issues within the administration.</p> <p>That was one of the appointments of Lisa Jackson as the administrator for the US Environmental Protection Agency, not only the first person of color to be an administrator of the US Environmental Protection Agency, but an individual that comes from a state agency, New Jersey in particular, where there was a lot of environmental injustices and environmental justice issues that have taken place in the State of New Jersey where Administrator Jackson worked as a commissioner for the State of New Jersey.</p> <p>So we believe that under the existing Governor, Governors Richardson -- Governor Richardson, Executive Order on Environmental Justice, the commitment that's been made by the New Mexico Environmental Department, the commitment that's been made by the administrator, by the secretary, Ron Curry, and the deputy administrator, and the longstanding commitment on the part of grassroots groups and community people for</p>		

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		<p>the protection and the well-being not only of ourselves, that are surrounded by many of these facilities, but for those that have families and others that are either working in, living close by or impacted one way or the other by these kind of facilities.</p> <p>I would highly encourage this committee, the Department of Energy and the others to read the public participation document that was produced by the National Environmental Justice Advisory Committee that actually is one of the truest forms of public participation that can take place.</p>		
337	Gen.	<p>Thank you for listening to our comments, and I implore you to sincerely consider the concerns of the citizens of this great state when making your decisions about the status of the draft hazardous waste permit for Los Alamos National Laboratories. Let me voice my unequivocal and steadfast opposition to permitting Los Alamos National Laboratories to burn hazardous waste in the open air when cleaner alternatives are available.</p> <p>New Mexico has been saddled with the nuclear industry since the inception of the atomic bomb. New Mexicans have worked uranium mines, built bomb cores and handled waste for over half a century. These industries are located in the most rural and impoverished areas of one of the most rural and impoverished states, and the negative impact on the health of New Mexico's people and fragile ecosystem is often ignored or downplayed in the name of supposed economic benefit or national security necessity. But the release of toxins into the air and the concomitant potential for further polluting the water supply of Northern New Mexican communities is a case of environmental racism. The people living in the Espanola Valley and its surrounds are overwhelmingly people of color.</p> <p>I do not believe anyone would find it acceptable to propose burning hazardous materials in the rarified air of wealthier, whiter areas of this country. But we are all created equal, and what is unacceptable in Silicon Valley is equally unacceptable in the Espanola Valley.</p> <p>Especially concerning is the fact that the waste can be burned in closed areas where pollution could be contained. Expense should never be an issue where environmental and human health is at stake. The nuclear industry must be regulated and monitored more heavily than any other, because of its unparalleled potential for long-term</p>	<p>Comment noted.</p> <p>See the Department's responses regarding open burning, environmental justice, and the information repository in the document titled General Response to Comments.</p>	Yes

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		<p>environmental damage.</p> <p>The people of New Mexico must be fully informed partners in determining the storage and disposal of any hazardous waste generated from that industry that potentially affects their bodies, their fields and orchards, their drinking water and the health of their children. Please let me state for the record that this hearing was not adequately publicized in the press, be it radio, newspapers or television, and that low public turnout does not equate to low public concern about hazardous waste at Los Alamos National Laboratories. The citizens of New Mexico are the ones who will live with the legacy and consequences of your decisions here today, and we deserve the opportunity to participate in the decision-making process by way of public comment. We cannot do so unless we are given adequate notice of the hearing, unless we are informed about issues surrounding the hazardous waste permit, and unless the public comment period is of sufficient duration to allow working people, the vast majority of New Mexicans, to speak their minds. Also, comments should be allowed via E-mail or telephone, which brings me to my last point.</p> <p>The citizens of New Mexico must be allowed to access information about the labs by way of a physical information repository. The labs and the hazardous materials they deal with concern every single person who breathes the air, drinks the water and eats the fruit of New Mexican soil. Transparency and public participation are essential.</p> <p>Please prioritize these things when making your decisions. Please consider the long-term impact of hazardous waste on the human beings of this place and the land and water they love and depend on for survival. You have the power to shape the environmental health of New Mexico. Please take it seriously, and please respect the citizens of New Mexico and treat them with the same dignity that you would the citizens of any other state. Recognize their need to participate and be informed about processes that affect them. This land matters, and the people of this land matter. Please keep that in the forefront of your minds when making your deliberations.</p>		
338	Gen.	<p>I think I pretty much agree with a lot of the comments that people have already made here today and probably what you've heard about, all the issues of transparency, environmental racism, and I think that this permit should be denied for open burning of hazardous wastes. It's a very clear thing.</p> <p>And I'm just sort of struck by the fact that this is the 40th anniversary of Earth Day, and</p>	<p>Comment noted.</p> <p>See the Department's responses regarding environmental justice and open burning in the document titled General Response to</p>	Yes

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		<p>here we are, 40 years later, still talking about things that Rachel Carson talked to us in the '60s, these dangers of contaminating and polluting the environment with all these kinds of chemicals and activities. And her big specialty in what she was talking about was the synergistic effect of these things. And I think that we need to figure out a standard and a way to raise the levels instead of lowering them and look at the fact of how all these things interact with each other on the human body. I mean, transparency, yes, I agree with that, but, I mean, I think we already know enough. I think there's enough knowledge out there to know that we've not as a society been doing our job very adequately and very well.</p> <p>I see Los Alamos basically as Rocky Flats 2, and it's a disaster that's -- has already been made, and it's going to get worse. We're looking at already with radionuclides in the river and thousands of people downstream here, a city that's approaching the area of a million people, are drinking that water. We found out last week that it's got PCBs in it now. We haven't been using PCBs supposedly since 1979. And so here they are in our drinking water, coming down the river.</p> <p>We've got all this other garbage, heavy metals, toxins in there, and doing open air burning in Los Alamos is just going to add to that. It's going to go up in the air and come back down in the watershed, going to wash down here, and we're going to be dripping in it, bathing in it. It's going to be in our ice cubes, the baby's bath water and everything else.</p> <p>And, you know, this comes from a view sometime back in the past, around the time when Rachel Carson was running actually, that, you know, radioactivity was -- and all these hazards were probably good and create healthy people. I mean, that was a silly idea, but that was what was around at one time. And I think that has a -- that has permeated in a lot of programs like Los Alamos and Sandia out here and these other nuclear facilities to just sort of run unbridled and get carried away with no real regulation and oversight.</p> <p>So I'm glad to see that something's being done, but I think it's a little late. I think we need to shut the door on this thing if it -- I mean, I think it's like Rocky Flats. I think the thing should be shut down, because we're in a population base here of a million-and-a-half people. I mean, we're on a collision course if you don't -- you have to realize, I think, looking at the context of this permit, because when all this stuff started and the</p>	Comments.	

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		<p>activities that go on, there was very few people here, and maybe you could get away with a lot of big, gross accidents and disasters and things like that, but we can't do that anymore.</p> <p>Just the social consequences of it -- they're talking about building up in Los Alamos, you know, a new -- a plutonium pit factory, which I think is a little bit insane when right here -- this school where I teach right here, we don't have money to pay the faculty and the teachers and to run the classes. APS, which is just across the street here, doesn't have money -- we're getting ready to lay off the teachers in the schools. So classes are going to get larger, less teachers, there's going to be less quality of education. And then we're going to turn around and talk about building new pits up there, pit factory, and we're going to build -- and do all the things, you know -- like deregulated, unregulated wild west atmosphere times again and just let them do whatever they want?</p> <p>I think it's time to step back and really grab a hold of where we're at, the social, environmental and the -- all the military conditions that go with this thing. We don't need any more of the activities at LANL. It's created environmental racism in the state; it's got people upset with each other and fighting over what should be trying to pull together to go forward.</p> <p>And now, not only -- I mean, I think if we go through with this open burning kind of permit, for example, we know that they're also going to deal with nanotechnologies and bio warfare stuff up there. I mean, that's going to come down the river, it's going to come down to the air, too, over all of us. The next step will be, you know, well, let us release these things into the water supply, too. And we don't know anything about nanotechnologies. I mean, it's these subatomic particles that they're using.</p> <p>So, you know, I -- I see this thing as a Rocky Flats 2. It should be shut down, and we should be putting our money in another direction for the benefit of society instead of this make-work project up here which is basically a corporate warfare -- welfare system. I think we've got enough transparencies, but we can always have more.</p>		
339	Gen.	<p>SRIC and NRDC are interested in LANL because it is a key facility in the Department of Energy (DOE) nuclear weapons complex, it generates and stores extremely large amounts of hazardous and radioactive wastes, and its associated cleanup and long-term management of those wastes will set a precedent for other sites across the country. Those hazardous and radioactive wastes pose significant threats to public health and the</p>	<p>The Department concurs that LANL must have a new permit and that that permit must have adequate safeguards for, and limitations on, the types and</p>	NA

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		<p>environment, and a stringent permit is essential to the safe operation of LANL and the protection of the public and the environment. Moreover, DOE plans for the future nuclear weapons complex provide for new and expanded LANL missions, including plutonium pit production. It is essential that the LANL permit have adequate safeguards for, and limitations on, the types and amounts of wastes that are generated and stored and that disposal units be prohibited.</p> <p>Further, a new permit is necessary, since the original LANL permit, issued on November 8, 1989 and administratively extended, is more than 18 years old and has many deficiencies. Updating a document that is nearly two decades old is crucially important if our hazardous waste laws are to have any meaningful impact on the plans for LANL's future.</p> <p>SRIC and NRDC appreciate the efforts that NMED, the permittees, and public parties in more than 40 days of negotiations in 2008 and 2009 that resulted in the Stipulation on Permit Language of June 26, 2009. The negotiations have resulted in a substantially improved Revised Draft Permit that is more protective of public health and the environment than the draft permit released on August 27, 2007.</p>	<p>amounts of wastes that are generated and stored. The Department believes that the Renewal Permit has all necessary general and specific terms and conditions as established by New Mexico's Hazardous Waste Act (HWA) and its implementing regulations to protect human health and the environment.</p> <p>The Permittees do not seek, and the Department is not issuing, a permit for hazardous waste disposal. The disposal of hazardous waste is in affect prohibited at LANL by New Mexico's Hazardous Waste Management regulations (HWMR) at 20.4.1.900, which incorporates by reference the federal regulations at 40 CFR 270.1(b) stating that the disposal of hazardous waste by any person who has not applied for or received a RCRA permit is prohibited. Permit Section 1.4 prohibits the disposal of hazardous waste by requiring compliance with all applicable laws and regulations.</p> <p>However, hazardous waste was disposed of in the past at Material Disposal Areas (MDAs) G, H,</p>	

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			and L at TA-54. The Renewal Permit addresses the closure and potential post-closure care of these units.	
340	Gen.	<p>I noticed that on the schedule for the public hearings for the LANL permit there is only one meeting in Espanola and am wondering if there may be an opportunity for at least one other. I do not know the time frame for completing these forums, but our environmental science students are required to participate in community planning and outreach as part of our environmental science program. Is there any opportunity for a student run community meeting that can help NMED meet its objectives for garnering information from the community? My sense has been that those that have been held at Northern in the past have been over whelmed by activist groups and possibly we can affect a broader scope of community input with student coordination. I must disclose that some of our students work at LANL, but they are also members of their community. If there is a potential for something that could be meaningful in the Espanola valley, please let me know.</p>	<p>Comment noted</p> <p>See the Department's responses regarding the information repository and public participation in the document titled General Response to Comments.</p>	NA
341	Gen.	<p>WE the People United of the Sole Source Espanola Aquifer Basin and Santa Fe Community respectfully request that the Powers that Be hear our concerns and act in our behalf to protect and preserve our living waters that affect the health of all our women, men, pregnant women, infants, children, sick and the aged.</p> <p>The Buckman Direct Diversion Project continues to spend \$215 million plus without adequate research and documentation that our health and safety will be protected by the diversion of Rio Grande river water containing emerging radioactive contamination from nuclear bomb waste created by our up river nuclear scientists from LANL. Health risks such as genetic mutations, birth defects, low birth weight, infertility, premature birth, environmental illness, and autoimmune disease from the synergistic and cumulative effects of contaminates such as: Americium-241, Neptunium-231, Plutonium-238, 239, and 240, Cesium-137, Strontium-90, and Tritium, Selenium, Hexavalent Chromium, PCB, and Perchlorate in our drinking and food growing water and our air; need further research and</p>	Comment noted	NA

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		<p>documentation.</p> <p>WE the People United of this Community Respectfully Intend that there be Created;</p> <ol style="list-style-type: none"> 1. Independent toxicologists or medical review panel with current experience in nuclear related disease, environmental and embryological risk factors be consulted to research our continued concerns about health and safety for pregnant women and children from drinking water and eating food with nuclear contamination in a area with highly unresolved «background radiation" also in our air. 2. A volunteer citizen review panel to work with the BDD Board to assure all public health concerns is addressed fully before \$215 million continues to be spent 3. More frequent Town Hall Meeting to monitor tax spending and safety issues publicly 4. Verification that the surrounding area of the Rio Grande BDD Projects site be free of potential increases of emerging nuclear bomb waste with all cost of protective research, early warning system, and clean up being financially accountable to LANL. 5. Regionally controlled sun, wind, and turbine energy for water purity and transport. 6. Alterative long term sustainable water resources to be funded concurrently as the BDD Project that include roof top catchments and filtration, effluent bio-digesters, deep saline aquifer filtration, aquifer research, and major water conservation education programs. 		
342	Gen.	<p>I was born and raised in the Espanola Valley. My grandfather and my grandmother and their great-grandparents and generations before them were raised here. So my concern is with people's lives at hand and how this is affecting them, and that's the bottom line, you know, because I love the people from this valley, and I think we have to, you know, take into consideration everybody's lives and what's going on and how it's affecting everybody. Like they said, life is water, right, and so it's all about that and the consequences at hand.</p>	Comment noted	NA

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343	Gen.	<p>I'm from Russia. I lived in the mountains near the first Russian nuclear plutonium facility. So I -- from my experience as an engineer and as a scientist, from my experience with legislation, and from my work from governments, and now again from my work in sociology, I am at this hearing from several areas.</p> <p>First of all, it is a very promising culture to create this close examination to understand the vision of the community, industry and governments. Of course, it is, I feel -- I understand, as a sociologist and as an activist and as a scientist, the buckle between cultures, between understanding and between rules.</p> <p>My question to the nuclear scientist; is the open burning the best decision? Is it a high-tech decision? Are you sure? Is it a demonstration of your technical -- technical level? I think no.</p> <p>It is discrimination of the -- of the position of the nuclear industry. This is a simplification. It is not an alternative to transportation. It is -- so this is -- I feel I understand -- I know how it is working in Russia, and it is simply trying to minimize expenses. But who will pay? The community will pay.</p> <p>What is the cost; life or the future generation? This creates opportunity for the next generation for the people that live their own life. So it is not the best decision.</p> <p>So the -- what I would prefer, as a human being, is a network of our biosphere, and the people from the other side, I would like to appreciate our -- our expectation to live a safe and healthy life, to create rules of safety and security, and respect those rules -- respect these rules. Of course, humanity is faced with new facts of high-explosive, high-destructive materials, but we need now to reduce this risk, through the common thinking, through the common wisdom, through the common -- through the joining of our humanity.</p> <p>So that's what I would like to learn from your community and from this cross-examination, and I wish you to find -- to find a common decision, which will be very respectful.</p>	<p>Comment noted.</p> <p>See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
344	Gen.	<p>After we finished reading sections of the documents that had been kept secret for up to 10 years, we prepared sections for people to read of a hotline report from the EPA's Office of Inspector General, titled "Region 6 Needs to Improve Oversight Practices" dated April 14, 2010, which we obviously received after this hearing had</p>	<p>See the Department's responses regarding contractor documents in the document titled General</p>	Yes

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		<p>begun.</p> <p>In anticipation that some of these pages would be read, I gave the court recorder a copy of the entire document, and also a copy to you, Your Honor for your convenience as pages were read, because it had not yet been introduced into the record.</p> <p>It turned out that citizens who came for public comment since then had prepared their own statements and thus these pages were not read into the record. So I highlighted in a copy of the full document those parts that we had intended to read, and I would like to submit this copy with the pertinent parts highlighted. We respectfully request that Your Honor take administrative notice of this serious report from the Office of Inspector General.</p>	Response to Comments.	
345	Gen.	<p>I want to say a few words about the documents that we have been reading into the hearing record, some of which had been held secret for a decade.</p> <p>I hope as these documents are read, everyone can hear how often over and over again, the TechLaw documents said such phrases as: lacks sufficient technical detail; severely deficient; difficult to justify; missing information; incomplete; poorly written and difficult to follow the assumptions; not clearly identified or discussed; options should be described; the risk assessment will need to be redone; revise the report to calculate a more accurate Hazard Index for the construction worker scenario; inconsistent with the human health risk assessment; many detected chemicals were eliminated without adequate justification; should be included; numerous incidents where information was presented but not supported; LANL has yet to provide descriptions of wastes to be stored at each unit; revise the application to include all pertinent figures; these issues need to be resolved immediately; and implementation of a sound safety strategy must be pursued on an urgent basis.</p> <p>Even if most of these directives have been taken care of by now, this definitely shows a pattern of sloppiness regarding care for the environment and the health of both workers and neighbors.</p> <p>If the public would have had access to those documents a decade ago, different decisions could have been made and we wouldn't have all the contamination problems we have now in the Rio Grande, groundwater and air.</p> <p>LANL claims that these contaminants are below standard and are therefore OK. But the</p>	See the Department's responses regarding contractor documents in the document titled General Response to Comments.	Yes

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		standard is based on what is called "reference man," which is a healthy, Caucasian, 154 pound male in his twenties, with a height of 5 ft. 7 in. These standards are not sufficient for many people of color, anyone who weighs less than 154 pounds or is shorter than 5'7", or has a compromised immune system. Women, children, fetuses, and the elderly are especially susceptible to toxins and other pollutants. The "Reference Man" standards are not adequate standards for the majority of citizens living and working near the Lab. If the pollutants are present in our rivers, groundwater and air, they pose potential health hazards to citizens downwind and downstream from the Los Alamos Lab, and who have already borne the burden of too many contaminants in their environment. We do not want any more toxins in our air, soil and water, not even the smallest amount. It is time to stop.		
346	Gen.	I'm going to read from what was a secret document, which is now identified as Administrative Record Number 32367. The document is dated November 7th, 2000. It comes from the New Mexico Environment Department. It is addressed to June Dreith, project manager at TechLaw, Incorporated. The subject line reads, "The scope of work for review of 'Draft Mesa-Top Material Disposable Areas Implementation Plan' Los Alamos National Laboratory." (MORE)	See the Department's responses regarding contractor documents in the document titled General Response to Comments.	Yes
347	Gen.	I'm going to be reading from the secret documents. And this document identified as 32379. It was sent to Ms. Eliza Frank at the State of New Mexico Environment Department, and it was sent from June K. Dreith, the project manager at TechLaw, Incorporated. "The general consensus is that the Revised Conceptual Model for TA-54 is not complete in that it does not identify primary and secondary transport pathways, offsite transport, exposure routes and receptors, or demographics and land use (current and future). (MORE)	See the Department's responses regarding contractor documents in the document titled General Response to Comments.	Yes
348	Gen.	And I wish to read into the record from document number 32433, which is a letter from TechLaw, Incorporated, to Mr. Carl Will of the State of New Mexico Environment Department, Hazardous Waste Bureau. And this concerns LANL Permitting Section -- Permitting Support, Evaluation of LANL NOD Responses for TA-54 Part B, RCRA Permit Renewal Application. (MORE)	See the Department's responses regarding contractor documents in the document titled General Response to Comments.	Yes
349	Gen.	This is a letter from June K. Dreith, program manager of TechLaw, Inc., written on March the 12th, 2002, to Mr. James Bearzi and Mr. David Cobrain, consisting of the technical review comments of the Los Alamos National Laboratory Technical Area 55	See the Department's responses regarding contractor documents in the document titled General	Yes

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		(TA-55) Part B Permit Application, dated 2002. The number of the document is 32409.	Response to Comments.	
350	Gen.	I'm going to read selected sections of what was until recently a secret document, which is now identified as Administrative Record Number 32468. The document is dated January 15th, 2004. It is from TechLaw to Mr. Cobrain. (MORE)	See the Department's responses regarding contractor documents in the document titled General Response to Comments.	Yes
351	Gen.	I'm going to read selected sections of what was until recently a secret document, which is now identified as Administrative Record Number 32409. This document is dated March 12th, 2002. It is from June Dreith, Program Manager of TechLaw, Inc., to James Bearzi of the New Mexico Environment Department. This document refers to the LANL Technical Area 55 Part B application, dated January, 2002. (MORE)	See the Department's responses regarding contractor documents in the document titled General Response to Comments.	Yes
352	Gen.	I'm going to read selected sections of what was, until recently, one of the secret documents. The first document is now identified as Administrative Record Number 32421. It refers to TA-54. The document is dated June 4th, 2002, from June Dreith, Program Manager of TechLaw, and it is to Mr. James Bearzi and Mr. David Cobrain. The second is from Administrative Record Number 32438 and refers to TA-55. The document is dated September 30th, 2002. Again, it is from June Dreith, the Program Manager of TechLaw, but this time to Mr. Carl Will.	See the Department's responses regarding contractor documents in the document titled General Response to Comments.	Yes
353	Gen.	I'm going to read selected sessions of what was, until recently, a secret document, which is now identified as Administrative Record Number 32424, and refers to TA-55. The document is dated June 20th, 2002. It is from June Dreith, Program Manager of TechLaw, Incorporated, to Mr. Carl Will.	See the Department's responses regarding contractor documents in the document titled General Response to Comments.	Yes
354	Gen.	Before I begin reading some selected sections of what was recently a secret, I do want to address something in this mildly contentious meeting with which we all agree, and that is our court reporters, all of them, are fabulous, and I'd like to hear a round of applause for those hard-working people. And, please, do put that in the record. The document is dated November 14th, 2003. It's from June Dreith, Program Manager of TechLaw, Incorporated, to Sandra Martin of the New Mexico Environment Department. The document refers to Risk and Ecological Assessment Review Comments on LANL's Phase 3 RCRA Facility Investigation Report for Solid Waste	See the Department's responses regarding contractor documents in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		Management Unit 16-021(C)-99 and applies to TA-16.		
355	Gen.	<p>I'm going to read selected selections of what was, until recently, a secret document, which is now identified as Administrative Record Number 32463.</p> <p>The document is dated August 25th, 2003. It is from June Dreith; the Program Manager of TechLaw, Incorporated, and it's to Mr. David Cobrain of the New Mexico Environment Department. The document refers to the risk assessment review comments on the Los Alamos National Laboratories Interim Action Completion Report for Solid Waste Management Unit 21-024(I) at TA-21.</p>	See the Department's responses regarding contractor documents in the document titled General Response to Comments.	Yes
356	Gen.	<p>I'm going to read selected selections of what was, until recently, a secret document, which is now identified as Administrative Record Number 32566. The document is dated February 4th, 2008. It is from Jasmine Schliesmann-Merkle, Vice-President of TechLaw, Incorporated, to Mr. David Cobrain of the New Mexico Environment Department. This document refers to a Technical Evaluation dated January 21st, 2008, of the Response to the Notice of Disapproval for the Consolidated Units at LANL Technical Area 16.</p>	See the Department's responses regarding contractor documents in the document titled General Response to Comments.	Yes
357	Gen.	<p>I want to say a few words about the documents that we have been reading into the hearing record, some of which have been held secret for over a decade.</p> <p>I hope as these documents are read everyone can hear how often, over and over again the TechLaw document said such phrases as "lacks sufficient technical detail," "severely deficient," "difficult to justify," "missing information," "incomplete," "poorly written and difficult to follow the assumptions," "not clearly identified or discussed," "options should be described," "the risk assessment will need to be redone," "revised report to calculate a more accurate hazardous index for the construction worker scenario," "inconsistent with the human health risk assessment," "many detected chemicals were eliminated without adequate justification," "numerous incidents where information was presented but not supported," "LANL has yet to provide descriptions of wastes to be stored at each unit," "revise the application to include all pertinent figures," "these issues need to be resolved immediately," "the implementation of a sound safety strategy must be pursued on an urgent basis."</p> <p>Even if most of these directives have been taken care of by now, this definitely shows a pattern of sloppiness regarding care for the environment and the health of both workers</p>	See the Department's responses regarding contractor documents in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>and neighbors. If the public would have had access to those documents a decade ago, different decisions could have been made, and we wouldn't have all the contamination problems we have now in the Rio Grande, groundwater and air.</p> <p>The lab claims that these contaminants are both -- are below standard and therefore okay. But the standard is based on what is called reference man, which is a healthy, Caucasian, 154-pound male in his 20s with height five feet and seven inches. These standards are not sufficient for many people of color or anyone who weighs less than 154 pounds or is shorter than five feet and seven inches or has compromised immune systems. Women, children, fetuses and the elderly are especially susceptible to toxins and other pollutants. The reference man standards are not adequate standards for the majority of citizens living and working near the lab.</p> <p>If the pollutants are present in our rivers, groundwater and air, they pose potential health hazards to citizens downwind and downstream from the Los Alamos Lab, and who have already borne the burden of too many contaminants in their environment. We do not want anymore toxins in our air, soil and water, not even the smallest amount. It is time to stop.</p>		
358	Gen.	<p>I'll be reading from the Plans and Practices for Groundwater Protection at LANL, the Final Report put together by the National Research Council; specifically, from Chapter 5 on Monitoring and Data Quality.</p> <p>Implementing a groundwater monitoring plan includes four elements: drilling wells, completing the wells, obtaining groundwater samples from the wells, and analyzing the samples.</p> <p>Monitoring is done to measure the extent of contaminant migration along expected pathways or to determine that the water is free of contamination. Monitoring is the only direct means to confirm models and predictions about subsurface contaminant transport and to provide early warning of potential contamination in drinking water supplies.</p> <p>This chapter deals with the actual practices of conducting monitoring - in particular ensuring that the LANL's groundwater monitoring data are reliable.</p> <p>The first part of the chapter deals with LANL's well construction work. The second deals with the specific data-quality questions presented in the</p>	See the Department's responses regarding groundwater protection in the document titled General Response to Comments.	No

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		<p>committee's task statement.</p> <p>LANL's understanding of contaminant pathways, which is essential for developing a monitoring plan, is discussed in Chapter 4.</p> <p>The data-quality questions raised in the committee's task statement are:</p> <ol style="list-style-type: none"> 1. Is the laboratory following established specific practices in assessing the quality of its groundwater monitoring data? 2. Are the data (including qualifiers that describe data precision, accuracy, detection limits, and other items that aid correct interpretation and use of the data) being used appropriately in the laboratory's remediation decision making? <p>The short answer to the first item is a qualified yes. LANL is using good practices in terms of having the proper quality assurance and quality control plans and documentation in place, but falls short of consistently carrying out all the procedures cited in the plans. Well drilling and completion methods are continuing to evolve, and the site is only beginning to implement its groundwater monitoring program under the consent order.</p> <p>I'd like to emphasize the following sentence.</p> <p>Many if not all of the wells drilled into the regional aquifer under the Hydrogeologic Workplan appear to be compromised in their ability to produce water samples that are representative of ambient groundwater for the purpose of monitoring.</p> <p>The short answer to the second answer, as it is written, is no. Although LANL appears to be generating sound analytical data, the results reported in databases and LANL reports often do not carry the proper qualifiers according to good QA/QC practices. This especially applies to analytical results near or below the limits of practical quantification and detection, near the natural background, or both.</p> <p>The difficulty here is that reported detection of contamination that is not statistically significant may be taken as real by regulators and other stakeholders</p>		

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		- with concomitant concerns and calls for remedial actions.		
359	Gen.	<p>One of the issues and concerns I have regarding the burn permit is currently the information repository is only accessible electronically, and as an individual that doesn't have a computer at home or access to the internet, I have a limited ability to get on-line. I have to go to the library. There is a 30-minute limit, and I actually tried to access this document and was able to, but looking at the page, it was hard to navigate and figure out where I needed to go for information, and it was very overwhelming, and in looking at the document, it seems like it would probably take hours to read the document, and with a 30-minute time limit at the library, it would be very -- it's not accessible to me.</p> <p>So I would really like to request that there be a physical informational repository that's accessible not only to me but other community members. I think it's a real issue, because a lot of people in this community and the outlying areas don't have access to internet from home. So that is one of the comments that I really want to impress on you and really indicate that it's a huge concern that I have for myself and other community members.</p> <p>I will also be reading from the Plans and Practices for Groundwater Protection at the Los Alamos National Laboratory, the Final Report that was conducted by National Research Council of the National Academies.</p> <p style="text-align: center;"><i>Chapter 6, Findings and Recommendations</i></p> <p style="text-align: center;">This chapter summarizes the committee's findings and recommendations developed in Chapters 3, 4 and 5 of this report. Los Alamos National Laboratory's current groundwater protection program began under mandate from the New Mexico Environment Department in 1998, and it is to be completed by 2015 according to a consent order issued by the New Mexico Environment Department.</p> <p style="text-align: center;">To help ensure a timely and successful completion, the Department of Energy requested the National Academies to provide technical advice on certain technical aspects of the program. The committee's statement of task is given in Sidebar 1.1.</p>	See the Department's responses regarding the information repository and groundwater protection in the document titled General Response to Comments.	Yes

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		<p>Because the groundwater protection program is at about its midpoint, the committee viewed it as a work in progress, and this report is necessarily a snapshot in time. The committee's findings are based on information presented by LANL and other stakeholders through about April, 2007.</p> <p>The committee's recommendations are directed toward improving the effectiveness of the program and providing a sound scientific basis for LANL's future remedial actions and long-term monitoring.</p> <p><i>Overarching Findings</i></p> <p>LANL's groundwater protection program faces substantial technical challenges. There is considerable uncertainty about the contamination sources themselves. The pathways for transport of contaminants from their sources include four different hydrologic regimes:</p> <ol style="list-style-type: none"> (1) surface streams and run-off; (2) near-surface groundwater in the canyon alluvium; (3) intermediate-perched groundwater in the unsaturated zone; and (4) a deep, regional aquifer. <p>Each of these regimes adds considerable uncertainty to the understanding of the overall system. Even with the best efforts to understand contaminant sources and pathways, the uncertainty will always be great. Nevertheless, LANL has no other options except to advance its program in the face of uncertainty. Surprises will be inevitable in this learning process.</p> <p>On the positive side, LANL scientists learned a good deal through the Hydrogeologic Workplan, which was conducted from 1998 to 2005. While the thickness of the vadose zone and the depth of the regional aquifer, some 1,000 feet, make their scientific study difficult, these features are assets for groundwater protection.</p> <p>The substantial relief provided by the canyons that cut through the volcanic sequence provides a good conceptual picture of the site's geology. The direction of surface of the groundwater flow is generally known, even if the identification</p>		

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		<p>of the specific pathways is problematic.</p> <p>Regardless of the difficulties that lie ahead, prudence and the law require that a groundwater monitoring system be established.</p> <p>The recommendations in this report support the proposition that it is technically feasible to monitor the groundwater. The efficacy of the monitoring system will have to be determined based on the analysis of the future data that will be obtained as the system is developed.</p> <p>There are four overarching findings that arose from the committee's study and that have relevance to essentially all parts of the task statement.</p> <p><i>Geochemistry</i></p> <p>LANL demonstrated substantial progress in the site characterization under the Hydrogeologic Workplan. However, LANL's work in geochemistry has not kept pace with the work in hydrogeology.</p> <p>Geochemistry is central to understanding the extent to which contaminants move with groundwater; it is a tool for better understanding hydrogeologic pathways; and it is essential for determining the degree to which monitoring data are representative of actual groundwater.</p> <p>The specific need is to understand how contaminant migration caused by groundwater is affected by geologic or anthropogenic media that are encountered along the groundwater's flow path.</p> <p>The committee saw few fundamental, site-specific studies that quantitatively address this need.</p> <p>Conducting such studies in the laboratory is not difficult, but it requires dedicated scientific effort to plan and conduct appropriate tests and to interpret their results.</p> <p><i>Mass Balance</i></p> <p>LANL needs better ways to demonstrate its considerable understanding – and eventually its mastery - of potential threats to the regional aquifer. Specifically this means knowing the site's inventory of contaminants and where they are.</p>		

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		<p>Most contaminants are evidently still in or near their sources; a sizable fraction of some have migrated into the vadose zone; and a small fraction are in the regional aquifer. This information needs to be quantified and presented succinctly.</p> <p>The committee judged that mass balance is an appropriate tool for this purpose. Mass balances, which LANL has begun developing for a few disposal areas, could be developed for other high-inventory areas and integrated to eventually account for contaminants statewide.</p> <p>Such accounting for contaminants is the essence for groundwater protection, and it can help foster trust among LANL, its regulators, and public stakeholders.</p> <p><i>Uncertainty</i></p> <p>Uncertainty is inherent in scientific knowledge, and work to address uncertainty leads to improved knowledge. LANL needs to do a better job of describing uncertainties in its groundwater protection program to both scientific and public audiences. This includes describing fundamental conceptual uncertainty - things that are simply not known, such as the nature of some groundwater pathways - and measurement uncertainty, such as the variability of the laboratory results for contaminants detected at very low levels.</p> <p>The committee judged that greater openness about uncertainty - on the parts of LANL and its stakeholders - could improve the quality and transparency of LANL's groundwater protection program.</p> <p><i>Peer Review.</i></p> <p>Peer review is the standard of science. The committee is not hesitant to take LANL's motto: 'The World's Greatest Science Protecting America' at face value. However, like many publications from DOE laboratories, LANL reports typically fall in the area of non-peer-reviewed literature. "LANL has produced massive amounts of report material, and the additional step of summarizing and publishing key portions, as it did with some information from the Hydrogeologic Workplan, can help authenticate LANL's groundwater protection program.</p>		

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		<p>This is not to discount LANL's other peer-reviewed publications from the program, but rather to encourage more. Besides peer-reviewed literature, other venues are available for peer review of important work that is not amenable to journal publication.</p> <p>Demonstration of sound science through peer reviews will go a long way toward ensuring the effectiveness of LANL's groundwater protection program and enhancing confidence among stakeholders.</p>		
360		<p>I'm reading from Plans and Practices for Groundwater Protection at Los Alamos National Laboratories.</p> <p><i>Findings and Recommendations to Address the Task Statement</i></p> <p>This section gives the detailed findings and recommendations developed in the main text of this report according to the task statement.</p> <p><i>Findings and Recommendations on Sources of Contamination and Source Controls</i></p> <p>Radioactive or chemically hazardous wastes disposed on site at LANL constitute the sources of contamination that the committee considered in addressing its statement of task.</p> <p>These sources are the inputs from which contaminants into the soils, rocks, and water that compromise the hydrogeologic environment beneath the LANL site.</p> <p>The laboratory has practiced on-site disposal of its waste since the early 1940s. Disposal methods include the discharge of liquid effluents into canyons and the emplacement of solid wastes, mainly on mesa tops.</p> <p>The committee's statement of task posed three questions regarding sources:</p> <p>1) What is the state of the laboratory's understanding of the major sources of groundwater contamination originating from laboratory operations and have technically sound measures to control them been implemented?</p> <p>The committee's short answer to the first question is yes for liquid sources and no for solids. Liquid waste discharges are generally eliminated or controlled. LANL's data indicate that previous liquid discharges were the</p>	See the Department's response regarding groundwater protection in the document titled General Response to Comments.	No

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		<p>sources of contamination currently found in groundwater. However, solid wastes and contaminants deemed by LANL to have less near-term potential to impact groundwater have received much less attention than the liquid sources and are not well understood, especially in terms of source inventories.</p> <p>2) Have the potential impacts of this (non-laboratory) contamination on corrective-action decision making been assessed?</p> <p>"The short answer to the second question is a qualified yes. The answer to the third has to be no because LANL is only beginning to determine corrective actions under the consent order. This aspect of decision making was not discussed with the committee.</p> <p>3) Their findings and recommendations were "Have potential sources of non-laboratory groundwater contamination been identified?</p> <p>The committee offers the following findings and recommendations to assist LANL in future work to understand and control its contamination sources, with emphasis on longer-term concerns that have not been addressed during the first portion of the groundwater protection.</p>		
361	Gen.	<p>I'm going to read from Plans and Practices for Groundwater Protection at the Los Alamos National Laboratory, Final Report.</p> <p>Solid wastes, e.g., the 25 material disposal areas (MDAs), and certain contaminants deemed by LANL to be essentially immobile have the potential for impacting groundwater in the future.</p> <p>MDA AB in Technical Area 49 (TA-49), which contains some 2,300 Ci of Pu-239, is an example.</p> <p>The committee received little information that would provide assurance that these sources are well understood or well controlled.</p> <p><i>Recommendation:</i> LANL should complete the characterization of major contaminant disposal sites and their inventories complete the investigation of historical information about these disposal sites with emphasis on radionuclides and chemicals likely to impact human health and the environment. Selected sites</p>	<p>Comment noted.</p> <p>See the Department's response regarding groundwater protection in the document titled General Response to Comments.</p>	No

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		<p>should be characterized by field analysis when historical information is insufficient to determine quantities of major contaminants disposed and to confirm the degree of transport that has occurred.</p> <p>LANL should devote greater effort to characterizing sources with significant inventories of contaminants (especially plutonium) that usually are strongly sorbing but still have the long-term potential to migrate in the presence of water.</p> <p><i>Priority for investigating sources established by the consent order</i></p> <p>This recommendation emphasizes the need to confirm assumptions that underpin the assignment of lower priority to 'immobile' wastes.</p> <p>There are still large uncertainties in LANL's estimates of the inventories of principal contaminant sources and their locations. Similarly, analyses are lacking to approximate the current locations of contaminants (which may have migrated from these sources) in the various hydrogeological units that constitute the LANL site and surrounding areas.</p> <p><i>Recommendation:</i> For the major disposal sites, LANL should develop mass balance estimates of the quantities of disposed chemicals and radionuclides remaining in the surface soil and/or residing in the shallow alluvium, the vadose zone, and the regional aquifer.</p> <p>Site-wide LANL should perform a mass balance for hazardous and radioactive substances by assessing the types, quantities, and volumes of individual hazardous materials that have entered the site over the years.</p> <p>These analyses, with estimates of data uncertainties, should help LANL account for contaminant sources, releases, radioactive decay, and migration through the hydrogeologic system in a way that is transparent and understandable to all of its stakeholders.</p> <p>Surface water is an important pathway for transport of contaminants to the groundwater. Stormwater can remobilize contaminants that have been deposited in canyons and transport them downstream.</p> <p>The contaminants can enter the shallow groundwater away from their original</p>		

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		<p>source or be transported off site.</p> <p>LANL needs to quantify the inventories of contaminants released in the canyons in order to understand their potential threat to groundwater. The site-wide mass balance of inventories of hazardous and radioactive substances should include the surface water transport pathway.</p> <p>LANL should continue to develop surface water and sediment monitoring programs. LANL should continue, and improve, its control contaminants moving down the canyons to prevent further surface transport and redistribution off site of both mobile and sorbing contaminants.</p> <p>Measures to control surface transport down canyons, including further reduction of aqueous discharges, removal of contaminated media, and appropriate use of barriers, are needed.</p> <p>Just added, I would like to say that living in Los Alamos, it has been uncomfortable for me to drink any of the water from the tap, due to the high calcium and other stuff in it; it just doesn't taste that great.</p> <p>A concern that I had, my brother works for LANL, and in reading this, he has worked at the bottom of the hill, where they are putting in certain things in the river to monitor everything that was discussed and read here. But my concern is, do their employees know exactly what they were working with and what they were doing, and what liabilities do they have, or what were they putting their hands in and their feet in and not ever knowing? They were just doing their job. I don't know if anything was explained to them properly or if they know exactly what their job description was. But I know that his job was 12 hours of working in a river that's already contaminated.</p>		
362	Gen.	<p>I guess I'm here to read from the scriptures, it looks like, from the Plans and Practices for Groundwater Protection at the Los Alamos National Laboratory, Final Report, National Research Council.</p> <p>The geochemistry of contamination migration has not been studied at a level of detail comparable to the site investigations conducted under the Hydrogeologic Workplan. This is a gap in LANL's current groundwater protection program.</p> <p><i>Recommendation:</i> LANL should better integrate geochemistry into its</p>	See the Department's response regarding groundwater protection in the document titled General Response to Comments.	No

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		<p>conceptual modeling. Laboratory experiments and field tests, in addition to literature data, are necessary to substantiate LANL's general observations and assumptions about the geochemical behavior of contaminants.</p> <p>LANL will continue to be an active DOE site with the potential for release of contaminants from its ongoing operations. Discharges and releases have been cut substantially at TA-50, the location of the site's Radioactive Liquid Waste Treatment Facility. Yet, its discharges will continue to provide a flow of water that will tend to remobilize contaminants already deposited in the canyons.</p> <p><i>Recommendation:</i> LANL should continue to review all operations and releases to the greatest extent practical. This includes efforts to minimize the disposal of solid waste on mesa tops because waste disposal in those areas can pose a long-term threat to the regional groundwater.</p> <p>LANL carried out its Hydrogeologic Workplan from 1998 through 2004 to better characterize the site's hydrogeology and potential pathways for contaminant transport.</p> <p>The purpose of the characterization program was to develop the scientific basis for a site-wide groundwater monitoring plan.</p> <p>The committee's statement of task posed two questions regarding LANL's current (interim) monitoring program:</p> <ol style="list-style-type: none"> 1. Does the lab's interim groundwater monitoring plan follow good scientific practices? Is it adequate to provide for the early identification and response to potential environmental impacts from the laboratory? 2. Is the scope of groundwater monitoring at the laboratory sufficient to provide data needed for remediation-decision making? If not, what data gaps remain, and how can they be filled? <p>After reviewing LANL Interim Facility-Wide Monitoring Plan the committee answered the two parts of item one with a qualified yes and no, respectively.</p> <p>While the Interim Plan generally follows good scientific practices, there are opportunities for improving it. The plan is not adequate to provide early identification of potential contaminant migration with high confidence because</p>		

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		<p>LANL's understanding of pathways for contaminant transport, especially inter-watershed pathways, is not yet adequate to support such confidence.</p> <p>The committee answered item two with a qualified no.</p> <p>Findings and recommendations to assist LANL address the remaining gaps in pathway conceptualizations and improve its monitoring plan are as follows:</p> <p>The current conceptualization of the LANL flow system into alluvial, intermediate-perched, and regional components, along with their importance to understanding the flow system within and below wet canyons, is a major accomplishment by LANL scientists. However, there is a lack of understanding of the interconnectedness of the pathways between basins.</p> <p>While there is a general understanding that perched waters are probably redirecting contaminants from areas directly below canyons where they originally infiltrate, to submesa areas and to other nearby canyons, the detailed knowledge needed to predict subsurface flow paths does not exist. Lack of understanding of these phenomena, coupled with rapid flow in the alluvium and apparent rapid flow facilitated by perched waters, was central to the surprise over detection of chromium near the water supply wells. An improved knowledge of these inter-watershed processes is needed to design an effective, early warning monitoring program."</p> <p>The recommendations are:</p> <p>LANL should add a site-wide perspective to its future groundwater monitoring plans. This perspective would include the following:</p> <p style="padding-left: 40px;">Design additional characterization, modeling, and geochemical investigations to better understand potential fast pathways between watersheds. Increase the area of the regional aquifer that is monitored by sampling inter-canyon areas from mesas or using directional wells from canyon bottoms. Provide additional monitoring locations in the southern area of the site and on Pueblo de San Ildefonso lands. Develop more applications of geophysical techniques to supplement information provided by well drilling and sampling, especially for understanding</p>		

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		<p>vadose zone pathways.</p> <p>As LANL's site characterization and monitoring programs mature, well locations should be derived from a quantitative spatial analysis of monitoring well locations to identify areas with the greatest uncertainty in plume concentrations, using geo-statistics or other methods, possibly coupled with flow and transport modeling.</p>		
363	Gen.	<p>I'm reading from the Plans and Practices for Groundwater Protection at Los Alamos National Laboratory, Final Report, National Research Council of the National Academies.</p> <p><i>Findings and Recommendations</i>, page 67.</p> <p>Mathematical models are essential tools for both codifying current knowledge and identifying knowledge gaps. Although LANL is using a numerically sophisticated multiphase model for vadose and regional groundwater modeling, it is not yet possible to predict with confidence when, where, or if a contaminant might appear in the regional aquifer. This is due largely to an exceptionally complex vadose zone. Studies show that most of the mass of many contaminants is likely still in the vadose zone on the way down from the release location to the regional aquifer.</p> <p><i>Recommendation:</i> LANL should increase its efforts to develop and use quantitative methods to describe contaminant pathways through the vadose zone and into the regional aquifer, as follows:</p> <p style="padding-left: 40px;">Mathematical models that incorporate the uncertainties from alternative conceptual models should underpin plans for design and operation of the site-wide monitoring system. Characterization of the vadose zone begun under the Hydrogeologic Workplan should continue with emphasis on new results from characterization and monitoring being used to test and improve the mathematical models.</p> <p>To support an evaluation of the effectiveness of the monitoring system to provide early warning of the potential impacts on the regional aquifer, LANL should quantify, to the extent possible, the inventory and current location of the</p>	See the Department's response regarding groundwater protection in the document titled General Response to Comments.	No

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		<p>contaminants disposed of in the major waste sites.</p> <p>Large waste disposal sites in the dry canyons and on dry mesas have not received as much attention as wet canyons and wet mesas because they presumably lack an aqueous driver to move contamination. The presumed dry locations have received minimal characterization with regard to the presence, strength, and potential impact of aqueous drivers. In some of these, surface disturbances have led to unexpected increased infiltration rates. LANL provided few data to justify assumptions about the relative immobility of wastes at these sites.</p> <p><i>Recommendation:</i> LANL should confirm the integrity (lack of surface disturbances or conditions leading to increased infiltration) of the major disposal sites in the dry canyons and mesas.</p> <p>LANL should schedule regular subsurface surveillance beneath disposed wastes on dry mesas and in dry canyons.</p> <p>LANL's present conceptualizations of the regional aquifer lead to very different pictures of how contaminants in the aquifer might behave. If there is low connectivity between layers within the aquifer, the contaminants might remain near the top of the regional aquifer and most likely discharge in the springs near the Rio Grande. On the other hand, higher connectivity could result in the contaminants spreading vertically and more likely entering the deep screened intervals of regional water supply wells.</p> <p><i>Recommendation:</i> LANL should continue efforts begun under the Hydrogeologic Workplan to characterize the regional aquifer. More large-scale pumping tests and improved analyses of the drawdown data are needed to establish a scientifically defensible conceptual model of the aquifer, i.e., leaky-confined, unconfined, or layered.</p>		
364	Gen.	<p>I'm going to be reading from Plans and Practices for Groundwater Protection at the Los Alamos National Laboratory, Final Report, as published by the National Research Council.</p> <p>With regard to LANL's practices in assessing the quality of its groundwater sampling data, the committee found that good data quality procedures are in</p>	See the Department's responses regarding groundwater protection in the document titled General Response to Comments.	No

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		<p>place, but there is a lack of follow-through in how the data are reported.</p> <p>Recommendation: LANL should ensure that there is consistency and clarity of all related sampling and analytical procedures with documented follow-through and appropriate action. This especially relates to: having clear data quality objectives; documenting how samples are to be collected; documenting how data are handled, statistically compiled, and reported; clear documentation of the quality of the data; and identification of all suspect data. Interpreting data at or near analytical detection limits is an area of growing scientific interest. LANL can benefit from scientific exchanges with other groups and organizations that are actively working in this area (such as the Environmental Protection Agency, American Society for Testing and Materials).</p> <p>Lack of agreement between LANL, regulators, and concerned citizens as to what constitutes the appropriate representation of groundwater contamination data is a source of confusion and distrust.</p> <p>Recommendation: LANL should ensure that measurements at or near background levels or near analytical detection limits (i.e., Method Detection Limits and Practical Quantitation Levels) are scientifically and statistically sound and are reported appropriately.</p> <p>The LANL site office of DOE should take steps to ensure that LANL and site regulators agree on how all such data are to be handled, compiled, and reported.</p> <p>LANL should make more effort to ensure that data uncertainties are made clear to public stakeholders.</p> <p>LANL's Groundwater Background Investigation Report (LANL, 2006b) is an important step in establishing levels of naturally occurring contamination in the regional aquifer, although some data quality gaps were identified by the committee. The Integrated Groundwater Monitoring Plan (LANL, 2006c) lists non-LANL sources of groundwater contamination. Such data are important to support future remediation decision making.</p> <p><i>Recommendations:</i> LANL should continue to track regional groundwater monitoring wells and water supply wells routinely to improve the statistical basis</p>		

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		<p>for reporting any increases above background.</p> <p>LANL's work under the Hydrogeologic Workplan significantly enhanced understanding of the hydrological characteristics of the site, and lessons learned during the program can improve future drilling efforts. Wells constructed under the Hydrogeologic Work plan were intended for characterization.</p> <p>LANL later attempted to use the characterization wells that reached the regional aquifer for monitoring. As noted earlier, their use for monitoring was evidently compromised by drilling and well development procedures.</p> <p><i>Recommendation:</i> LANL should plan and conduct future characterization drilling and monitoring well drilling as separate tasks. For monitoring locations where characterization data are unavailable, LANL should consider drilling simple test holes to obtain these data before attempting to drill the monitoring wells.</p> <p>With the more complete hydrogeologic characterization that is now available (see Chapter 4), LANL can design and construct future monitoring wells more confidently. LANL's plans to obtain geologic and geophysical logs during drilling further increase confidence that well screens can be installed to intercept a contaminant pathway.</p> <p><i>Recommendation:</i> LANL should design and install new monitoring wells with the following attributes: A borehole drilled through the monitoring zone without the introduction of drilling muds or additives (i.e., use air or water); one screened interval that targets a single saturated zone, and a carefully planned design (length and depth) of the well screen, which is confirmed with information collected in the drilling process.</p> <p>Drilling under specific conditions and sampling requirements can lead to exceptions to the above, and adapting to circumstances will be necessary.</p> <p>LANL's Quality Assurance Project Plan should enforce the documentation of any and all instances where it is believed that chemicals and radionuclides detected in groundwater are not the result of LANL operations, such as naturally occurring or anthropogenic contaminants or the result of sampling artifacts.</p>		

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		<p><i>Concluding Remarks</i> - LANL's groundwater protection program is at or about its temporal midpoint, continuing for another eight years until 2015. The consent order establishes an enforceable process and schedule for the program.</p> <p>The committee hopes that the assessments, findings, and recommendations presented in this report will be useful in informing technical decisions that will be made within the consent order process.</p>		
365	Gen.	<p>Final Report published by the National Research Council.</p> <p><i>Findings and Recommendations on Monitoring and Data Quality.</i></p> <p>Implementing a monitoring plan involves the practicalities of constructing groundwater wells and analyzing samples from the wells. Any monitoring activity faces a conundrum: If little or no contamination is found, does this mean that there is in fact little or no contamination, or that the monitoring itself is flawed?</p> <p>During this study the committee was presented a good deal of information suggesting that most or all wells into the regional aquifer at LANL are flawed for the purpose of monitoring.</p> <p>The committee did not disagree, but rather found a lack of basic scientific knowledge that could help ensure future success. Evidence about the conditions prevalent around the screens in the compromised wells is indirect - relying on plausible but unproven chemical interactions, general literature data, analysis of surrogates, and apparent trends in sampling data that may not be statistically valid.</p> <p>The committee's statement of task pose two questions regarding the reliability of data produced in LANL's current monitoring program:</p> <ol style="list-style-type: none"> 1. Is the laboratory following established scientific practices in assessing the quality of its groundwater monitoring data? 2. Are the data (including qualifiers that describe data precision, accuracy, detection limits, and other items that aid correct interpretations and use of the data) being used appropriately in the laboratory's 	See the Department's response regarding groundwater protection in the document titled General Response to Comments.	No

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		<p>remediation decision making?</p> <p>The short answer to the first item is a qualified yes. LANL is using good practices in terms of having the proper quality assurance and quality control plans and documentation in place, but falls short of consistently carrying out all the procedures cited in the plans. Well drilling and completion methods are continuing to evolve and the site is only beginning to implement its groundwater monitoring program under the consent order.</p> <p>The answer to the second item as written was judged as no. Although LANL appears to be generating sound analytical data, the results presented in databases and LANL reports often do not carry the proper qualifiers according to good QA/QC practices. This especially applies to analytical results near or below the limits of practical quantitation and detection, near the natural background, or both.</p> <p>The difficulty here is that reported detection of contamination that is not statistically significant may be taken as real by regulators and other stakeholders - with concomitant concerns and calls for remedial action.</p> <p>The following findings and recommendations are intended to strengthen LANL's well drilling and sample analyses for site monitoring.</p> <p>Data from scientifically vetted (peer-reviewed) studies are necessary to authoritatively address concerns and uncertainties about how drilling and well completion processes might alter the native conditions around well screens and to ensure reliable monitoring activities in the future.</p> <p>The committee received little scientific information - for example, on a par with LANL's publications about vadose zone pathways - regarding the geochemical behavior of contaminants in the subsurface or effects of non-native materials (drilling fluids, additives, construction materials) on the geological media to be sampled.</p> <p>Recommendation: LANL should plan and carry out geochemical research to ascertain the interactive behavior of contaminants, materials introduced in drilling and well completion, and the geological media.</p>		

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		<p>As a part of LANL's future plans for site-wide monitoring, this work would include:</p> <p>Determining the nature of interactions among material proposed for use in constructing monitoring wells and the types of geological media that LANL intends to monitor.</p> <p>Quantitative measurement of sorption of contaminants onto the natural, added, and possibly altered constituents that constitute the sampling environment of the monitoring well, and publication of results in peer-reviewed literature.</p> <p>The committee is not recommending open-ended research. Rather, targeted investigations would underpin plans for future monitoring of specific areas of the site: contaminants of greatest concern in the area, geologic media expected to be sampled (known from previous site characterization), and drilling fluids, additives, and other materials intended to be used in constructing the monitoring wells). Screening tests envisioned by the committee would include simple batch equilibrium tests to measure solubilities and sorption coefficients and to determine what, if any, interactions actually occur among drilling materials and the geologic media - and whether alterations are permanent or temporary. More detailed column tests can simulate and measure effects of flow rate and surface area (mass transfer) around the well screens.</p> <p>Planning, conducting, and interpreting the results will require the high quality of science one would expect of a national laboratory.</p>		
366	Gen.	<p>I'm going to read selections from three letters regarding the plutonium nuclear facility, written by A. J. Eggenberger, Chairman of the Defense Nuclear Facilities Safety Board. The first is dated January 13th, 2009:</p> <p>In the revised Implementation Plan for the Defense Nuclear Facilities Safety Board's Recommendation 2004-2, 'Active Confinement Systems,' the Department of Energy (DOE) committed to delivering the Ventilation System Evaluation Report for the Plutonium Facility at Los Alamos National Laboratory (LANL) to the Board by December 21st, 2006.</p> <p>The Board has not yet received this report. The evaluation of the Plutonium Facility was intended to address a 'high-priority facility' on an accelerated</p>	<p>The Permittees have demonstrated that they can conduct the hazardous waste management operations that they propose in the TA-55 vault in a manner that's protective and in compliance with the regulations and the permit provisions governing container management at this location are protective. The conditions and requirements in</p>	No

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		<p>schedule, and to include an assessment of the facility's needs and a plan for resolving identified gaps with appropriate upgrades.</p> <p>"As DOE finalizes this deliverable, the Board wishes to emphasize that the implementation of the recommended actions demands careful integration and planning to ensure successful execution. "Therefore, the Board requests that, within 90 days of receipt of this letter, DOE submit the following deliverables as described in the Implementation Plan for Recommendation 2004-2."</p> <p>The first item is a site office facility-specific Ventilation System Evaluation Report for the Plutonium Facility at LANL (originally due December 21st, 2006)." The second point is a Program Secretarial Office concurrence with and approval of the upgrades in coordination with the Central Technical Authority."</p> <p>Then, "Additionally, pursuant to 42 USC, Article 2286b(d), the Board requests that DOE provide a report summarizing physical modifications and upgrades for the Plutonium Facility, including plans for funding and a schedule for completion, to be submitted along with the above two deliverables. This report should include the approach DOE will take to ensure that the best project management practices are applied in implementing the upgrades. It should also include a technical justification if any of the enhancements recommended in LASO's September 17th, 2008, letter will not be implemented in the near future. Sincerely, A. J. Eggenberger, Chairman."</p> <p>The second is dated April 7th, 2009, and is to Secretary of Energy Steven Chu.</p> <p>"April 7th, 2009, the Honorable Steven Chu, Secretary of Energy, US Department of Energy, 1000 Independence Avenue, Southwest, Washington, DC, 20585-1000.</p> <p>"Dear Secretary Chu: The Defense Nuclear Facilities Safety Board (Board) remains concerned that the safety-class vault water bath system at the Plutonium Facility at Los Alamos National Laboratory (LANL) is unable to fulfill its safety function in a reliable manner. This system is relied upon to protect the public by preventing one of the laboratory's highest consequence accident scenarios. Despite this critically important safety function, significant unresolved issues with this safety-class system are unaddressed; leaving it in an indeterminate and degraded state with respect to operability, reliability, and</p>	<p>the proposed permit, combined with the information that the applicants have provided to us in their application, satisfy any of the requirements of RCRA and New Mexico's Hazardous Waste Act. The issues raised by the Defense Nuclear Facilities Safety Board are beyond the purview of those statutes. Furthermore, the Department is aware that hazardous wastes are not managed in the room containing the vault water bath system at TA-55.</p>	

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		<p>effectiveness – a situation that is unacceptable to the Board.</p> <p>"Many of the highest consequence accidents at LANL involve the processing, handling, and storage of plutonium-238 enriched heat source plutonium (HS-Pu). The vast majority of LANL's inventory of HS-Pu is stored in the Plutonium Facility's vault water baths, which are relied upon to dissipate heat generated by the intense radioactive decay of HS-Pu. This heat dissipation prevents about 200 nonsafety-class containers - some of which have no reliable design information - from overpressurizing, failing, and releasing their contents. The unmitigated off-site consequences of an overpressurization event involving even a single container of HS-Pu amount to nearly 500 rem; the consequences of multiple failures are much higher.</p> <p>"In a letter to the National Nuclear Security Administration (NNSA) dated October 16th, 2007, the Board identified deficiencies in a number of vital safety systems and urged both NNSA and the laboratory to take actions that would rapidly increase confidence in credited safety systems. In particular, inadequacies were identified in the safety basis associated with the safety-class vault water baths. The Board has determined that the safety function of the vault water baths has not been effectively defined, implemented, or protected. As a result, inadequate controls exist to make certain that vital water level and cooling are maintained to ensure that all of the nonsafety-class HS-Pu containers will remain submerged and adequately cooled during all anticipated normal and abnormal conditions. In particular, a failure of the system cooling function for the vault water baths, which is not credited as a safety control, could allow the water in the baths to boil in as little as 18 hours, followed shortly by uncovering of the containers. Insufficient information exists to reliably predict how some of the containers will respond to such a loss of cooling. "Notwithstanding these facts, the existing LANL system surveillance required only a monthly verification of water level and a spot-check that the nonsafety-class containers were submerged. The Board has identified a number of other weaknesses related to the vault water baths that further challenge their ability to perform the required safety function. Based on recent interactions with the Board's staff, both LANL and the Los Alamos Site Office have acknowledged the existence of these issues, however, it is not clear that proposed near-term actions will resolve</p>		

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		<p>the issues in an acceptable manner. "The Board is deeply concerned by this lack of progress in addressing deficiencies with the safety-class vault water baths to ensure that this critical system can perform as a reliable and effective control. The Board notes that an assessment of the vault water baths performed by LANL in 2008 failed to identify any of the issues outlined in this letter. This calls into question the laboratory's ability to conduct credible assessments of system safety functions.</p> <p>Based on the severity and persistence of these issues, as well as other safety system deficiencies identified in the Board's October 16th, 2007, letter, the Board believes emphasis must be placed on improving the ability to identify and expeditiously address operability issues associated with the vault water baths and other vital safety systems at LANL.</p> <p>"Therefore, pursuant to 42 USC, Part 2286b (d), the Board requests a report and briefing within 45 days of receipt of this letter describing (1) any compensatory measures and immediate actions NNSA has taken to improve the safety posture of nonsafety-class HS-Pu containers stored in the vault water baths, and (2) the strategy for fully characterizing and correcting vault water bath deficiencies identified by the Board or for improving the robustness of HS-Pu containerization.</p> <p>Additionally, the Board requests a briefing within 60 days of receipt of this letter describing the plan of action, including milestones and completion dates, to improve the process used to identify and resolve operability issues relating to other vital safety systems at LANL." This is "Sincerely A. J. Eggenberger," again.</p> <p>That's it.</p> <p>And then the third letter is dated July 28th, 2009, and it's again to Mr. D'Agostino, and it refers to the National Security Administration May 19th response to the April 7th letter that I just read. I'm just going to read highlights.</p> <p>The Board disagrees with NNSA's assertion that all nonsafety-class containers presently stored in the vault water baths can currently survive for at least 18 months in air. There is no engineering data to support such a claim for 40 of</p>		

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		<p>these containers. While future analysis may support this position, the fact that the necessary data do not currently exist underscores the need to safely and aggressively pursue actions to improve the robustness of HS-Pu containerization."</p> <p>"The Board and its staff will continue to closely follow the progress of NNSA and LANL in meeting the scheduled milestones and commitments to correct the deficiencies in the vault water bath system, improve HS-Pu containerization, and strengthen the process to identify and resolve vital safety system operability issues at LANL.</p> <p>I'd just like to say that, from what I understand, that Rocky Flats in Colorado was closed due to violations, as far as -- as far as hazardous waste violations. This was -- I believe it was in the '80s. This place was also made a Superfund site, as far as cleanup, and was officially closed. I think LANL has some of those same -- same and similar violations, some of the similar operations, and I think it would be interesting to look into the possibility of severe, if not Superfund, cleanup conditions. They've been cited by the Department of Energy several times for violations, Los Alamos, and by their own Tiger Teams, and various other federal agencies as well.</p>		
367	Gen.	<p>I'm going to read selected sections from two letters regarding the Plutonium Nuclear Facility written by John Mansfield, Vice Chairman of the Defense Nuclear Facilities Safety Board. The first letter is dated October 26th, 2009, and is to Secretary of Energy Steven Chu. The second letter is dated March 15th, 2010, and is to Secretary -- Deputy Secretary of Energy Daniel Poneman.</p>	<p>The Permittees have demonstrated that they can conduct the hazardous waste management operations that they propose in the TA-55 vault in a manner that's protective and in compliance with the regulations and the permit provisions governing container management at this location are protective. The conditions and requirements in the proposed permit, combined with the information that the applicants have provided to us in their application, satisfy any of</p>	No

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			the requirements of RCRA and New Mexico’s Hazardous Waste Act. The issues raised by the Defense Nuclear Facilities Safety Board are beyond the purview of those statutes. Furthermore, the Department is aware that hazardous wastes are not managed in the room containing the vault water bath system at TA-55.	
368		Permit Section Specific Comments		
369	1.8	<p>The definition for hazardous waste management unit in this section is acceptable but the Permittees reserve the right to object to the use of the term in other portions of the revised draft permit. The objection relates to the interpretation of the term “permitted units” in this general definition. The Permittees specifically object to the identification of certain units as permitted units in other parts of the permit (please see comment on the definition of permitted unit on page 18, line 14). In particular, the use of the term hazardous waste management unit subsequently affects the interpretation of Parts 11.2.(1) and (2) of the revised draft permit regarding the division of the appropriate unit designations between those covered by the permit and the Consent Order.</p> <p>No suggested change to text.</p>	See the Department’s response regarding regulated units/alternative requirements in the document titled General Response to Comments.	No
370	1.8	<p>The definition for permitted unit in this section is acceptable but the Permittees reserve the right to object to the use of the term in other portions of the revised draft permit. The Permittees do not agree with the list of identified permitted units contained in Attachment J (Hazardous Waste Management Units), Table J-1 (Active Portion of the Facility) of the permit. The table lists Column 1, <i>Unit Identifiers</i> for TA-54 “G,” “H,” and “L” with the term “Material Disposal Area” in the Column 4 <i>General Information</i>. These identifiers potentially include a much larger area than the Permittees agree has been actually used for the management of hazardous waste. This identification also confuses other portions of the revised draft permit (<i>see</i> comment on the definition of</p>	See the Department’s response regarding regulated units/alternative requirements in the document titled General Response to Comments.	No

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		<p>hazardous waste management unit on page 17, line 28 and the general comment on regulated units).</p> <p>See Comment on Table J-1 and proposed text change, below.</p> <p>No suggested change to text.</p>		
371	1.8	<p>Suggested Changes to Section 1.8 DEFINITIONS in the February 2, 2010 New Mexico Environment Department Hazardous Waste Permit (DRAFT) for Los Alamos National Laboratory</p> <p>-The February 2, 2010 New Mexico Environment Department (NMED) Hazardous Waste Permit (DRAFT) for Los Alamos National Laboratory currently contains definitions that are:</p> <ol style="list-style-type: none"> 1). Incomplete, and/or 2). Incorrect for compliance with the Resource and Conservation Recovery Act (RCRA). <p>-There are also</p> <ol style="list-style-type: none"> 3). Additional definitions that should be included in the Draft Permit. <ul style="list-style-type: none"> • Definitions to add or modify in the DRAFT Permit Section 1.8: • Add to the DRAFT Permit the definition in 40 CFR §264.90(a)(2) for "<i>Regulated Unit</i>" <p style="margin-left: 40px;">Regulated Unit. A surface impoundment, waste pile, and land treatment unit or landfill that receives hazardous waste after July 26, 1982 (hereinafter referred to as a "regulated unit") must comply with the requirements of §§264.91 through 264.100 in lieu of §264.101 for purposes of detecting, characterizing and responding to releases to the uppermost aquifer. The financial responsibility requirements of §264.101 apply to regulated units.</p> • Modify the definition in the Draft Permit for "<i>Permitted Unit</i>. 11 The definition for <i>Permitted Unit</i> in the LANL Draft Permit is incorrect and does not meet the 	<p>The suggestion that the Renewal Permit include definitions for terms defined in the regulations is unfounded. Permit Section 1.8 states “[t]erms used in this Permit shall have the same meanings as those in the HWA, RCRA, and their implementing regulations unless this Permit specifically provides otherwise.” Subject terms include: <i>regulated unit, active life, active portion, closed portion, inactive portion</i>. The inclusion or exclusion of these terms in the Permit has no bearing on the regulatory or permit status of Material Disposal Areas G, H, and L and in all circumstances the Department utilizes and conforms to the definition of these terms as specified at 40 CFR § 260.10.</p> <p><i>Permitted Unit</i> – The Department has changed the definition of this term for completeness. The Permit Section 1.8 definition of this term is consistent with the definition at 40 CFR § 260.10 and</p>	No

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		<p>required formal process under RCRA for issuance of a permit. The incorrect definition on page 19 in the LANL Draft Permit is pasted below:</p> <p>"Permitted Unit means a hazardous waste management unit: 1) that is not an interim status unit; and 2) that is authorized by this Permit and listed in Attachment J (Hazardous Waste Management Units), Table J-1 (Active Portion of the Facility), or Table J-2 (Permitted Units Undergoing Post-Closure Care)."</p> <p>- The <i>recommended</i> definition for Permitted Unit is pasted below:</p> <p>"Permitted Unit means a hazardous waste management unit: 1) that is not an interim status unit; and 2) that is issued a RCRA permit to manage hazardous waste. A RCRA permit application for each hazardous waste management unit consists of two parts; part A (see 40 CFR §270.13) and part B (see 40 CFR §270.14 and applicable sections in 40 CFR §§270.15 through 270.29)."</p> <p>In the Draft Permit, Table J-1 "Active Portion of the Facility," pp. 2-3, list TA 54 "G" as an active landfill (code 080) and as a "regulated unit," but states "Unit not permitted to receive hazardous waste." This indicates that MDA G is illegally carrying on operations without having met Part B requirements to be permitted, without submitting a closure plan and post closure permit application and has disposed of hazardous waste at the unit without a RCRA permit for its active life.</p> <p>Table J-1 p.5 lists MDAs Hand L as regulated units under the 080 code for active landfills and states "Unit not permitted to receive hazardous waste."</p> <p>Table J-2 "Permitted Units Undergoing Post-Closure Care," p.8, lists no units in postclosure care.</p> <p>Table J-3 "Closed Portion of the Facility not in Post-Closure Care," p. 9, identifies that TA-16 surface impoundment disposal received waste after July 26, 1982, <i>i.e.</i>, it is a "regulated unit." There is no information to indicate groundwater monitoring requirements are being met for post closure under 40 CFR §§264.91-100. The location of TA-16 must be, but is not identified. Surface impoundments at TA-16 are not identified in the table.</p>	<p>is augmented to reflect the fact that the Permit addresses both units actively managing hazardous waste and units in post-closure care. Post-closure care is an activity regulated under RCRA and NM's HWA, is specifically addressed at 40 CFR Part 264, Subpart G, addresses the management of hazardous wastes or waste residues remaining after a unit is closed, and is therefore appropriately included in the definition of <i>permitted unit</i>. The Department does not consider it necessary that the Permit definition include the regulatory clause regarding RCRA permit applications.</p>	

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		<ul style="list-style-type: none"> • Many of the definitions to add to the Draft Permit Section 1.8 are from 40 CFR §260.10 Definitions. -Add from §260.10 <i>Active life</i> of a facility means the period from the initial receipt of hazardous waste at the facility until the Regional Administrator receives certification of final closure. -Add from §260.10 <i>Active portion</i> means that portion of a facility where treatment, storage, or disposal operations are being or have been conducted after the effective date of part 261 of this chapter and which is not a closed portion. (See also "closed portion" and "inactive portion".) -Add from §260.10 <i>Closed portion</i> means that portion of a facility which an owner or operator has closed in accordance with the approved facility closure plan and all applicable closure requirements. (See also "active portion" and "inactive portion".) -Add from §260.10 <i>Inactive portion</i> means that portion of a facility which is not operated after the effective date of part 261 of this chapter. (See also "active portion" and "closed portion".) • Many of definitions are incomplete and must be supplemented with language from 40 CFR 260.10 Definitions. <p>NOTE: Section 1.8 in the DRAFT Permit has an incomplete definition for <i>Active Portion</i> that is pasted below. I recommend replacement with the definition pasted above from 40 CFR § 260.10.</p> <p>-From page 17 of the Draft Permit</p> <p>10 Active Portion means that portion of a facility where treatment, storage, or disposal</p> <p>11 operations are being or have been conducted after the effective date of 40 CFR Part</p> <p>261</p> <p>12 and which is not a closed portion as defined in 40 CFR § 260.10.</p> <p>NOTE: The effective date of 40 CFR Part 261 is May 19, 1980. Disposal operations were conducted at LANL RCRA "regulated units" MDAs G, Hand L after May 19, 1980.</p>	<p><i>Active Portion</i> – The Department intentionally augmented the definition of this term to exclude unit at the Facility that are closed</p>	

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		<p>• Suggested changes to the definition of <i>Facility</i> in the DRAFT Permit.</p> <p>The definition of <i>Facility</i> in the DRAFT Permit is pasted below:</p> <p>-From page 18 of the Draft Permit</p> <p>Facility means the Los Alamos National Laboratory site comprised of approximately 40 square miles, located on the Pajarito Plateau in Los Alamos County in north central New Mexico, approximately 60 miles north-northeast of Albuquerque and 25 miles northwest of Santa Fe, and owned by the United States Department of Energy.</p> <p>Add from 40 CFR §260.10 <i>Facility</i> means:</p> <p>(1) All contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).</p> <p>(2) For the purpose of implementing corrective action under § 264.101, all contiguous property under the control of the owner or operator seeking a permit under subtitle C of RCRA. This definition also applies to facilities implementing corrective action under RCRA Section 3008(h).</p> <p>(3) Notwithstanding paragraph (2) of this definition, a remediation waste management site is not a facility that is subject to 40 CFR 264.101, but is subject to corrective action requirements if the site is located within such a facility.</p> <p>DISCUSSION OF THE IMPORTANCE OF THE DEFINITIONS ABOVE</p> <p>RCRA regulations require that a hazardous waste management unit must have permits during the active life (including the closure period) of the unit. (40 CFR 270.1 (c)). "Six months after the initial promulgation of the part 261 regulations, treatment, storage, or disposal of hazardous waste by any person who has not applied for or received a RCRA permit is prohibited." (270.1 (b)). The effective date of 40 CFR Part 261 is May 19, 1980. Disposal operations were conducted at LANL "regulated units" Material Disposal Areas G, Hand L after May 19, 1980.</p> <p>The definitions for a permitted unit in the RCRA permit application process consists</p>	<p>so that these two types of permitted units might be distinguished in the Permit.</p> <p><i>Facility</i> – The Department has utilized its right and obligation to make the Permit more understandable and more enforceable by defining this term so as to distinguish between the entirety of LANL and those portions of LANL where hazardous wastes are being managed under the Permit. The Department has clarified this geographical distinction by defining <i>hazardous waste management unit</i> as being the applicable area referenced at 40 CFR § 260.10(1).</p>	

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		<p>of two parts known as Part A and Part B. Part A gives only general information. 40 CFR 270.1. The Part A application is necessary for a waste site to receive "interim status," pending more formal regulation. Part B of the application is more detailed and includes specific information relating to disposal facilities, environmental impact, and other details necessary for the review of the permit application. 40 CFR 270.14. Under the Post-closure Section 9 of the Draft Permit, the regulated units G, H and L are listed as one of three types of "permitted units." However, the MDAs G, H and L have not met the RCRA criteria for being permitted units.</p> <p>"The RCRA requires facilities that treat, store or dispose of hazardous waste to obtain a permit from either the United States Environmental Protection Agency or an authorized state." <i>Fla. Power & Light Co. v. EPA</i>, 145 F.3d 1414 at 1417 (D.C. Cir. 1998).</p> <p>Regulated units (Material Disposal Units, MDAs) G, H and L and other hazardous waste management units that received hazardous waste at LANL after July 26, 1982 need to be accurately described in the Draft Permit. The regulated units G, H and L were not part of the Part B permit after November 8, 1985, thus losing their interim status (40 CFR §270) and were slated to close under 40 CFR §264 Subpart G. (July 6, 2009 LANL Draft Permit Fact Sheet, p.27).</p> <p>The definition of "closed portion" includes the requirement of an approved facility closure plan. It is important to note that LANL did not obtain an approved closure plan for G, H and L and that no Closure Plan is provided for G, H and L in the Draft Permit. Regulated units G, Hand L remain as "active portions" of the LANL Facility because they were not "closed" subject to applicable RCRA regulations.</p> <p>Regulated units G, Hand L were subject to RCRA Part B requirements by 1986 at the latest, but continued without permits to receive hazardous and mixed waste until at least 1990 for Area G; 1986 for liquid hazardous and radioactive wastes at Area L and Area H for radioactive, hazardous, and explosive constituents until 1989. (March 1, 2005 Compliance Order on Consent, p. 77).</p> <p>Because the regulated units G, Hand L lost interim status and did not comply with the Part B permitting requirements, regulated units G, H and L have been and are still operating illegally.</p>	<p>This argument may be important for understanding the regulatory status of the MDAs but it is not helpful for the Permit.</p> <p>See the Department's response regarding regulated units/alternative requirements in the document titled General Response to Comments.</p>	

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		<p>"Corrective Action," the action taken by the NMED under the 2005 Compliance Order on Consent (Consent Order), is not a substitute for meeting the stricter Part B permitting requirements, either in practice or by law. Instead, "corrective action" under the Consent Order is for removal or remediation of the hazardous wastes at regulated units G, H and L. LANL and NMED cannot now claim that because the Consent Order is being applied for corrective action that the regulated units have become "permitted units" in the Draft Permit. After losing interim status, not obtaining closure plans permit and post closure permit, regulated units G, H and L cannot now be elevated to the status of permitted units.</p> <p>LANL had no grace period to continue operating regulated units G, H and L for hazardous waste disposal after November 8, 1985 or to bootstrap absence of regulatory enforcement by NMED for the Closure Plan and Post-Closure permit into permanent immunity from RCRA Part B permitting requirements. The regulated units G, H and L as landfills were required to immediately close. (<i>United States v. Ecko Housewares, Inc.</i>, 62 F.3d 806 at 813 (6th Cir. 1995). Simply ceasing operations does not constitute "closure" within the meaning of RCRA and to avoid liability.</p> <p>At the time LANL ceased <i>disposal</i> operations, <i>storage</i> and future plans for <i>treatment</i> remained -indeed, storage and future plans for treatment continue to this day. Once RCRA's protections are triggered, ceasing disposal operations does not mean an operator is not still actively engaged in contaminating the site. (<i>Environmental Defense Fund, Inc. Lamphier</i>, 714 F.2d 331, 335 (4th Cir. 1983); <i>see also Fisherman's Ass'n v. Remington Arms Co.</i>, 989 F.2d 1305, 1315 (2d Cir. 1993) (although gun club ceased skeet shooting and therefore ceased disposal of hazardous waste, it continued operating storage facility where contamination left on site).</p> <p>Thus, regulated units G, Hand L continue to be in operation without closure plans.</p> <ul style="list-style-type: none"> • Discussion of definitions in the DRAFT Permit for groundwater issues. <p>The Draft Permit contains the following definitions that are the same as definitions in 40 CFR §260.10.</p> <p>-From page 17 of the Draft Permit, <i>Aquifer</i> means a geologic formation, group of formations, or part of a</p>		

No.	Loc.	Comment	NMED Response	Δ
		<p>formation capable</p> <p>14 of yielding a significant amount of groundwater to wells or springs.</p> <p>-From page 18 of the Draft Permit</p> <p>20 <i>Groundwater</i> means water below the land surface in a zone of saturation.</p> <p>Definitions that should be <i>added</i> to the Draft Permit include:</p> <p>.. Add from 40 CF R §260.10 <i>Uppermost aquifer</i> means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary .</p> <p>.. Add from 40 CFR §260.1 0 <i>Confined aquifer</i> means an aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined ground water.</p> <ul style="list-style-type: none"> • Additional groundwater definitions to add to the Draft Permit -can this be combined with the above? <p><i>Unsaturated zone</i> or <i>vadose zone</i> means the zone between the land surface and the water table of the regional groundwater resource.</p> <p><i>Perched groundwater zone</i> means water in a limited zone of saturation below land surface a distance generally greater than 100 feet and above the regional zone of saturation. The perched groundwater zones are generally less than 50 feet thick, are not laterally continuous over a great distance and are bounded below by impermeable beds. Multiple perched zones may be present at one location.</p> <p><i>Regional groundwater resource</i> means the large groundwater resource deep below the Pajarito Plateau. The water table of the regional groundwater resource generally is in the depth range of 800 to 1000 feet below ground surface. The large regionally extensive saturated zone contains interlayered geologic formations that are highly productive aquifers and geologic formations that have low permeability and are poorly productive of groundwater.</p> <p><i>Sole Source Aquifer.</i> The Environmental Protection Agency has designated the Espanola Basin including the 40-square mile property of the Los Alamos National Laboratory as a sole source aquifer. (See Federal Register/Vol. 73, No. 14I Tuesday, January 22, 200 at</p>	<p>Permit Section 1.8 states “[t]erms used in this Permit shall have the same meanings as those in the HWA, RCRA, and their implementing regulations unless this Permit specifically provides otherwise. Where the term is not defined in the HWA, RCRA, implementing regulation, or this Permit, the meaning of the term shall be determined by a standard dictionary reference, EPA guidelines or publications, or the generally accepted scientific or industrial meaning of the term.”</p> <p>The terms “Uppermost aquifer”, “Confined aquifer”, “Unsaturated zone”, “Regional groundwater resource”, “Sole Source Aquifer”, and “Underground source of drinking water” do not appear in the text of the Permit; therefore, they do not need to be defined in the Permit.</p> <p>The meaning of the terms “Vadose zone” and “Perched groundwater zone” is determined by a standard dictionary reference, in accordance with Section 1.8 of the Permit.</p>	

No.	Loc.	Comment	NMED Response	Δ
		<p>Notices page 3723.) The aquifer is eligible for sole source designation because it is the principal source of drinking water for the area. "EPA may essentially "veto" financial assistance proposed by Federal agencies for projects it finds may contaminate such a designated aquifer. To date, EPA has designated 75 sole source aquifers." kt.</p> <p>-Add from 40 CFR §270.2 <i>Underground source of drinking water (USDW)</i> means an aquifer or its portion:</p> <p>(a)(1) Which supplies any public water system; or</p> <p>(2) Which contains a sufficient quantity of ground water to supply a public water system; and</p> <p>(i) Currently supplies drinking water for human consumption; or</p> <p>(ii) Contains fewer than 10,000 mg/l total dissolved solids; and</p> <p>(b) Which is not an exempted aquifer.</p> <p>There is a fundamental requirement to install monitoring wells in the permeable geological formations that are accordingly the pathway for contaminated groundwater away from the disposal sites, including the regulated units. Unfortunately, many of the LANL monitoring wells are installed in poorly productive geologic formations instead of the permeable formations that are important to monitor.</p>	<p>Regional monitoring wells at LANL are designed to monitor a productive zone closest to the water table. Under some circumstances, if the most productive geologic formation is substantially below the water table, a less-productive formation that is closer to the water table will be selected for screen placement. In double-screened wells, the second screen will be usually placed in the deeper, most productive formation.</p>	
372	1.10.1	<p>EPA would like a clarification statement indicating that the RACER is a requirement of the permit; however, not all of the data in the RACER meets the NMED data quality criteria and may not be considered in the decision making process.</p>	<p>The Department disagrees – The data quality limitations of data within RACER are sufficiently described in the database’s implementation document. The Department considers a permit requirement sufficient.</p>	No
373	1.12	<p>The Permittees support the requirements for a community relations plan as set forth in the revised draft permit, with one requested change. As part of the Community Relations Plan, the Permittees are required to specify how they will consult on a government-to-government basis with the local tribes and pueblos. The Permittees do</p>	<p>The Department concurs. The proposed language has been added to the Renewal Permit.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>not document any information about consultations, communications, agreements, and disagreements between the Permittees and tribes and pueblos either in the Facility Operating Record or on the Permittees’ web site unless the tribes and pueblos specifically request that the information be so documented or posted. The Permittees propose that Section 1.12 be revised to clarify this requirement.</p> <p>Suggested language change:</p> <p style="padding-left: 40px;">Page 29, lines 1-4, modify the sentence to read as follows:</p> <p style="padding-left: 40px;">The Permittees shall not document in the Facility Operating Record or post on the Permittees’ web site consultations, communications, agreements, or disagreements between the Permittees and tribes and pueblos unless approved by those tribes and pueblos <u>specifically request that the information be included in the Facility Operating Record or be posted on the Permittees’ web site.</u></p>		
374	1.16	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change:</p> <p style="padding-left: 40px;">Change the reference to Attachment N within in the section from “Figures 2, 3, and 4” to “to Figures 1, 2, and 3”.</p>	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
375	1.16.2	We request that residential cleanup standards must be met for any land to be transferred and that deed restrictions should not be allowed.	<p>The Department disagrees – The Department does not have the regulatory authority to stop the Permittees from transferring land. The Department can only require that any environmental liability must remain with a property and therefore new owners must be made aware of those liabilities prior to the transfer.</p> <p>The land transfer requirements in the Renewal Permit apply only to properties within the permitted</p>	No

No.	Loc.	Comment	NMED Response	Δ
			units. A permitted unit that does not achieve residential cleanup standards will not be considered clean closed and will have to be permitted for post-closure care. There is a provision in the Consent Order (§ III.Y) that addresses land transfer of property addressed under that document.	
376	1.17	This requirement is currently covered in a binding agreement. There is no regulation that requires a facility to report its demolition activities. This agreement was entered into by LANS, DOE and NMED. It is limited and flexible due to the nature of demolition operations at the laboratory. The requirements in the permit are more prescriptive and will cause issues with the demolition process thereby limiting the laboratory's ability to reduce its footprint, potentially jeopardize money allocated for demolition and, should there be issues of whether the laboratory met the requirement, it places the permit in jeopardy through enforcement. Since this is not a permitting issue it should be removed from the permit.	The Department disagrees - The Department has the authority under the omnibus provision of the regulations to include necessary general and specific terms and conditions to a hazardous waste permit to protect human health and the environment.	No
378	2.2.1	The inclusion of the "offsite" wastes section is unnecessary, poses a hardship for various programs, makes problems for national security, and is not a good use of tax payer's monies. This comment addresses both the sited Part of the permit and Attachment L. These sections limit the Laboratory from receiving wastes from off-site. The Laboratory is a National Laboratory. As such its missions are national in nature. This prohibition limits the Laboratory's ability to address national problems such as the Off-site Sealed Source Recovery Program. This program works at both a national and international level to recover sealed radioactive sources and securely dispose of them. This program is aimed at keeping these sources out of the hands of terrorists and preventing them from making "dirty bombs". The prohibition as written restricts the Laboratory to one drum of these sources per year if it is deemed mixed waste (governed by RCRA). At this time the program is not receiving any mixed waste but the potential exists that some	The Department disagrees – NMED limits the amount of off-site waste the Permittees may receive to avoid a significant increase in the quantity of hazardous waste at the Facility. Permit Section 2.9 requires the Permittees implement a waste minimization plan in part to accomplish this goal. The Department has authorized the Permittees to receive limited	No

No.	Loc.	Comment	NMED Response	Δ
		<p>of the sources will be mixed waste. If the amount should exceed one drum per year then the Laboratory would be required to seek permit modifications to increase that amount. Additionally, the Laboratory routinely sends wastes off-site for treatment. It then is required to take back the treated residues (still regulated under RCRA) sometimes. The list of facilities in Attachment L is those facilities that the Laboratory is currently using to treat its wastes off-site. If the Laboratory can no longer use one or more of those facilities or a more efficient or cost effective option becomes available to the Laboratory, it would be required to seek a permit modification. I understand that NMED and the public do not want to see hazardous chemical and radiological/chemical mixed waste disposed at LANL. LANL has not asked for and is not trying to permit a disposal site for those wastes. LANL, however, is a unique member of the NNSA National Laboratory system. It has unique capabilities. It is understandable that with costs and requirements what they are for security and compliance with state/federal DOE laws, regulations and orders that many capabilities are not duplicated throughout the DOE complex. Therefore, if LANL has the capabilities that no other facility has it makes sense to have LANL provide the service necessary to characterize and package certain wastes (i.e. sealed sources, limited wastes from Sandia) for shipment to WIPP. The regulations contain no prohibition against this. The purpose of the permit is to protect the public health and the environment. This provision does just the opposite, it places restrictions upon the facility that make it difficult if not impossible to provide those services it missions demand to protect the nation. In order to carry on the mission of this program unhampered this provision should be deleted from the permit.</p>	<p>amounts of particular wastes and receive hazardous wastes from the limited off-site facilities the Permittees proposed in their permit application. At no time have the Permittees argued or provided evidence that the Renewal Permit's limits on the receipt of off-site wastes "poses a hardship for various programs" or "makes problems for national security."</p> <p>The Permittees have requested relieve from the Department for corrective actions and RCRA's long-term storage prohibitions because of difficulties is shipping wastes off-site. The Department has granted that relief in part because of Permit limits on the receipt of additional wastes.</p>	
379	2.2.1(4)	<p>On page 6 of the Fact Sheet it mentions that LANL is "to receive only sealed source wastes that are eligible for disposal" at WIPP and to "receive no more than one 55-gallon drum of sealed source waste per year" If there is a pathway to disposal, why is there a limit on the number of drums that can be received? It is vitally important to national security to have the flexibility to gather up unused and orphan sources from unsecure locations to prevent their use for terror-type activities and to ensure their proper disposal. The source recovery program at LANL has done an excellent job. Perhaps the current national need may only be one or several drums per year, but if there is an unforeseen increase in the unused/orphan source inventory, the country should have the ability to deal with it without obstacles created</p>	<p>NMED limits the amount of off-site waste the Permittees may receive to avoid a significant increase in the quantity of hazardous waste at the Facility. Permit Section 2.9 requires the Permittees implement a waste minimization plan in part to accomplish this goal.</p> <p>The Department has authorized</p>	No

No.	Loc.	Comment	NMED Response	Δ
		by some unnecessary regulatory control. NMED should not have a limit on such drums but instead insert a clause to assure the drums are sent to WIPP within one year of receipt.	the Permittees to receive the amount of seal-source wastes the Permittees proposed. Furthermore, Permit Section 2.2.1(4) contemplates an increase to the allowable amount of off-site sealed source mixed waste. The Section requires a Class 2 permit modification request with all applicable public participation.	
380	2.2.2	Many of the sources that the Off-site Sealed Source Recovery Program deals with are sources manufactured in the United States but sold or sent out of the country for use. Those sources are then recovered, characterized and packaged for shipment and disposal. It is not impossible that some of these sources will be mixed waste once characterized. Again, it is in the interest of protecting the public from potential threats that these sources should be secured. Therefore, this section should be deleted from the permit as well.	The Department limits the amount of off-site waste the Permittees may receive to avoid a significant increase in the quantity of hazardous waste at the Facility. The Department has authorized the Permittees to receive the amount of seal-source wastes the Permittees proposed.	No
381	2.4.6	We request that waste streams that have not been previously treated in the thermal process (open burning) shall not be allowed to be burned openly under this permit.	The Department disagrees - In accordance with the thermal treatment requirement at 40 CFR § 265.375, the Permittees are permitted to treat previously untreated waste streams so long as they sufficiently characterize the waste.	No
382	2.4.7	Section 2.4.7 requires the Permittees to notify the Department in writing within three days of receiving notice from a waste disposal facility that there is a discrepancy between the waste received and the pre-approved waste analysis certification or accompanying waste manifest or shipping paper. 40 CFR §264.72(c), which addresses	The Department disagrees – the shorter notification time reflects the Department’s interest in appropriate waste	No

No.	Loc.	Comment	NMED Response	Δ
		<p>manifest discrepancies, states that the owner or operator of the receiving facility must attempt to reconcile significant manifest discrepancies, as defined in 264.72(b), with the waste generator or transporter. Section 264.72(c) allows 15 days for resolution of the discrepancy before notice must be given to the administrative agency. The Permittees request that the three day requirement in the revised draft Permit be changed to 15 days. Three days does not provide enough time for the Permittees to attempt to reconcile the discrepancy with the receiving facility, as required under Section 264.72(c).</p> <p>Suggested language change:</p> <p>Page 43, line 1, modify the sentence to read as follows:</p> <p>Permittees shall notify the Department in writing within three <u>15</u> days of their receipt of the notice of the discrepancy from the receiving facility.</p>	<p>characterization.</p> <p>The focus of the regulation cited by the Permittees is manifest discrepancies, not waste characterization. In fact, 40 CFR § 264.72(c) would allow no notification to the authority if the discrepancy is resolved within the specified time.</p> <p>The Department requires early notice of any possible error in waste characterization so that it might evaluate all possible ramifications, including problems in the waste characterization process and the possible mismanagement of similar wastes remaining at the Facility.</p>	
383	2.4.9	<p>The Permittees agree that there may be occasions when a comprehensive analysis for all constituents of a generated waste may be appropriate to meet the requirements of 40 CFR §268.48 where there is no other information. However, the permit condition does not allow alternative options. The condition as written does not explain the terms “laboratory analysis” and “capable of measuring,” and is therefore ambiguous. Any condition of this Permit must clearly identify requirements imposed on the Permittees.</p> <p>Section 2.4.9 regards waste characterization for compliance with Land Disposal Restrictions (LDR) and the condition specifically addresses the hazardous constituents listed in the referenced table. 40 CFR §268.48 describes compliance with treatment standards for underlying hazardous constituents as defined by 40 CFR §268.2(i). 40 CFR §268.2(i) states that the term “underlying hazardous constituents” (UHCs) means constituents listed in the table “...which can reasonably be expected to be present at the point of generation of the hazardous waste at a concentration above the constituent-specific UTS treatment standards.”</p>	<p>The Department agrees that the term “capable of measuring” may be ambiguous so with the concurrence of the Permittees the following changes are made in the Renewal Permit to the following paragraph,</p> <p>When using laboratory analysis as part of a hazardous waste characterization pursuant to Attachment C (Waste Analysis Plan), Section C.3.1.2, the Permittees shall require the laboratory to report concentrations</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>The permit condition precludes the use of process knowledge or other acceptable knowledge (see Section 3.1.1, Attachment C) to reasonably determine whether the UHCs are present. The preamble to the final Phase II rule implementing the LDR states: "regulated entities do not have to ascertain the presence of all hazardous constituents for which EPA is promulgating a universal treatment standard. Generators may base this determination on their knowledge of the raw materials they use, the process they operate, and the potential reaction products of the process, or upon the results of a one-time analysis of the entire list of constituents at 268.48" (see 59 FR 48015). In addition, EPA's April 1994 guidance for waste analysis plans in permits also supports the use of other waste information in addition to sampling and analysis for characterization and does not revise this provision in the case of LDR determinations (ECDIC-2002-011, OSWER 9938.4-03). NMED's adoption of the federal regulations does not include a provision revising this requirement (see Hazardous Waste Management Regulations, 20.4.1.801 [3/1/2009]).</p> <p>Additionally, as indicated above, and at 58 FR 29872, if a one-time analysis for all the 40 CFR §268.48 constituents is conducted, subsequent analysis may be limited to only those UHCs identified in the initial sampling and analysis. The permit condition, as currently written, requires that all constituents must be analyzed at any time laboratory analysis is used as part of a hazardous waste characterization.</p> <p>Attachment C of the draft permit describes the use of laboratory analysis both as primary sampling and analysis (Section 3.1.2) where acceptable knowledge is insufficient for waste characterization and as additional characterization data, an allowable component of acceptable knowledge when appropriate (Section 3.1.1). Laboratory analysis supporting AK is often selective in terms of analytes measured. The proposed permit condition does not define which type of laboratory analysis is being considered.</p> <p>The use of the term "capable of measuring" in the condition is not sufficiently explained by the additional reference to SW-846 to resolve its meaning for compliance purposes. SW-846 contains numerous sources for determining whether the contained methods are appropriate for analytes of concern. Chapter Two of SW-846 specifies the determinative methods for analysis of specified analytes but individual methods can potentially be used for much wider ranges of analytes. For example, Method 8260B</p>	<p>of all hazardous constituents listed at 40 CFR § 268.48, <i>Table UTS</i> that the analytical test method used is capable of measuring, as specified at the most recent version of the U.S. EPA's <i>Test Methods for Evaluating Solid Wastes (SW-846)</i>. <u>When performing this laboratory analysis the Permittees will not be required to perform sample preparation or determinative procedures other than those performed routinely for the target analytes.</u></p>	

No.	Loc.	Comment	NMED Response	Δ
		<p>(gas chromatography/ mass spectrometry) of SW-846 is used to determine volatile organic compounds for waste characterization. The method contains a table listing those compounds that can be determined by the method using the contained procedures (Section 1.1) and this table is generally in agreement with Table 2-1 of Chapter Two. However, the method further states that it can be used to quantitate most volatile organic compounds that have boiling points below 200°C (Section 1.3). This would potentially add many analytes in Table UTS that are not specifically listed for the method in SW-846 Table 2-1 where the appropriateness of the analytical requirements (e.g., detection limits, reproducibility) are not known. Additionally, there are six potential sample preparation techniques for Method 8260B (Section 1.2), none of which are appropriate for all the potential analytes capable of being measured by the method. The proposed permit condition does not resolve the applicability of any of these factors in determining how compliance will be achieved.</p> <p>Suggested language change:</p> <p>Page 43, lines 34-36 to page 44, lines 1-2, delete the following:</p> <p>When using laboratory analysis as part of a hazardous waste characterization, the Permittees shall require the laboratory to report concentrations of all hazardous constituents listed at 40 CFR §268.48, Table UTS, that the analytical test method used is capable of measuring, as specified at the most recent version of the US EPA's Test Methods for Evaluating Solid Wastes (SW-846).</p>		
384	2.5	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change:</p> <p>Change the reference to Attachment N within the section from “Figures 5 through 11” to “Figures 4 through 10”.</p>	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
385	2.6.3	<p>The Permittees take exception to the use of the word “potentially” in the context stated as follows:</p> <p><i>“any errors potentially affecting waste containment or compliance with this Permit;”</i></p> <p>The requirement for listing <i>any errors potentially affecting waste containment or compliance with this Permit</i> is duplicative, onerous and beyond the requirements of the</p>	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>regulations in 264.15(d).</p> <p>“Potentially” is a broad word in its meaning and is ambiguous here. Should an issue arise with the waste containers or compliance (i.e. equipment) found during the inspection, the anomaly is noted as required in Attachment E, Section E.1.1 and corrective measures are taken and documented.</p> <p>Container management for containers and mitigative measures are outlined in Part 3 of this Draft Permit.</p> <p>Suggested language change:</p> <p>Page 46, line 34, modify the sentence to read as follows:</p> <p>any errors potentially affecting waste containment or compliance with this Permit;</p>		
386	2.8	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change</p> <p>Change the reference to Attachment N within the section from “Figures 12, 15, 21, 23, and 37” to “Figures 11, 16, 22, 24, and 38”.</p>	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
387	2.8.1	<p>SRIC and NRDC objected to the last sentence of section 2.8.1, which states:</p> <p>The Permittees shall assume that all containers that hold mixed transuranic wastes and that are not vented contain hydrogen gas and that the associated wastes are considered ignitable.</p> <p>SRIC and NRDC are concerned that provision limited venting to transuranic waste containers, while other mixed waste containers also are being vented to reduce the likelihood of explosions and deflagrations that could endanger public health and the environment.</p> <p>Subsequent to June 26, 2009, additional negotiations occurred, which included exchange of additional information about management of waste containers at LANL. As a result, SRIC and NRDC are aware that there are a limited number of waste containers with tritium, which are not vented to prevent tritium releases into the environment. In addition, some mixed waste containers are not vented because they</p>	<p>The Department concurs.</p> <p>The Renewal Permit is changed as follows to address the containers the Department considers at risk of inappropriately containing hydrogen gas:</p> <p>The Permittees shall assume that all drums <u>with volume capacities between 55 and 110 gallons that hold mixed transuranic wastes and that are not vented , and standard waste boxes that hold mixed transuranic waste and are</u></p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>are not transuranic waste and are shipped offsite to disposal facilities that do not allow vented containers. Additional information about container management is being submitted for the record by the permittees. Therefore, SRIC and NRDC agree to support a revised last sentence of section 2.8.1, which states:</p> <p>The Permittees shall assume that all drums with volume capacities between 55 and 110 gallons that hold mixed transuranic wastes and that are not vented and standard waste boxes that hold mixed transuranic wastes and that are not vented contain hydrogen gas and that the associated wastes are subject to the conditions of this Section 2.8.1.</p>	<p><u>not vented, contain hydrogen gas and the associated wastes are subject to the conditions of this Permit Section (2.8.1).</u></p> <p>that hold mixed transuranic wastes and that are not vented contain hydrogen gas and that the associated wastes are considered ignitable. (see 40 CFR §§ 264.17(a); 270.32(b)(2)).</p>	
388	2.8.1	<p>The Permittees propose lines 24-26 on page 48 be revised.</p> <p>Based on the supporting documents, listed below and attached as Appendix 2, hereto, and discussions with NMED and other parties, the Permittees anticipates that Southwest Research and Information Center and other parties will agree to the proposed language. If NMED files a response to comments or other documents stating that the proposed language will be included in the final Permit, the Permittees will withdraw the exception to Section 2.8.1.</p> <p>The following documents, attached hereto as Appendix 2, support the proposed language and were included in discussions held between the interested parties, NMED and the Permittees in July and August, 2009 to develop the proposed language:</p> <ul style="list-style-type: none"> ○ LANL Response to Questions Submitted on July 9, 2009 by Don Hancock ○ LANL Waste Acceptance Criteria, P930-1, Rev. 2 ○ Waste Generator Instruction for Completing the Waste Profile Form (WPF), TL-001, Rev. 0 ○ Waste Profile Form, Form 1346 (9/08) ○ User Manual for the Waste Disposal Request (WDR) Form, Rev. ○ LANL Response to Questions Submitted on August 7, 2009 by Don Hancock ○ Storage and Remote Drum Venting of Unvented Transuranic Waste Drums, 	<p>The Department concurs. The proposed language has been added to the Renewal Permit.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>Safety Basis Addendum No. 1, Rev 0 to the TA-54, Area G Documented Safety Analysis, Dec. 2007</p> <ul style="list-style-type: none"> ○ Approval of Safety Basis Addendum No. 1, Rev. 0 ○ Waste Acceptance Criteria Exception Form, Form 1973, May 2008 <p>Suggested language change:</p> <p>Page 48, lines 24-26, modify sentence to read as follows:</p> <p>The Permittees shall assume that all containers drums with volume capacities between 55 and 100 gallons that hold mixed transuranic wastes and that are not vented, and standard waste boxes that hold mixed transuranic wastes and that are not vented, contain hydrogen gas and that the associated wastes are subject to the conditions of this Section 2.8.1. considered ignitable. (see 40 CFR §§264.17(a); 270.32(b)(2)).</p>		
389	2.12.2(8)	<p>Based on the general comment on Financial Assurance, the Permittees object to 2.12.2(8) which requires that all closure cost estimates be included in the Facility Operating Record.</p> <p>Suggested language change:</p> <p>Delete Section 2.12.2(8).</p>	See the Department's response regarding financial assurance in the document titled General Response to Comments.	Yes
390	2.13	<p>Based on the general comment on Financial Assurance above, the Permittees object to the inclusion of requirements for cost estimates for closure and post-closure and request that this section be deleted.</p> <p>Suggested language change:</p> <p>Delete Section 2.13</p>	See the Department's response regarding financial assurance in the document titled General Response to Comments.	Yes
391	2.13.1	Typically in the permitting process, the permittee (LANS) should have already submitted an acceptable closure cost estimate before the permit was drafted by the regulator.	See the Department's response regarding financial assurance in the document titled General Response to Comments.	Yes
392	2.14	What provisions exist for increasing financial provisions? How will the necessary funds be maintained and what provisions exist for inflationary costs for treatment, removal,	See the Department's response regarding financial assurance in	Yes

No.	Loc.	Comment	NMED Response	Δ
		etc?	the document titled General Response to Comments.	
393	2.14	Based on the general comment on Financial Assurance above, the Permittees object to the inclusion of financial assurance requirements and request that this section be deleted. Suggested language change: Delete Section 2.14	See the Department’s response regarding financial assurance in the document titled General Response to Comments.	Yes
394	2.14	Typically in the permitting process, the permittee (LANS) should have already demonstrated one or more instruments of financial assurance for the closure costs of all hazardous waste management units before the permit was drafted.	See the Department’s response regarding financial assurance in the document titled General Response to Comments.	Yes
395	2.15	What is the timeframe for the permittee, LANS, to be in compliance with this permit provision? EPA assumes that it is the effective date of the permit. Please clarify.	See the Department’s response regarding financial assurance in the document titled General Response to Comments.	Yes
396	2.15	Based on the general comment on Financial Assurance above, the Permittees object to the inclusion of liability requirements and request that this section be deleted. Suggested language change: Delete Section 2.15	See the Department’s response regarding financial assurance in the document titled General Response to Comments.	Yes
397	2.16	Based on the general comments on Financial Assurance above, the Permittees object to the inclusion of the requirements in this section and request that this section be deleted. Suggested language change: Delete Section 2.16	See the Department’s response regarding financial assurance in the document titled General Response to Comments.	Yes
398	3.7.1(2)	The requirement to remove liquid within 24 hours or immediately is not based on the regulation cited and does not address the need to extend the timeframe when justified. Additionally, the term “accumulated” is not defined sufficiently to determine whether the condition of the storage unit is in compliance. The triggers for action to remove material from the containment system under the cited	The Department disagrees in part – the permit section establishes a requirement that is based on the cited regulation, is protective of human health and the environment, and is more	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>regulations are linked to the excess capacity (40 CFR §264.175(b)(4)) and potential overflow of the collection system (40 CFR §264.175(b)(5)). In both cases, this involves determinations primarily related to the volume of the system and the potential for release rather than the residence time of the material. The specified timeframes in the revised draft Permit condition do not consider program needs that may appropriately result in longer removal times. Examples include the need to prepare for removal of ice or liquid and the need for sampling and analyzing spilled waste or precipitation to determine the appropriate removal method and related safety procedures.</p> <p>Based on the cited regulations, material can accumulate in the secondary collection systems unless the condition results in reduction of the required secondary containment volumes for the unit or overflow of the system. However, the permit condition does not provide a definition of a threshold amount that would activate the requirement. Thus, removal would potentially be necessary for any amount less than those levels, including de minimus precipitation or run-on events. This imposes a requirement that is burdensome and makes it difficult to determine the compliance status of the unit.</p> <p>Therefore, the Permit requirement should reflect the language of the regulation which is implementable and appropriate.</p> <p>Suggested language change:</p> <p>Page 67, line 32, delete the following:</p> <p>If the sumps or secondary containment system are the sole means of secondary containment the Permittees must remove the spilled or leaked waste and/or accumulated precipitation within 24 hours of detection or immediately if necessary to prevent overflow of the secondary containment system.</p>	<p>enforceable than the regulation’s term “as timely a manner as is necessary.”</p> <p>The Department’s primary concern is reducing the possibility of a release. For secondary containment systems without redundancy the Department sees no reason to allow a diminished storage capacity for greater than 24 hours. Large hazardous waste container management facility such as the Permittees’ must have equipment readily available to manage accumulated liquids.</p> <p>The Permittees do not identify the fluid level on a containment system that must not be exceeded to maintain a minimum capacity. Furthermore, this level can change frequently depending on the type and quantity of wastes being managed. The revised language in the Renewal Permit addresses the need to measure liquid levels and to calculated capacity. The revised language in the Renewal Permit also addresses the short action time to remove liquids by allowing an extention of that time with the Department’s approval if</p>	

No.	Loc.	Comment	NMED Response	Δ
			<p>necessary.</p> <p>The Renewal Permit is changed as follows:</p> <p>Otherwise, the Permittees must remove the spilled or leaked waste and/or accumulated precipitation in any form in as timely a manner as is necessary to prevent overflow of the containment system <u>and shall, while the system's capacity is diminished, measure the system daily to demonstrate that the system retains sufficient capacity to contain 10% of the volume of containers or the volume of the largest container holding free liquids, which ever is greater. (see 40 CFR §§ 264.175(b)(4) and (5)). The Permittees shall document this measurement in the Facility Operating Record. Requests for extension of time for any deadline under this subparagraph may be made by e-mail.</u></p>	
399	3.7.1(4)	<p>The permit requires that the facility maintain, in their operating record, certification that coatings and/or sealants used as a secondary containment system were applied and maintained in accordance with manufacturer's specifications. EPA recommends that a condition be added to the permit requiring LANL to submit a certification to NMED (within fifteen days of the effective date). This is a highly overlooked item during inspections and would ensure that the certification is being performed in a timely</p>	<p>The Department disagrees - having the subject certification statement in the Permittees' operating record available for the Department's inspection is a suitable enforcement policy. The</p>	No

No.	Loc.	Comment	NMED Response	Δ
		manner.	Permittees have numerous secondary containment systems and other systems requiring certification. Requiring certification statements be provided to the Department would create unnecessary tracking issues.	
400	3.7.1(4)	<p>If an existing coating or sealant has been applied using normal industry standard practices (painting or spraying), appears functional, and passes inspection, there is no reason to replace it. The effect of the condition as written could require the replacement of coatings based solely on the lack of records that were not previously required irrespective of the condition of the material. The condition is retroactive and should be restricted to new or repaired coatings.</p> <p>Suggested language change:</p> <p>Page 68, lines 8-11, modify sentence to read as follows:</p> <p>If a coating or sealant is used as a secondary containment system <u>and is re-applied or renewed during the life of this permit</u>, the Permittees shall maintain documentation in the Facility Operating Record that the coating or sealant was applied and maintained in accordance with the manufacturer's specifications.</p>	<p>The Department disagrees – Adherence to sealant manufacture' specifications is critical to ensuring proper function of secondary containment systems. The Permittees' permit application identifies sealants as being an important component of some secondary containment systems. If the Permittees cannot certify that secondary containment system sealants have been applied and maintained as recommended by the manufacturer, and because there are no suitable inspection procedures and the appearance of functionality is insufficient, then the Permittees must properly replace the existing coating sealant. Without the manufacturer's specifications of coatings or sealants it is not possible to know the life expectancy of the material.</p>	No

No.	Loc.	Comment	NMED Response	Δ
401	3.7.1 (5)	<p>The permit requires that the facility maintain, in their operating record, certification that all flexible liners, being used as a secondary containment systems, were installed and maintained in accordance with the manufacturer's specifications. EPA recommends that a condition be added to the permit requiring LANL to submit a certification to NMED (within fifteen days of the effective date). This is a highly overlooked item during inspections and would ensure that the certification is performed in a timely manner.</p>	<p>The Department disagrees - having the subject certification statement in the Permittees' operating record available for the Department's inspection is a suitable enforcement policy. The Permittees have numerous secondary containment systems and other systems requiring certification. Requiring certification statements be provided to the Department would create unnecessary tracking issues.</p>	No
402	3.11.3	<p>The section inappropriately requires the Permittees to prevent run off from TA-50 units. Run off cannot be prevented. However, existing run-on and run-off controls ensure that water does not come into contact with waste and then run off the site.</p> <p>Hazardous waste is stored within transportainers at the unit and does not come into contact with precipitation. Precipitation does fall on the asphalt pad and is directed as described within the rest of the section.</p> <p>Suggested language change:</p> <p>Section 3.11.3, Page 71, Lines 17-18:</p> <p>The Permittees shall prevent surface water run-on to the TA-50 permitted units. to other areas or to the environment.</p>	<p>The Department concurs in part – the TA-50 Outdoor Storage Unit is not constructed to contain run-off.</p> <p>Permit Section 3.5.1(5) requires that waste stored at the unit is protected from contact with precipitation using weather protective equipment. Permit Section 3.11.3 prohibits the loading or unloading of waste at the unit during precipitation events.</p> <p>The Renewal Permit is changed as follows: The Permittees shall prevent surface water run-on <u>from contacting stored waste containers</u></p>	Yes

No.	Loc.	Comment	NMED Response	Δ
403	3.12.1 and 3.12.3.6	<p>Sections 3.12.1 and 3.12.3.6 should be revised to accurately reflect the actual waste management practices at TA-54-412.</p> <p>Section 3.12.1, General Operating Conditions, requires that, at Area G, all containers storing hazardous waste with free liquids be stored on secondary containment pallets, except inside specifically identified structures, including Building TA-54-412 (DVRS). Section 3.12.3.6 sets forth secondary containment requirements for TA-54-412 and treats the building itself as the secondary containment. However, TA-54-412 is not designed to provide secondary containment and is not used for secondary containment. If free liquids are stored in TA-54-412, they are stored on secondary containment pallets. Therefore, the exception in 3.12.1 is not needed and the requirements in Section 3.12.3.6 should be removed.</p> <p>Suggested language change:</p> <p>Page 72, line 4, delete the following Building TA-54-412 (DVRS).</p> <p>Page 74, delete lines 7-11, Section 3.12.3.6. 3.12.3.6 — TA-54-412</p> <p>The Permittees shall treat the floor of the building with an epoxy sealant, providing an impervious seal to contain any potential leaks, spills, or accumulation of precipitation. The Permittees shall maintain the sealant in accordance with Permit Section 3.7.1 and the manufacturer's specifications.</p>	<p><u>at the TA-50 permitted units.</u></p> <p>The Department concurs – the TA-54 Area G Pad 1, DVRS is described in the permit application as having secondary confinement, not secondary containment. The Permittees have not requested that the building be considered secondary containment.</p> <p>The Permit is revised to require containers holding free liquids in TA-54-412 to be placed on portable secondary containment pallets.</p>	Yes
404	3.12.2	<p>EPA recommends that a condition be added to the permit requiring LANL to submit a certification to NMED (within fifteen days of the effective date of the permit) regarding the repair of the curbs.</p>	<p>The Department has confirmed that the curbs at Domes 153 and 283 and at Shed 8 protecting against precipitation run-on have been repaired and therefore a certification of that action is not necessary. The Department will alter the Renewal Permit accordingly during the next</p>	No

No.	Loc.	Comment	NMED Response	Δ
405	3.12.3	EPA recommends that a condition be added to the permit requiring LANL to submit a certification to NMED (within fifteen days of the effective date) regarding the storage areas that are required (in the draft permit) to have a chemical resistant epoxy and protective coating.	<p>permit modification.</p> <p>The Department disagrees – having the subject certification statement in the Permittees’ operating record available for the Department’s inspection is a suitable enforcement policy. The Permittees have numerous secondary containment systems and other systems requiring certification. Requiring certification statements be provided to the Department would create unnecessary tracking issues.</p>	No
406	4.6	<p>The Permittees object to the inclusion of Section 4.6 in the revised draft permit, which sets forth a proposed permit condition applicable to the Radioactive Liquid Waste Treatment Facility (RLWTF) at TA-50. As discussed below, this permit condition does not meet minimum legal criteria of 40 C.F.R. § 270.32(b), is not supported by the record, and is an inappropriate condition to impose under RCRA permit regulations. Section 4.6 provides as follows:</p> <p style="padding-left: 40px;">The Permittees shall discharge all treated wastewater from the TA-50 Radioactive Liquid Waste Treatment Facility (RLWTF) through the outfall permitted under Section 402 of the federal Clean Water Act, or as otherwise authorized by the terms of an applicable Clean Water Act permit that regulates the treatment and use of wastewater. If the Permittees intentionally discharge through a location other than the permitted outfall, they will fail to comply with this requirement, and as a consequence the wastewater treatment unit exemption under 40 CFR § 264.1(g)(6) will no longer apply to the RLWTF. The Permittees shall not accept listed hazardous wastes as specified at 40 CFR Part 261 Subpart D at the RLWTF. Revised Draft Permit § 4.6, p. 78.</p>	The Department disagrees - See the Department’s response regarding the RLWTF in the document titled General Response to Comments.	No

No.	Loc.	Comment	NMED Response	Δ
		<p>1. <i>Permit Condition 4.6 does not meet the criteria of 40 CFR § 270.32(b).</i></p> <p>Section 270.32(b)(1) provides that the Department may impose permit conditions necessary to achieve compliance with RCRA regulations, including each of the applicable requirements specified in Parts 264 and 266 through 268. Department rules also require the agency to either incorporate the applicable regulatory requirement by reference or provide a specific citation to the applicable regulatory requirement (§ 270.32(e)). The Agency has the burden of proof to support agency-imposed permit conditions, and must provide ample justification in the administrative record.</p> <p>As an initial matter, Permit Condition 4.6 does not meet the criteria of § 270.32(b)(1) or § 270.32(f). The Department provides no regulatory citation or support that the requirement is necessary to ensure compliance with a hazardous waste management requirement under parts 264, 266 or 268. Instead, the Department states that the condition is necessary to ensure that the wastewater treatment unit (WWTU) exemption applicable at the RLWTF will “no longer apply” as a consequence of the Permittees’ intentional failure to comply with the requirement that the discharge of all treated wastewater from the RLWTF be through an outfall permitted under Section 402 of the federal Clean Water Act (CWA) (Fact Sheet, at 82). In other words, the permit condition mischaracterizes the circumstances under which LANL may or may not lose its WWTU exemption at the RLWTF. The issue, as explained below, is a fact-specific question and ultimately an enforcement issue for EPA or NMED. The condition is not based on achieving compliance with any regulatory standard under part 264 or part 268.</p> <p>2. <i>Permit Condition 4.6 inappropriately attempts to regulate the RLWTF and imposes requirements not supported by EPA and NMED rules.</i></p> <p><u>The WWTU Exemption</u></p> <p>The RLWTF, a facility that treats wastewater, discharges effluent through an outfall (discharge point) into Mortandad Canyon that is regulated by a permit issued by EPA under § 402 of the CWA. LANL treats hazardous wastewater at the RLWTF without a RCRA permit under the WWTU exemption (Fact Sheet at 82). 40 CFR § 264.1(g)(6) exempts a wastewater treatment unit (as defined in 40 CFR § 260.10) from the requirement to obtain a RCRA permit for that storage and treatment of hazardous wastewater in tanks or tank systems. The WWTU exemption was issued to avoid imposing duplicative permitting requirements on a facility subject to both an NPDES</p>		

No.	Loc.	Comment	NMED Response	Δ
		<p>permit and a hazardous waste permit for the same unit (i.e., tank). To qualify for and maintain the exemption, LANL must treat hazardous wastewater in a “device” that meets the criteria of § 260.10. A facility that does not meet these criteria (for whatever reason) cannot claim that its treatment tanks are exempt from RCRA permit requirements. As a consequence, the facility must obtain a RCRA permit or be subject to potential enforcement.</p> <p><u>Permit Condition 4.6</u></p> <p>A. Permit Condition 4.6 states that the WWTU exemption “will no longer apply to the RLWTF” if the Permittees <i>intentionally</i> discharge through a location other than the permitted outfall. As drafted, the proposed condition can be construed to result in a loss of the WWTU exemption on a <u>permanent</u> basis. EPA did not intend this result. The WWTU exemption is conditional, and the failure to meet any of the three criteria results in a loss of the exemption. It does not automatically disqualify the wastewater treatment facility from future operation under the WWTU exemption. There are numerous circumstances that may result in the loss of the WWTU exemption under § 260.10 (e.g., a tank fails to meet the <i>tank</i> definition due to leakage or discharge into the environment or inadvertent shipment of wastewater to an off-site treatment facility). If a wastewater treatment facility fails to meet the criteria of § 260.10 it may not rely on the WWTU exemption and could be subject to potential enforcement.</p> <p>B. The permit condition sets a standard for the loss of the WWTU exemption that conflict with EPA and NMED rules. The Department explains that the WWTU exemption “would not be lost” if another discharge point were used by inadvertence, such as when a leak developed, but the intentional diversion of treated wastewater voids the exemption.” (Fact Sheet, pp. 82-83.) Section 260.10 does not distinguish between <i>intentional</i> and <i>non-intentional diversions</i> of treated wastewater, and these terms are undefined. Nor does the WWTU exemption limit how a facility may divert wastewater so long as it meets the requirements of § 260.10. A facility can operate under the WWTU exemption so long as it uses tanks or tank systems to manage hazardous wastewater dedicated for use with an on-site wastewater treatment facility subject to an NPDES permit requirement. The Department states that LANL would not lose the WWTU exemption by an inadvertent leak from a tank. Does this mean an inadvertent leak into the environment or a leak to a secondary containment device with no releases</p>		

No.	Loc.	Comment	NMED Response	Δ
		<p>into soils and sediments? How is an intentional leak defined? The permit condition is unclear and inaccurately describes how the WWTU exemption may be lost.</p> <p>C. The Department also states that the WWTU exemption “would not be lost . . . so long as EPA . . . states unambiguously that the new configuration would be regulated by the EPA . . . and meets the definition of a [WWTU] under § 260.10” (Fact Sheet, at 82). This goes far beyond the scope of EPA rules at § 260.10. EPA has authority to issue NPDES permits, and will determine what conditions are necessary to meet CWA effluent limitations and NPDES permit requirements. The applicability of the WWTU exemption does not require the CWA agency (i.e., EPA) to determine whether or not a unit meets the criteria of § 260.10.</p> <p>D. The permit condition prohibits the RLWTF from accepting listed hazardous wastes. This is an attempt to prescribe an operational requirement at the RLWTF, unrelated to ensuring compliance with part 264 standards. Currently, the RLWTF does not accept listed hazardous wastes due to its internal waste acceptance procedures and the fact that the treatment systems at the RLWTF are not configured to treat listed hazardous wastes. The WWTU exemption allows treatment of listed hazardous wastes (§ 261.3) and does not prohibit a facility from treating listed hazardous waste. It is possible that LANL may determine in the future to treat listed wastes at the RLWTF but could only do so with new technological treatment equipment and in compliance with the WWTU exemption requirements.</p> <p>E. The permit condition applies to “all treated wastewater,” which is broader than RCRA authority which applies by definition to <i>hazardous</i> wastewater (§ 260.10). The WWTU exemption applies to hazardous wastes treated in tanks. Non-hazardous wastewaters are not regulated by RCRA.</p> <p>Based on the foregoing, Section 4.6 should be deleted from the revised draft Permit.</p> <p>Suggested language change:</p> <p>Page 78, lines 12-21, delete Section 4.6.</p> <p>The Permittees shall discharge all treated wastewater from the TA-50 Radioactive Liquid Waste Treatment Facility (RLWTF) through the outfall permitted under Section 402 of the federal Clean Water Act, or as otherwise authorized by the terms of an applicable Clean Water Act permit that regulates the treatment and use of</p>		

No.	Loc.	Comment	NMED Response	Δ
		wastewater. If the Permittees intentionally discharge through a location other than the permitted outfall, they will fail to comply with this requirement, and as a consequence the wastewater treatment unit exemption under 40 CFR § 264.1(g)(6) will no longer apply to the RLWTF. The Permittees shall not accept listed hazardous wastes as specified at 40 CFR Part 261 Subpart D at the RLWTF.		
407	4.6	This facility is regulated by the Clean Water Act. It holds an NPDES permit for its operation and discharges. As such it is exempt from the hazardous waste regulations and their permitting requirements as per subpart 261.4(a)(2). If the facility should fail to meet any of its requirements under its NPDES Permit then it would be in violation of that permit and not subject to losing an exemption under the Hazardous Waste Regulations. There is no provision in the hazardous waste regulations providing for lose of such an exemption. Including it or referencing it in this permit is, therefore, outside the scope of the permitting regulations and therefore it should be deleted from the permit.	The Department disagrees - See the Department's response regarding the RLWTF in the document titled General Response to Comments.	No
408	Part 6	No open burning should be permitted. Only subpart O should apply. No subpart X treatment alternative technologies exist.	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
409	Part 6	Part 6 and Attachments B and C appear to have contradictory limits on which wastes, waste constituents, or waste codes may be treated at TA-16. See Section 6.2, the TA-16 portion of Attachment B and Tables C-6 and C-12 in Attachment C.	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
410	Part 6	We request that waste streams that have not been previously treated in the thermal process (open burning) shall not be allowed to be burned openly under this permit.	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
411	6.1	There are several explosive constituents (RDX, HMX, TNT) that are not mentioned as a constituent to be burned in the Waste Analysis Plan (WAP) at TA-16. Please have LANL revise the WAP to include all explosive constituents associated with the explosive wastes to be burned at TA-16.	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
412	6.1	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change:</p> <p>Change the reference to Attachment N within the section from “Figure 16” to “Figure 17”.</p>	<p>See the Department’s response regarding open burning in the document titled General Response to Comments.</p>	Yes
413	6.1.1	<p>Administrative – Typographical error on section numbers</p> <p>Suggested language change:</p> <p>Change section numbers 6.1.1, 6.1.1.1, 6.1.1.2, 6.1.1.3, 6.1.2, 6.1.3, 6.1.3.1, 6.1.3.2, and 6.1.3.3 to 6.3.1, 6.3.1.1, 6.3.1.2, 6.3.1.3, 6.3.2, 6.3.3, 6.3.3.1, 6.3.3.2, and 6.3.3.3.</p>	<p>See the Department’s response regarding open burning in the document titled General Response to Comments.</p>	Yes
414	6.3.1.1(1)	<p>We request that an effort be made to keep as many of the large pine trees as possible within the 200 ft radius.</p>	<p>See the Department’s response regarding open burning in the document titled General Response to Comments.</p>	Yes
415	6.3.1.1(1)	<p>The requirement for <u>all</u> vegetation to be trimmed to 6 inches or less is excessive.</p> <p>The Permittees follow the requirements for vegetation control and combustible material control within the Department of Energy (DOE) Explosives Safety Manual (DOE M 440.1-1A).</p> <p>Vegetation control for fire protection (Section 5.1) states:</p> <p>“Vegetation around storage magazines and explosives operating facilities should be controlled to minimize potential damage to the magazine or facility from erosion or grass, brush, or forest fires. A firebreak at least 50-ft (15-m) wide and free from combustible material should be maintained around each aboveground magazine or explosives operating facility.”</p> <p>For waste management areas, Section 20.5(d) of the manual states:</p> <p>“[d]uring destruction operations, the area within 200 ft (60 m) of the destruction point shall be kept clear of dry grass, leaves, and other extraneous combustible material. This clearance may be reduced to fire brand distance if aids to limit the range of fragments and debris are provided for the destruction points used within the disposal area.”</p>	<p>See the Department’s response regarding open burning in the document titled General Response to Comments.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>Combustible material is defined by the DOE Explosive Safety Manual as “[a]ny material that, when ignited, will sustain burning.”</p> <p>Stakeholders expressed concern with erosion due to tree removal during a site visit on June 30, 2009.</p> <p>Vegetation at the open burning treatment units is controlled in a manner that minimizes the combustible material around each of the units.</p> <p>There are evergreen trees within the 200 ft radius that are necessary to aid in erosion control at the site.</p> <p>Suggested language change:</p> <p>Page 84, Lines 5-8, modify the text to read as follows:</p> <p><u>Grasses and shrubs</u> Vegetation within a 200 ft radius of the Flash Pad and the Burn Tray shall be trimmed to less than or equal to six inches above the ground surface <u>and the area will be kept free of other combustible material</u>, before treatment. The Permittees shall document compliance with this provision in the Operating Record;</p>		
416	6.3.1.1(2)	<p>The Permittees request that the requirement in 6.3.1.1(2) be modified to be consistent with Section 6.3.3.2, which requires the Permittees to cover and inspect the treatment units within 10 hours of the last open burn treatment. As written, this section (6.3.1.1(2)) prohibits all access to the treatment units for 10 hours and is inconsistent with the requirement in Section 6.3.3.2.</p> <p>Suggested language change:</p> <p>Page 84, lines 9-11, modify sentence to read as follows:</p> <p>The barricade at TA-16-389 shall be closed for the duration of the treatment. and for. Safety barricades will be used during the ten-hour cool-down period after treatment to prevent the entry of unauthorized personnel into the area TA-16-388 or TA-16-399, except as provided in Permit Section 6.3.3.2.</p>	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes
417	6.3.1.3(4)	<p>Section 6.3.1.3(4) inappropriately prohibits treatment during high fire danger conditions.</p> <p>Current operations at the open burning treatment units allow for safe operation under</p>	See the Department’s response regarding open burning in the document titled General Response	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>“High” Fire Danger Rating. The ratings system was developed by the United States Forest Service’s Wild Fire Assessment System and modified by Facility personnel for specific terrain and weather conditions.</p> <p>Forecast for fire danger each day utilizes the Wild Fire Assessment System and the National Oceanic and Atmospheric Administration’s Storm Prediction Center, which are incorporated at http://www.weather.lanl.gov/fire_outlook.asp.</p> <p>The Storm Prediction Center’s Fire Outlook indicates areas where the combination of dry dead fuels, such as grass and timber, and meteorological conditions (wind, relative humidity, temperature, and dry thunderstorms) might contribute to potentially dangerous wild fire behavior. However, it does not forecast local meteorological conditions (<i>i.e.</i>, local variability of relative humidity or the effects of terrain on wind direction and speed). Local meteorological conditions are considered when the fire danger rating is posted each day at LANL.</p> <p>In addition, an assessment of slope of local terrain, types of fuels, variability of fuels, and live fuel moisture content at the site initially establishes, and regularly reaffirms, specific controls for operations during each fire danger rating. The <i>Restrictions on Operations</i> section (currently Section 6.1.1) of the revised draft Permit includes these operational controls.</p> <p>During “High” Fire Danger, open burning operations can be conducted with controls in addition to the conditions already included within the Permit for lower fire danger ratings. The suggested text highlights the extra precaution taken when open burning treatment occurs under “High” fire conditions.</p> <p>Through evaluation by fire protection personnel, it has been determined that treatment operations at the TA-16 open burning treatment units are conducted safely and without any additional risk to human health and the environment.</p> <p>Other general controls during a burn include scheduling with other waste treatment and experimental firing sites, so as not to overload any resources; receiving High Explosive Safety Operations personnel approval; notifying site access control as well as the Los Alamos Fire Department (LAFD); watching the burn remotely through a camera during and 30 minutes after completion; and measuring wind speed just prior to the burn to ensure it is within the fire danger matrix.</p>	to Comments.	

No.	Loc.	Comment	NMED Response	Δ
		<p>Additionally, water and fire extinguishers are available if they are needed and personnel are trained to use fire extinguishers, and LAFD Station #5 is located less than 5 minutes away from the open burning treatment units.</p> <p>The ability to treat waste during High Fire Danger is needed to ensure compliance with regulatory and safety requirements for the storage of high explosives waste and high explosive contaminated waste. Specific requirements which must be met include generator storage area time frames or laboratory safety storage volume limits.</p> <p>Suggested language change:</p> <p>Page 85, Lines 11-14, modify the section to read as follows:</p> <p>(4) Open burning treatments shall not be conducted during High, Very High, or Extreme Fire Danger classes as designated by the National Oceanic and Atmospheric Administration's National Weather Service <u>United States Forest Service</u>. <u>Treatment during High Fire Danger must only occur at wind speeds less than 10 miles per hour.</u></p>		
418	6.1.1	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change:</p> <p>Change the reference to Attachment N within the section from “Figure 17” to “Figure 18”.</p>	See the Department’s response regarding open burning in the document titled General Response to Comments	Yes
419	6.1.1(1)	<p>Why is the maximum amount of waste to be treated by open burning set at 12,500 pounds of waste per year? This maximum amount is set forth in section 6.1.2 of the Revised Draft RCRA Permit.</p> <p>While we appreciate the numerous revisions NMED has made to strengthen this overall section of the permit, the Pueblo has not yet seen any documentation from NMED or LANL that actually justifies the need for this particular maximum volume. It is our understanding that LANL has been treating significantly less pounds per year of waste through this method of treatment than the maximum amount proposed in the Revised Draft RCRA Permit. Even taking into account some need for flexibility of waste treatment options at LANL, this number still seems high for a ceiling in the permit.</p>	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes
420	6.1.2	Section 6.1.2, Page 81, Lines 30-31:	See the Department’s response regarding open burning in the	Yes

No.	Loc.	Comment	NMED Response	Δ
		EPA recommends re-wording the asbestos condition to the following: "Only HE-contaminated equipment containing <i>de minimus</i> quantities/concentrations of asbestos may be treated".	document titled General Response to Comments.	
421	6.1.2 (3)	What test method will LANL use to determine the % volume of high explosives in liquids?	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
422	6.1.2	It appears the requirements are the same for both types of waste burns. Please clarify.	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
423	6.3.3	Please include a condition in the permit that requires the Permittees to document routine maintenance in the operating record.	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
424	6.2	Please deny all open burning of depleted uranium at LANL in the permit. The tiny contaminated (radioactive/chemical) particles can be carried for miles by the wind in the air eventually depositing on the land and water. When inhaled or ingested these particles can cause devastating health problems and birth defects.	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
425	6.2	NMED states in the July 6, 2009, Fact Sheet, which provides the basis for requirements not specified in state regulations, that its prohibition on burning the hazardous component of mixed wastes "effectively prohibits the burning of radionuclides." NMED has authority to regulate only the hazardous portion of mixed waste, therefore its prohibition amounts to an impermissible regulation of the radioactive component of mixed waste. Suggested language change: Page 82, line 34, modify the sentence to read as follows: (1) the hazardous component of mixed wastes, and beryllium (see 40 CFR	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		§270.32(b)(2));		
426	6.2(2)(i)	<p>To clarify this section, the Permittees propose to add language stating that the certification will be included in the Biennial Report.</p> <p>Suggested language change:</p> <p>Page 83, lines 2-4, add the following sentence:</p> <p><u>Certification will be included in the Biennial Report.</u></p>	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes
427	6.2(9)	<p>The Permittees request the removal of the waste prohibition in Section 6.2(9), which prohibits the treatment of “wastes capable of generating dioxins and furans.” The following presents the Permittees’ support for the removal of this Permit condition.</p> <p><i>Air Model Background</i></p> <p>To demonstrate that the OB units will not cause adverse effects on human health or the environment, air modeling was performed and reports were generated by both the Permittees and NMED. The Permittees’ modeling showed that OB treatment operations at Technical Area (TA)-16 are protective of human health and the environment and pose no adverse effects due to migration of waste constituents in the air. The NMED model showed that open burning treatment of 20,000 pounds (lbs) of <u>bulk</u> high explosive (HE) waste “can be conducted and considered protective of human health and the environment.” However, the NMED conclusion was that burning 20,000 lbs per year of <u>HE-contaminated</u> waste “can be considered protective of human health but not protective of ecological receptors.”</p> <p>The model found that the estimated 10-year soil deposition value for dioxin/furan due to the burning of HE-contaminated wastes would fail the LANL Ecological Screening Level for a Montane Shrew. The NMED model report stated that the “exceedances were driven by the emission factors chosen for furans while the dioxin component did not contribute to the exceedance.” The NMED model report also recommended that the treatment of HE-contaminated wastes at TA-16-388 required “performance of a more refined analysis of ecological risk, restrictions on the types of HE-contaminated wastes</p>	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>treated, and/or implementation of controls or procedures to prevent exposure of small mammals.”</p> <p><i>Model screening exceedance only with HE-contaminated combustibles</i></p> <p>The NMED model results determined that operations at the open burning treatment units pose <u>no adverse effects</u> for the treatment of bulk HE waste up to 20,000 lbs. Most of the waste treated through open burning at LANL (approximately 90%) is bulk HE from the machining of high explosives components used for testing, research and development projects within the DOE Complex. This waste consists of scraps and chips of explosives from machining mixed with water and the fiber filter socks used to strain the larger chunks of explosives from the water used for cooling. All waste treated at the TA-16-399 Burn Tray is bulk HE and most of the waste treated at the TA-16-388 Flash Pad is bulk HE and filters. The treatment of the HE-contaminated combustible waste makes up a small percentage of the waste treated at the open burning treatment units and in recent years has been less than 2% of the 20,000 lbs. modeled.</p> <p>Another major factor influencing the result for the open burning of HE-contaminated waste is the uncertainty associated with the emission factors used in the analysis. The emission factors for furans chosen by NMED represented a surrogate waste that did not accurately represent waste actually treated at the TA-16-388 Flash Pad. The emission factors were associated with the open burning of propellant-contaminated Manufacturer’s Waste consisting of 65% aluminized ammonium perchlorate propellant, 20% plastic material (polyethylene gloves), 11% paper/wood/cloth and 4% diesel fuel. These emissions factors represent the highest values available for furans. The HE-contaminated combustible waste stream that is treated at the TA-16-388 Flash Pad, however, consists of pieces or powder HE, cloth, cardboard, kim-wipes, limited plastic bags, small amounts of solvent or oil on kim-wipes or filters, small glass pieces, and small metal pieces. This waste stream does not contain a high percentage of plastics, wood, or paper as these items would lead to the higher production of furans. Also, propellants such as ammonium perchlorate are not treated through open burning by the Permittees and are not considered high explosives.</p> <p>Based on these potential impacts, and to address recommendations from NMED modelers, the Permittees will implement the following.</p>		

No.	Loc.	Comment	NMED Response	Δ
		<p><i>Ecological Risk Analysis</i></p> <p>To address recommendations from NMED’s modelers, the Permittees conducted limited soil sampling, which found a higher value of dioxin/furan congeners in one out of the six samples. The elevated furan reading is suspected to result from activities that are no longer performed at that location.</p> <p>It was determined that more data is necessary to assess the ecological risk at the site. On August 26, 2009, 31 additional soil samples were collected and sent for analysis for dioxin/furans and the eight Resource Conservation and Recovery Act metals. The analysis of these soil samples will be added to the previously collected samples and the data will be used to characterize the TA-16 Burn Ground in regards to the air depositional impact that could occur from the current open burning treatment operations. The risk assessment will characterize the risk to wildlife in the area associated with the open burning treatment units at the TA-16 Burn Ground and take into consideration past operational activities and acts of nature (forest fires) that have impacted the site. Anticipated results of the risk assessment include data presenting values close to concentrations measured within other areas of LANL property, while taking into consideration historic activities and occurrences at the site. The data quality objectives and a map of the soil sampling locations for the most recent sampling event are included in Appendix 3, hereto.</p> <p><i>Restrictions on Waste Treated</i></p> <p>The revised draft Permit includes restrictions on the amount of waste treated as well as the types of waste at the open burning treatment units. The amount of waste that can be treated at the open burning treatment units was decreased from the volume of waste that was modeled. The model volume of waste was 20,000 lbs. and the draft Permit condition requires that the Permittees treat no more than 12,500 lbs. per year. An additional list of prohibited wastes has been added to the revised draft Permit that includes many dioxin/furan producers. The list includes chlorinated solvents and ammonium perchlorate, polyvinyl chloride, and structural components of demolition and decommissioning wastes. The prohibition of these wastes covers much of the concern for dioxin/furan producers. In fact, the Permittees are prohibited from treating the waste stream upon which NMED’s modeling was based. Additionally, these specific waste bans are much less complicated to comply with for the Permittees and increase</p>		

No.	Loc.	Comment	NMED Response	Δ
		<p>the enforceability for the NMED-HWB compliance inspectors.</p> <p><i>Controls to Prevent Small Mammal Exposure</i></p> <p>Periodic surveys of the TA-16 Burn Ground were recommended by NMED’s model report to identify and relocate nesting areas. The fire break that is described in the comment to Section 6.1.1.1(1) of this document helps to discourage small animals from living in the area and the Permittees are committed to adding a periodic survey to look for signs of small burrowing mammals as an operational requirement that would be documented in the operating record for the permitted units.</p> <p>See Appendix 3 for supporting documents.</p> <p>Suggested language change:</p> <p>Page 83, delete lines 16-24:</p> <p>(9) —wastes capable of generating dioxins and furans:</p> <p>(i) — The Permittees shall provide to the Department, prior to each treatment event, a certification that wastes being treated are not capable of generating dioxins and furans.</p> <p>(ii) — To remove the prohibition, the Permittees must submit to the Department a Class 3 permit modification request that includes a demonstration that the treatment of waste capable of generating dioxins or furans will be conducted in a manner that will ensure protection of human health and the environment.</p>		
428	6.4	EPA recommends that LANL submit an alternative assessment report much sooner than eight years, since they have been operating both units under interim status for over 25 years.	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes
429	6.4	We request that the Permittees submit an open burn alternative treatment assessment report to the Department no later than the 2nd anniversary of the effective date of this Permit and implement an open burn alternative treatment no later than the 4th	See the Department’s response regarding open burning in the document titled General Response	Yes

No.	Loc.	Comment	NMED Response	Δ
		anniversary.	to Comments.	
430	6.5.1	EPA recommends a condition be placed in the permit stating that if the baseline soil sampling report for the open burning units indicates grossly contaminated soils, then operation of the units may be suspended or modified as required.	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
431	6.5.1	<p>EPA recommends that LANL begin the soil sampling at the open burning units within 30 days of the permit becoming effective. The original draft permit has been "available" to the public for over a year and LANL does not need additional time to perform the soil sampling at both units. Also, EPA could not locate the soil sampling plan which establishes the baseline conditions for each open burning unit. However, EPA did locate the soil sampling locations under Figure 19. From reviewing the Figure, it appears that only 13 soil samples are required for characterizing the baseline conditions at both units.</p> <p>EPA recommends that LANL perform the multi-increment sampling (MIS) approach for establishing the baseline conditions at both open burning units (see EPA's comments from Laurie King dated January II, 2008). The MIS approach can be found in the Appendix of EPA SW-846, method 8330(b). However, EPA would recommend that for the analysis of the metals, semi-volatile organics, perchlorates, and dioxins/furans that the soil samples not be ground, as is required for explosives. Also, EPA believes that there is very little chance of finding volatile organics in the 0-2 inch soil interval from open burning, unless there are spills of the waste from the trays. EPA recommends that if volatile organic soil samples (discrete) are required, that the samples be taken near the trays or the unloading areas.</p>	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
432	6.5.1	The EPA Guidance for ecological risk assessment is: <i>Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments (EP A15401R-97 1006)</i> .	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
433	6.5.1	The list of analytes for soil monitoring at the open burning treatment units includes constituents that are not representative of treatment operations at the permitted units. The revised draft Permit includes a prohibition on treatment of perchlorate at the open burning treatment units. Therefore, the Permittees should not have to monitor for this	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>constituent “to monitor for hazardous constituents release to soils during open burning treatment events” as is stated in the first paragraph of the section.</p> <p>Additionally, the revised draft Permit currently includes a prohibition on the treatment of wastes capable of generating dioxins/furans. In Comment NN, above, the Permittees objected to the prohibition. Therefore, based on the current prohibition, the Permittees should not have to monitor for this constituent. However, if the prohibition in Section 6.2(9) is removed, the Permittees do not object to soil monitoring requirements for dioxin/furan congeners.</p> <p>Additionally, volatile organic compounds and semi-volatile organic compounds are not constituents likely to be released to soils from the open burning treatment units. The deposition of these constituents is unlikely and analysis for metals will give a better indication of adverse impacts to the soil from the open burning treatment operations as they have the highest potential to impact the soil from open burning treatment operations.</p> <p>The Environmental Protection Agency submitted comments to the first draft permit indicating that a multi increment sampling approach is appropriate for this site. The Permittees support this suggestion and request reconsideration of the multi increment sampling approach and sampling locations to allow for this method.</p> <p>Suggested language change:</p> <p>Page 87, lines 4-6, modify the sentence to read as follows:</p> <p>The Permittees shall analyze the soil samples collected during each monitoring event for total metals <u>and</u> explosive compounds, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), perchlorate, and dioxins/furans.</p>		
	6.5.2	EPA recommends a larger map be included for the sampling locations at TA-16 open burning units.	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes
434	6.5.2	What analytical methods will be used for the surface water samples taken? Also, VOC analysis for storm water samples were omitted (from the prioritization scheme) from the permit condition for surface water. Maybe that was intentional, due to the low	See the Department’s response regarding open burning in the document titled General Response	Yes

No.	Loc.	Comment	NMED Response	Δ
		probability of finding volatile organics from open burning. In addition, line 9 should be revised to read as follows: "Department within 90 days of completion of each sampling event".	to Comments.	
435	6.5.2	EPA recommends listing exactly what a "measurable storm event" means in the draft Hazardous Waste Permit, otherwise this may cause confusion on the permittees side.	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
436	6.5.2	<p>The list of analytes for surface water monitoring at the open burning treatment units includes analytes that are not representative of treatment operations at the permitted units and constituents that in practice are not reliably detected in storm water.</p> <p>Storm water monitoring for perchlorate is not warranted because it is prohibited from treatment at the permitted units.</p> <p>Storm water monitoring for dioxins/furan is not warranted because the treatment of wastes capable of generating dioxins/furans is prohibited. However, if the prohibition in Section 6.2(9) is removed, the Permittees will monitor for dioxin/furan congeners.</p> <p>Storm water should not be monitored for volatile organic compounds and semi-volatile organic compounds because it is difficult to collect a representative sample. Analysis for metals will give a better indication of the impacts on storm water from the open burning treatment operations as they have the highest potential to impact the soil from open burning treatment operations.</p> <p>Suggested language change:</p> <p>Page 88, lines 3-4 and 7-8, modify the section to read as follows:</p> <p>The samples shall be analyzed for total metals; <u>and</u> explosive compounds; volatile organic compounds, semi-volatile organic compounds, perchlorate, and dioxins/furans. If the precipitation event produces insufficient sample volume to perform all analyses, the Permittees will prioritize the list of analytes based on the sample volume collected as follows: 1) explosive compounds; <u>and</u> 2) total metals; 3) semi-volatile organic compounds; and 4) perchlorate.</p>	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
437	Part 9	This part is inconsistent regarding there being a clean closure performance standard for regulated units. The section on regulated units, Section 9.1.1, references the closure	The Department agrees – Renewal Permit Section 9.2,	Yes

No.	Loc.	Comment	NMED Response	Δ
		performance standards.	<p><i>Closure Performance Standards</i>, has been revised to reference all permitted units at Section at Section 9.1 which includes Section 9.1.1, <i>Regulated Units</i>.</p> <p>The Renewal Permit is changed as follows:</p> <p>The Permittees shall meet the following closure performance standards for permitted units identified in Permit Sections 9.1.2 and 9.1.3 <u>Permit Section 9.1</u>.</p>	
438	9.1	Are all of the disposal units at MDA's G, H, and L considered RCRA regulated units or are only certain disposal units considered RCRA units? This should be clarified in the permit and clearly depicted on a Figure.	See the Department's response regarding regulated units/alternative requirements in the document titled General Response to Comments.	No
439	9.1	<p>Based on the Permittees' comment on the designation of regulated units, above, the Permittees propose that Section 9.1 be revised to accurately identify the regulated units and to clarify that the outdoor units are either co-located with SWMUs and AOCs or not co-located with SWMUs and AOCs.</p> <p>Suggested language change:</p> <p>Page 93, lines 3-10, modify the section to read as follows:</p> <p>This Permit Part addresses the three categories of permitted units at the Facility. They are identified as follows:</p> <p>(1) regulated units (<i>i.e.</i>, material disposal areas G, H, L <u>Area G Pit 29 and Shaft 124; Area H Shaft 9; and Area L Shafts 1, 13-17, 19-34 and Impoundments B and D</u>);</p>	See the Department's response regarding regulated units/alternative requirements in the document titled General Response to Comments.	No

No.	Loc.	Comment	NMED Response	Δ
		<p>(2) indoor units (structures and related equipment); and</p> <p>(3) outdoor units (asphalt or concrete pads and related structures and equipment):</p> <ul style="list-style-type: none"> a. co-located with a regulated unit <u>solid waste management units (SWMUs) and areas of concern (AOCs)</u>; b. not co-located with a regulated unit <u>SWMUs and AOCs</u>; and associated with an open burn unit. 		
440	9.1.1	It appears that Section 9.2 does not mention the "regulated units" as needing to meet the closure performance standards but does mention the indoor and outdoor units; therefore, the reference to the closure performance standard in Permit Section 9.2 can be deleted.	<p>The Department agrees in part – Renewal Permit Section 9.2, <i>Closure Performance Standards</i>, has been revised to reference all permitted units at Section at Section 9.1 which includes Section 9.1.1, <i>Regulated Units</i>.</p> <p>The Renewal Permit is changed as follows:</p> <p>The Permittees shall meet the following closure performance standards for permitted units identified in Permit Sections 9.1.2 and 9.1.3 <u>Permit Section 9.1</u>.</p>	Yes
441	9.1.1	<p>The Permittees support the requirements of this section but object to the designation of regulated units in the revised draft Permit. <i>See</i> Comment on designation of regulated units, above.</p> <p>No suggested text change.</p>	See the Department’s response regarding regulated units/alternative requirements in the document titled General Response to Comments.	No
442	9.1.3	Based on the Permittees comment on the designation of regulated units, above, the Permittees propose that Section 9.1.3 be revised to be consistent with 40 CFR §264.110(c) and to clarify that the outdoor units are either co-located with SWMUs and	See the Department’s response regarding regulated units/alternative requirements in the document titled General	No

No.	Loc.	Comment	NMED Response	Δ
		<p>AOCs or not co-located with SWMUs and AOCs.</p> <p>Suggested language change:</p> <p>Page 94, lines 1-6, modify the section to read as follows:</p> <p>(1) asphalt or concrete storage pads co-located with a regulated-unit <u>SWMUS and AOCs</u> (<i>i.e.</i> outdoor storage unit) (<i>e.g.</i>, TA-54 Area L);</p> <p>(2) asphalt storage pads not co-located with a regulated-unit <u>SWMUS and AOCs</u> (<i>i.e.</i> outdoor storage unit) (<i>e.g.</i>, TA-50-69 Outdoor Unit); and concrete pads associated with an open burn unit (<i>i.e.</i> outdoor treatment units) (<i>e.g.</i> TA-16-388).</p>	Response to Comments.	
443	9.2	<p>If Permittees are unable to achieve any of the Clean Closure standards, we request early and often public participation under the expanded RCRA standard for timely, meaningful public participation.</p>	<p>Public participation at closure of a permitted unit is contemplated at new/renumbered Sections in the Renewal Permit. Sections 9.2.2.1 and 9.2.2.3 require a permit modification that will include public participation if clean closure is not attainable for a permitted unit. These Sections also require e-mail notification if the clean closure standard is not attained. Section 9.4.8 requires a permit modification to closure plans for specific occurrences in accordance with 40 CFR Part 270.</p> <p>For a discussion regarding public participation during closure of a regulated unit see the Department's response regarding regulated units/alternative requirements in the document titled General Response to</p>	No

No.	Loc.	Comment	NMED Response	Δ
			<p>Comments.</p> <p>Permit Section 1.12 (Community Relations Plan) requires the Permittees develop a plan to keep interested members of the public informed of Permit-related activities, including closure and post-closure care, and permit modifications.</p>	
444	9.2.1	<p>EPA does not see the difference between the standards of "Clean Closure" and the standard under line 27, "Inability to Achieve Clean Closure Performance Standards". They appear to be the same standards.</p>	<p>The distinction between the two standards is that for clean closure the Permittees must demonstrate three things: 1) removal of all hazardous waste residues and hazardous constituents (not in environmental media), 2) acceptable risks based on a residential exposure scenario (the most conservative), and 3) that there is no potential to contaminate groundwater.</p>	No
445	9.2.2.2	<p>Based on the Permittees comment on the designation of regulated units, above, the Permittees propose that Section 9.2.2.2 be revised to clarify that alternative closure requirements may be used for outdoor units co-located with SWMUs and AOCs.</p> <p>Suggested language change:</p> <p>Page 95, lines 19-23, modify the section to read as follows:</p> <p>Outdoor Units Co-located with Regulated Units <u>SWMUs and AOCs</u></p> <p>The Permittees may petition the Department for alternative closure requirements in accordance with 40 CFR §264.110(c) if the closure performance standards at Permit Sections 9.2.1(1) and (2) are not attainable for an outdoor unit (including associated indoor structures) co-located with a regulated unit <u>SWMUs and AOCs</u> (see Permit</p>	<p>See the Department's response regarding regulated units/alternative requirements in the document titled General Response to Comments.</p>	No

No.	Loc.	Comment	NMED Response	Δ
		Section 9.1.3(1)).		
446	9.2.2.3	<p>Based on the Permittees comment on the designation of regulated units, above, the Permittees propose that Section 9.2.2.3 be revised to be consistent with 40 CFR §264.110(c) and the accurate identification of regulated units.</p> <p>Suggested language change:</p> <p>Page 95, lines 30-31, modify the sentence to read as follows:</p> <p>for an outdoor unit (including associated indoor structures) <i>not</i> located with a regulated unit <u>SWMUs or AOCs</u> (see Permit Section 9.1.3(2))...</p>	See the Department's response regarding regulated units/alternative requirements in the document titled General Response to Comments.	No
447	9.3	<p>EPA was under the impression that the Permit would address the closure and post-closure of all RCRA regulated units and that the Compliance Order on Consent would address the SWMUs and AOCs. However, the permit indicates in this section that the consent order is where the closure and post-closure care requirements for the Material Disposal Areas will be addressed. However, in Section 9.5 the permit requires a closure certification report for all permitted units. Please clarify. This section appears to be in conflict with Section 9.5.</p> <p>If Closure and Post-Closure care of the MDAs are to be addressed under the Order on Consent, then NMED should assure the same requirements (Closure and Post-Closure) in the Order as would be required in the permit.</p>	See the Department's responses regarding regulated units/alternative requirements and the relationship between the Permit and the Consent Order in the document titled General Response to Comments.	No
448	9.3	<p>The Permittees agree with the requirements of Section 9.3 as long as the regulated units are identified as set forth in the Permittees' comment on the designation of regulated units, above, and in the proposed changes to Section 9.1.1 and Table J-1.</p> <p>No suggested text change.</p>	See the Department's response regarding regulated units/alternative requirements in the document titled General Response to Comments.	No
449	9.4.6.2	<p>This section requires the Permittees to notify NMED at least 60 days prior to conducting a structural assessment. However, Attachment G requires the Permittees to make notification of closure at least 45 days before the Permittees begin closure, and to make notice of the Permittees intent to conduct a structural assessment at least 20 days before final receipt of waste. The notification requirement in this section would require the Permittees to notify NMED of the intent to conduct a structural assessment before they notify NMED of the closure of a unit.</p>	The Department concurs the requirement is confusing. The Renewal Permit is changed to reflect notification of the structural assessment shall be at the same time as notification of closure.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>The Permittees suggest that the permit requirement be changed so that the notification of the structural assessment could come at the same time as the notification for closure at 45 days prior to beginning closure activities. The structural assessment must be conducted prior to beginning decontamination activities but after all waste has been removed from the unit, therefore, it would be beneficial to plan this at the time of notification for closure.</p> <p>This section provides that the Permittees “shall begin closure of a permitted unit no later than 90 days after the date on which the unit receives the known final volume of hazardous waste,” and cites 40 CFR §113(a) as authority for the requirement. 40 CFR does not address when a Permittee shall begin closure, rather it requires that a Permittee treat, remove from the unit or facility, or dispose on-site, all hazardous wastes in accordance with the approved closure plan within 90 days. Attachment G contains the details of closure activities, therefore Permittees suggest that 9.4.1 refer to Attachment G.</p> <p>Suggested language change:</p> <p>Page 99, lines 31-33, modify sentence to read as follows:</p> <p>The Permittees shall notify the Department <u>of the closure and the structural assessment at the same time, that is, 45 days prior to initiating closure. at least 60 days prior to conducting the assessment to provide the Department the opportunity to participate in the unit’s physical condition review.</u></p> <p>The Permittees shall <u>remove all hazardous wastes from a permitted unit</u>begin closure of a permitted unit no later than 90 days after the date on which the unit receives the known final volume of hazardous waste or, if there is a reasonable possibility that the permitted unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous wastes, in accordance with 40 CFR §264.113(a).</p>	<p>The Renewal Permit is changed as follows:</p> <p>The structural assessment is an assessment of the unit’s physical condition. The Permittees shall notify the Department at least 60 days prior to conducting the assessment to provide the Department the opportunity to participate in the unit’s physical condition review.</p> <p><u>The structural assessment is an assessment of a unit’s physical condition and shall occur within ten days of the completed removal or treatment of all waste from the permitted unit (see 40 CFR 270.32(b)). The Permittees shall notify the Department at least 30 days prior to the scheduled assessment so the Department may have the opportunity to participate in the assessment.</u></p> <p>The Permittees shall begin closure of a permitted unit no later than 90 days after the date on which the unit receives the known final volume of hazardous waste or, if there is a reasonable possibility that the permitted unit</p>	

No.	Loc.	Comment	NMED Response	Δ
			<p>will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous wastes, in accordance with 40 CFR § 264.113(a).</p> <p><u>The beginning of closure is marked by initiating removal of waste from a permitted unit for the purpose of closure. In accordance with 40 CFR 264.112(d)(2), incorporated herein by reference, the date when the Permittees begin closure shall be no later than 30 days after the date on which a permitted unit receives the known final volume of hazardous wastes, or if there is a reasonable possibility that the permitted unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous wastes. In accordance with 40 CFR § 264.113(a), within 90 days after receiving the permitted unit's final volume of hazardous waste, the Permittees shall remove or treat, as applicable, in accordance with the approved closure plan, all hazardous waste</u></p>	

No.	Loc.	Comment	NMED Response	Δ
			<u>from a permitted unit.</u>	
450	9.4.7.1	The phrase "hazardous constituents" is defined differently at Section 9.4.7.1 (page 100, line 20) compared to the definition at Permit Section 1.8 (page 17, line 13). Please revise.	The Department concurs. Section 9.4.7.1 is changed to reference the definition in Permit Section 1.8. The Renewal Permit is changed as follows: The list shall include all hazardous constituents listed within Appendix VIII of 40 CFR Part 261 and within Appendix IX of 40 CFR Part 264. <u>The list shall include all hazardous constituents as defined in Permit Section 1.8.</u>	Yes
451	9.4.7.1	This references 9.4.7.1.ii(c) which does not exist. Please revise.	The Department concurs. The revision has been made to the Renewal Permit.	Yes
452	9.4.7.1.ii.a	EPA is not sure what is meant by "One sample at all secondary containment areas". Under line 9 in the same section, there is a requirement for "1 sample for every 900 square feet under the pad". Is the sample to be taken underneath the curb or wall of the storage unit? Please clarify in the permit.	The Department disagrees – the closure plans in Renewal Permit Attachment G conform to the language in Part 9 and are approved by the Department.	No
453	9.4.7.1.ii.b	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the references to Attachment G figures within numbers 2 and 3 as follows: <ul style="list-style-type: none"> • Line 22 should change from “Figures G.2-1 and G.3-1” to “Figures G.2-2 and G.3-1”. 	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<ul style="list-style-type: none"> Line 24 should change from “Figures G.2-1 and G.3-1” to “Figure G.2-1”. 		
454	9.5	<p>The Permittees request the deletion of the reference to financial assurance requirements. See Permittees’ comment on financial assurance requirements, above.</p> <p>Suggested language change:</p> <p>Page 105, lines 4-6, delete the following:</p> <p>Documentation supporting the independent registered professional engineer’s certification must be furnished to the Department before the Permittees are released from the financial assurance requirements for closure under 40 CFR §264.143.</p>	See the Department’s responses regarding financial assurance in the document titled General Response to Comments.	No
455	10.1.2	<p>The Permittees agree with the requirements of Section 10.1.2 as long as the regulated units are identified as set forth in the Permittees’ comment on the designation of regulated units, above, and in the proposed changes to Section 9.1.1 and Table J-1.</p> <p>No suggested text change.</p>	See the Department’s responses regarding regulated units/alternative requirements in the document titled General Response to Comments.	No
456	Part 11	<p>WSAR is inadequate and defective according to NAS and EPA Kerr Laboratories. Well monitoring at LANA is not in compliance with requirements or 40 CFR 264.90 thru 100. POC requirements are not met.</p>	See the Department’s responses regarding regulated units/alternative requirements and groundwater protection in the document titled General Response to Comments.	No
457	11.1	<p>The Permittees agree with the statement made in the section concerning the corrective action requirements under the Consent Order. However, as discussed in the Permittees’ comments on the designation of regulated units and the financial assurance requirements, above, the Permittees believe that certain requirements in the revised draft Permit do constitute a change to the Consent Order.</p> <p>No suggested text change.</p>	<p>Comment noted.</p> <p>See the Department’s responses regarding regulated units/alternative requirements and financial assurance in the document titled General Response to Comments.</p>	No

No.	Loc.	Comment	NMED Response	Δ
458	11.2	<p>The Permittees object to this section to the extent it purports to state the exceptions identified in the Consent Order. This language is inconsistent with the language in the Consent Order, appears to substantively change the meaning of the language in the Consent Order, and therefore directly conflicts with the Consent Order. This section must incorporate the Consent Order language by reference or include it verbatim. Section III.W.1 of the Consent Order identifies the four items which will be addressed in the Permit rather than the Consent Order, and states that:</p> <p>The Department has determined that all corrective action for releases of hazardous waste or hazardous constituents at the Facility, required by sections 3004(u) and (v) of RCRA, 42 U.S.C. §§ 6924(u) and (v), and sections 74-4-4(A)(5)(h) and (i) and 74-4-4.2(B) of the HWA, shall be conducted solely under this Consent Order and not under the current or any future Hazardous Waste Facility Permit (“Permit”), with the exception of ... four items which will be addressed in the Permit and not in this Consent Order:</p> <p>Suggested language change:</p> <p>Page 111, lines 14-23, substitute the following for the language in the revised draft Permit:</p> <p>(1) <u>new releases of hazardous waste or hazardous constituents from operating units at the Facility;</u></p> <p>(2) <u>the closure or post-closure care requirements of 20.4.1.500 NMAC (incorporating 40 CFR Part 264, Subpart G), as they apply to operating units at the Facility;</u></p> <p>(3) <u>implementation of the controls, including long-term monitoring, for any SWMU on the Permit’s Corrective Action Complete with Controls list [Table K-2 in the draft permit]; and</u></p> <p>(4) <u>any releases of hazardous waste or hazardous constituents that occur after the date on which the Consent Order terminates.</u></p>	<p>The Permittees are inspecific in this comment as to precisely why the language at Permit Section 11.2 “appears to substantively change the meaning of the language in the Consent Order, and therefore directly conflicts with the Consent Order.” The Department believes that the Permittees objection is to the substitution of the term “hazardous waste management units” for the term “operating units.” With regard to that substitution, the Department incorporates the term <i>hazardous waste management unit</i> because it is defined in the regulations at 40 CFR § 260.10 and is used throughout the permit, unlike the term <i>operating unit</i>. In drafting the Consent Order the Department meant the term <i>operating unit</i> to have the definition at § 260.10 so considers the Renewal Permit language an improvement.</p> <p>See the Department’s response regarding the relationship between the Permit and the Consent Order in the document titled General Response to Comments.</p>	No

No.	Loc.	Comment	NMED Response	Δ
459	11.2.1	<p>Section 11.2.1 identifies SWMUs and AOCs. The title should be changed for clarification and the reference to Table J-1 should be deleted.</p> <p>Suggested language change:</p> <p>Page 112, line 1, modify the title to read as follows:</p> <p>11.2.1 Identification of SWMUs and AOCs Requiring Corrective Action.</p> <p>Delete lines 13-15:</p> <p>Attachment J, Table J-1 (Active Portion of the Facility) includes lists of hazardous waste management units at the Facility and their status (e.g., interim status, permitted operating, closed) of each unit.</p>	The Department disagrees.	No
460	11.3.1	EPA recommends that the Interim Facility Wide Groundwater Monitoring Plan be attached to the permit unless there is a public comment period under the Consent Order where the public can comment on this plan.	The Interim Facility Wide Groundwater Monitoring Plan (IFGMP) is updated each year. If IFGMP were attached to the Permit, then each annual update of the IFGMP would require a Permit modification, something the Department wishes to avoid. The public will have an opportunity to comment on the appropriateness of groundwater monitoring for specific hazardous waste management units when a permit modification is done to close those units.	No
461	11.3.1	<p>Page 112, line 18. The Permittees agree with the requirements of Section 11.3.1 as long as the regulated units are identified as set forth in the Permittees' comment on the designation of regulated units, above, and in the proposed changes to Section 9.1.1 and Table J-1.</p> <p>No suggested text change.</p>	See the Department's response regarding regulated units/alternative requirements in the document titled General Response to Comments.	No
462	11.3.1	Ground water monitoring and installation of wells is another issue that is being driven by the Consent Order and in a separate agreement between NMED and LANL. If the alternative closure approach is used, then, other than mentioning that the monitoring	See the Department's responses regarding regulated units/alternative requirements, the	No

No.	Loc.	Comment	NMED Response	Δ
		system being developed and implemented under separate agreements at this point and will be rolled into the post closure care permit when the Consent Order expires is excessive and serves no point. I propose that this section should be deleted from the permit as well.	relationship between the Permit and the Consent Order, and groundwater protection in the document titled General Response to Comments.	
463	11.3.1.2	Page 114, line 24. The Permittees agree with the requirements of Section 11.3.1.2 as long as the regulated units are identified as set forth in the Permittees' comment on the designation of regulated units, above, and in the proposed changes to Section 9.1.1 and Table J-1. No suggested text change.	See the Department's response regarding regulated units/alternative requirements in the document titled General Response to Comments.	No
464	11.4	Our position is that a human health target risk level of 10^{-6} should be used.	The Department disagrees - The risk level of 10^{-5} in the Renewal Permit is consistent with Department, New Mexico Water Quality Control Commission, and New Mexico's Environmental Improvement Board's policy. NM's groundwater quality standards are based on the same risk level. The Department feels that the Renewal Permit is not the appropriate mechanism to alter that risk level. Furthermore, the target risk level in the Renewal Permit falls within the U.S. EPA's range of acceptable levels. EPA discusses what that agency considers appropriate risk levels in a March 16, 1998 memorandum titled <i>Risk-Based Clean Closure</i> . In that memo EPA states "EPA	No

No.	Loc.	Comment	NMED Response	Δ
			generally considers protective media cleanup standards for human health to mean constituents concentrations that result in the total residual risk from any medium to an individual exposed over a lifetime falling within a range from 10^{-4} to 10^{-6} , with the cumulative carcinogenic risk not to exceed 10^{-4} and a preference for cleanup standards at the more protective end of the risk range.”	
465	11.4.2.1	<p>Soil cleanup levels are to be based on residential and industrial land use. This pre-judges the field situation. Contamination on steep canyon walls and other similar situations should not be evaluated for residential or industrial scenarios because the likelihood of the land use for these scenarios is remote to none. To set the cleanup goal at such a value does little to nothing to reduce long-term risk to the public and ensures considerable funds will be spent with no commensurate gain. In fact the total risk to the public may be higher because of the risks incurred in implementing mitigating measures. It is recommended on line 28 of page 117 that "residential and industrial land use" be deleted and substituted with "a credible land use scenario."</p>	Currently, legislation has not been passed that provides the Department with authority to enforce land use controls. In the absence of such legislation, the Department uses the default cleanup scenario for residential land use for sites subject to RCRA regulation. With the exception of land that is slated for transfer, the Permittees are allowed to use less stringent cleanup levels at sites, which will result in controls being imposed on the sites under the Renewal Permit. If the land use subject to controls changes or the land is transferred to another owner, not subject to the Permit, then the Permittee must conduct further corrective action to achieve residential cleanup levels.	No
466	11.4.2.1	Our position is that a human health target risk level of 10^{-6} should be used.	See the Department’s response at	No

No.	Loc.	Comment	NMED Response	Δ
			Permit Section 11.4 above.	
467	11.4.2.1	<p>The revised draft Permit references soil-screening levels for residential and industrial land use, but does not include soil-screening levels for construction workers. NMED’s <i>Technical Background Document for Development of Soil Screening Levels (Rev. 5.00)</i>, Section 2.3 Non-Residential Land Uses separates industrial and construction worker.</p> <p>Suggested language change:</p> <p>Page 117, line 28, modify the sentence to read as follows: residential, industrial <u>and construction worker land use.</u></p>	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
468	11.4.2.1	<p>The revised draft Permit states “The Department may determine that a dilution attenuation factor of 1, as calculated using Department approved methods, for contaminated soils is appropriate to achieve clean closure, at sites where migration of contaminants through the soil column to groundwater has occurred or when the Department determines that the potential exists for the migration of contaminants through the soil column to groundwater.” The sentence is in conflict with NMED’s <i>Technical Background Document for Development of Soil Screening Levels (Rev. 5.00)</i>, Section 4.4 Dilution Attenuation Factor. This Section states that “A DAF of 1 implies no reduction in contaminant concentration occurs.” And “NMED believes that a DAF of 20 for a 0.5 acre source area is protective of groundwater in New Mexico. If the default DAF is not representative of conditions at a specific site, then it is appropriate to calculate a site-specific DAF based upon available site data.”</p> <p>Use of a dilution attenuation factor soil screening level (DAF SSL) is not applicable or appropriate. Furthermore, if as stated above, migration of contaminants to groundwater has occurred, the DAF SSLs are no longer appropriate. The Department-approved methods for calculating DAF soil cleanup levels incorporate a number of conservative assumptions that are very favorable for migration of contamination from soil to groundwater, and are not representative of LANL.</p> <p>If the Permittees must use DAF SSLs, even a DAF of 20 is too low given the physical conditions at most LANL sites. Specifically, the methods described in the Department’s background document assume an infinite source of contamination and a uniform contaminant distribution from the surface to the water table. These conditions are not appropriate for any site where the vertical extent of contamination is bounded in the</p>	<p>Permit Section 11.4.2.1 has been modified to reference a DAF of 1 or greater and to state that DAF “may apply” rather than to state that DAF “is applied” at sites where the migration of contaminants through the soil column to groundwater has occurred or has the potential to occur.</p> <p>The Renewal Permit has been changed as follow:</p> <p><u>If the potential for migration to groundwater is applicable for a site</u>, the Department may determine that a dilution attenuation factor <u>(DAF) of one</u> or greater, as calculated using the Department-approved methods, for contaminated soils is appropriate to achieve clean closure. <u>This approach may</u> apply at sites where <u>the migration</u></p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>vadose zone, which is the case at almost all sites investigated at LANL so far. The methods also assume a receptor well (point of exposure) at the down gradient edge of the source, which is inappropriate for most locations at LANL. Further the methods presented in the Technical Background document use an infiltration rate of 0.13 m/yr, which may be two orders of magnitude higher than the actual infiltration rate at most mesa top locations at LANL. The Permittees believe that if DAF SSLs must be included, they should be calculated using a DAF appropriate for the physical conditions at LANL sites. The assumptions and calculations used would be submitted to the Department for their approval.</p> <p>Suggested language change:</p> <p>Page 117, lines 28-33, replace the sentence with the following text:</p> <p><u>The Permittees shall evaluate the soil contamination and its potential to migrate to groundwater. DAF SSLs (calculated according to Department methods) that reflect subsurface conditions at the site may be used as part of this evaluation.</u></p>	<p>of contaminants through the soil column to groundwater has occurred or when the Department determines that the potential exists for migration of contaminants through the soil column to groundwater.</p>	
469	11.4.2.1	<p>Maximum concentration and soil saturation concentration values are not included in NMED Version 5 and the current EPA RSL Table. In addition, further in the sentence, EPA Region VI HHMSL should be replaced with EPA RSL.</p> <p>Suggested language change:</p> <p>Page 117, line 39 to page 118, line 1, modify the sentence to read as follows:</p> <p>...the soil cleanup level shall be established using the most recent version of the EPA RSL for residential and industrial soil compounds designated as “n” (non-carcinogen effects) “max (maximum concentration) and “sat” soil saturation concentration; or ten times the EPA Region VI HHMSL <u>RSL</u> for compounds designated “c” (carcinogen effects).</p>	<p>Permit Section 11.4.2.1 has been modified to remove the reference to “max” and “sat” and to change the reference EPA Region VI HHMSL to RSL.</p> <p>The Renewal Permit has been changed as follows:</p> <p>If a Department soil screening level has not been established for a substance for which toxicological information is published, the soil cleanup level shall be established using the most recent version of the EPA RSL for residential and industrial soil for compounds designated as “n” (non-carcinogen effects)</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
			<p>“max (maximum concentration) and “sat” soil saturation concentration), or ten times the EPA RSL -Region VI HHMSSL for compounds designated “c” (carcinogen effects).</p>	
470	11.4.2.1	<p>The revised draft Permit lists specific types of land use in parentheses, but does not include the “construction worker” scenario. NMED’s <i>Technical Background Document for Development of Soil Screening Levels (Rev. 5.00)</i>, Section 2.3 Non-Residential Land Uses separates industrial and construction worker.</p> <p>Suggested language change:</p> <p>Page 118, line 9, modify the sentence to read as follows: ...(<i>e.g.</i>, residential, recreational, industrial, <u>construction</u>).</p>	<p>Permit Section 11.4.2.1 has been modified to add construction worker to the list of cited examples related to future land use.</p> <p>The Renewal Permit has been changed as follows:</p> <p>If the current and reasonably foreseeable future land use is one for which the Department has not established soil screening levels, the Permittees may propose cleanup levels to the Department based on a risk assessment and a target excess cancer risk level of 10^{-5} for carcinogenic substances or an HI of 1.0, based on current and reasonably foreseeable future land use (<i>e.g.</i>, residential, recreational, industrial, <u>construction worker</u>).</p>	Yes
471	11.5	<p>LANL’s <i>Screening Level Ecological Risk Assessment Methods</i> has been revised to <i>Screening Level Ecological Risk Assessment Methods Revision 2</i> (LA-UR-04-8246).</p> <p>Suggested language change:</p> <p>Page 118, Lines 24-30, reference the current version:</p>	<p>Permit Section 11.5 has been modified to replace references to specific document dates and LANL reference numbers with</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p><u><i>Screening Level Ecological Risk Assessment Methods Rev. 2 (LA-UR-04-8246).</i></u></p>	<p>the term “as updated.”</p> <p>The Renewal Permit has been changed as follows:</p> <p>Screening for ecological risk shall be conducted using the LANL Ecological Screening Levels (ESLs), which are included in LANL’s <i>Screening Level Ecological Risk Assessment Methods</i>, (LA-UR-99-1404 and as updated and approved by the Department). In the absence of ESLs, the Permittees may use U.S. EPA’s ECO-SSLs with the Department approval. If the LANL’s ESL database does not contain a screening value for the receptor or contaminant, the Permittees shall derive a screening level using the methodology in the Department’s <i>Guidance for Assessing Ecological Risks Posed by Chemicals: Screening-Level Ecological Risk Assessment</i> (<u>as updated March 2008</u>) or in LANL’s <i>Screening Level Ecological Risk Assessment Methods</i> (LA-UR-99-1404). Ecological risk at each site shall be evaluated in a manner consistent with the Department’s <i>Guidance for Assessing</i></p>	

No.	Loc.	Comment	NMED Response	Δ
			<p><i>Ecological Risks Posed by Chemicals: Screening-Level Ecological Risk Assessment (as updated March 2008) and, if appropriate, Assessing Ecological Risks Posed by Radionuclides: Screening-Level Radioecological Risk Assessment (as updated April 2000).</i></p>	
472	11.5	<p>The cite to the radionuclide reference document is outside of the scope of the Permit, which does not regulate radionuclides.</p> <p>Suggested language change:</p> <p>Page 118, lines 33-34, delete the following reference:</p> <p><i>Assessing Ecological Risks Posed by Radionuclides: Screening Level Radioecological Risk Assessment (April 2000).</i></p>	<p>The cited risk guidance document (<i>Assessing Ecological Risks Posed by Radionuclides: Screening Level Radioecological Risk Assessment</i>) is a Department guidance document. The Permittees are required to assess cumulative risk, which includes all contaminants including radionuclides that are present at a site.</p>	No
473	11.7.1	<p>This section clearly states the requirement for long-term maintenance and monitoring for SWMUs undergoing corrective action under the Permit. It also clearly defines the process by which the monitoring and maintenance plan is developed, approved, and enforced. However, the section should be consistent with the Consent Order, and so must clearly distinguish the process applied to SWMUs and AOCs subject to corrective action under the Consent Order; for those units, the long term monitoring and maintenance requirements are established solely under the Consent Order.</p> <p>Suggested language change:</p> <p>Page 120, insert the following at line 10 after “measures”:</p> <p><u>For SWMUS and AOCs subject to corrective action under the Consent Order, the long-term monitoring and maintenance plan shall include the controls identified in the Certificate of Completion issued by the Department pursuant to section VII.E.6.b of the Consent Order. Pursuant to Section III.W.3.b of the Consent Order, no additional controls will be imposed by this permit, but controls identified in the</u></p>	<p>Consent Order Section III.W.1 states that implementation of controls, including long-term monitoring, will be addressed under the Permit. The Certificate of Completion simply states that a site qualifies for Corrective Action Complete with or without controls. The Certificate of Completion does not constitute a Permit modification to change the status of a site, which requires a Class 3 Permit Modification. Controls, if required are implemented under the Permit once the status of such a site is</p>	No

No.	Loc.	Comment	NMED Response	Δ
		<p><u>Certificate of Completion are enforceable under this Permit.</u> Upon approval, such plans shall be included in Attachment O (<i>Long-term Monitoring and Maintenance Plans</i>).</p>	<p>changed from Corrective Action Required (Table K-1) to Corrective Action Complete with Controls I (Table K-2).</p>	
474	11.10.4	<p>The organization of the paragraph is not sequential. The paragraph should be organized to reflect the order of processes the Permittees will perform so it is clear what the actual sequence of work is.</p> <p>Furthermore, combining the Site-Specific Human Health Risk Assessment and the Site-Specific Ecological Risk Assessment (Section 11.10.5) and the related work plans and reports that go with these assessments into one Risk Assessment Report including both human health and ecological assessments is current practice and is efficient.</p> <p>Suggested language change:</p> <p>Page 156, lines 12-20, rearrange the paragraph and combine Sections 11.10.4 and 11.10.5 Site Specific Ecological Risk Assessment Methods. Modify the section to read as follows:</p> <p><u>Should the Permittees be unable to meet the cleanup levels in Permit Section 11.4.2, they shall conduct a Site-Specific Risk Assessment, that addresses both human health and ecological risk assessments, as appropriate, in accordance with current and acceptable EPA, Regional EPA, and Department guidance and methodology (as updated). The Permittees shall submit to the Department for its review and approval a work plan that includes, at a minimum, the site-specific exposure assumptions and any additional sampling needed to support the risk assessment. The Permittees shall prepare a Risk Assessment Report, which addresses both human health and ecological risk assessments, as appropriate, in support of corrective action, and, if necessary, for closure in accordance with Permit Part 9.</u></p>	<p>Permit Section 11.10.4 has been modified to move the first sentence to the end of the paragraph.</p> <p>The Renewal Permit has been changed as follows:</p> <p>The Permittees shall prepare a Human Health Risk Assessment Report in support of corrective action, and, if necessary, for closure in accordance with Permit Part 9. Should the Permittees be unable to meet the cleanup levels in Permit Section 11.4, they shall conduct a site-specific risk assessment in accordance with current and acceptable EPA, Regional EPA, and Department guidance and methodology (as updated). <u>If the Department determines that a human health risk assessment work plan is necessary,</u> the Permittees shall submit to the Department for its review and approval a workplan that includes, at a minimum, the site-specific exposure assumptions and any additional</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
			<p>sampling needed to support the risk assessment. <u>The Permittees shall prepare a Human Health Risk Assessment Report in support of corrective action, and, if necessary, for closure in accordance with Permit Part 9.</u></p>	
475	11.10.4.1. ii	<p>The last two sentences as drafted are unclear and do not define a Statement of Work. It is unclear what the comparison would entail and what the consequences would be. Also, there is no reference to the specific EPA methodology for handling non-detects and replicates in the risk assessment. The permit condition is ambiguous and unclear. The last two sentences of the Section should be deleted. If the sentences are not deleted, a reference to the EPA methodology for handling non-detects and replicates should be included.</p> <p>Suggested language change:</p> <p>Page 157, Lines 14-19, modify the section as follows:</p> <p>The risk assessment shall include an evaluation of analytical data and usability of the data in the assessment. Data validation shall be conducted in accordance with current EPA guidelines. The evaluation of data shall also include a comparison of detection limits with appropriate and current risk-based screening levels. Current EPA methodology for handling non-detects and replicates in the risk assessment shall be applied.</p>	<p>The last sentence of Permit Section 11.10.4.1.ii has been deleted and the following text has been added to the preceding sentence, "...if MDLs are inconsistent and do not achieve the requirements of Permit Section 11.10.3 (Chemical Analysis)."</p> <p>The Renewal Permit has been changed as follows:</p> <p>The risk assessment shall include an evaluation of analytical data and the usability of the data in the assessment. Data validation shall be conducted in accordance with current EPA guidelines. The evaluation of data shall also include a comparison of detection limits with appropriate and current risk-based screening levels, <u>if MDLs are inconsistent and do not achieve the requirements of Permit Section 11.10.3 (Chemical Analyses)</u></p>	Yes

No.	Loc.	Comment	NMED Response	Δ
			Current EPA methodology for handling non-detects and replicates in the risk assessment shall be applied.	
476	11.10.4.1. iii	<p>COPCs are initially identified in Section 11.4 in conjunction with the comparison to soil screening levels. The COPCs are carried forward from Section 11.4.2 to Section 11.10.4 if the Permittees are unable to meet the cleanup levels in Permit Section 11.4.2. Therefore, this discussion of Constituents of Potential Concern should be inserted in 11.4 as 11.4.1.</p> <p>Suggested language change:</p> <p>Move Section 11.10.4.1.iii, page 157, lines 20-34 to page 158, to Section 11.4.1.</p>	Permit Section 11.4 addresses cleanup levels. Permit Section 11.10 addresses risk assessment procedures; therefore, the text of Permit Section 11.10.4.1.iii is in the appropriate permit section.	No
477	11.10.4.1. iii	<p>No. 4 of the inorganic chemical site attribution analysis indicates that maximum detected concentration is compared to upper tolerance limit (UTL), but the Permittees currently compare the maximum concentration, including detection limits. So if the maximum is a non-detect, the Permittees will still compare it to the UTL, because the Permittees believe this is more protective.</p> <p>Suggested language change:</p> <p>Page 158, lines 1 and 2, in addition to moving this Section to 11.4.1, modify the sentence as follows:</p> <p>(4) comparison of maximum detected-site concentrations to a background reference value (<i>e.g.</i> upper tolerance limit, UTL)</p>	The Department concurs. The word “detected” has been deleted from Item 4 in Permit Section 11.10.4.1.iii.	Yes
478	11.10.4.1. iii	<p>An alternative should be included in the event that sample size is not sufficient to perform statistical analysis.</p> <p>Suggested language change:</p> <p>Page 158, lines 3-5, in addition to moving this Section to 11.4.1, add the following this sentence to the end of number (5):</p> <p><u>If the sampling size is not sufficient to perform statistical analysis, a comparison of the maximum site concentration to the maximum background concentration shall be</u></p>	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
479	11.10.4.1. iii	<p><u>used:</u></p> <p>The evaluation of essential nutrients does not necessarily include comparison to recommended daily allowances. This comparison is only done if the Permittees cannot eliminate the essential nutrient based on comparisons to the background. Currently the Permittees evaluate essential nutrients if they are not eliminated by UTL or statistics, using frequency detected above background and how much above background per EPA RAGS.</p> <p>Suggested language change:</p> <p>Page 158, line 10, in addition to moving this Section to 11.4.1, modify the sentence as follows:</p> <p>(8) evaluate essential nutrients and compare to recommended daily allowances and/or upper intake limits. <u>by frequency detected above background and by how much above background per EPA RAGS. If the nutrients cannot be eliminated by this comparison the Permittees shall compare them to recommended daily allowances or upper intake limits.</u></p>	<p>The Department disagrees.</p> <p>The evaluation of essential nutrients referenced in Permit Section 11.10.4.1.iii is in reference to the tiered approach to assessment of inorganics concentrations relative to background concentrations, not as they relate to calculating risk.</p>	No
480	11.10.4.1. iv	<p>The ProUCL software that is used as an example of EPA and/or Department accepted guidance and methodologies does not always recommend using 95% estimate of the upper confidence limit (95% UCL). Sometimes a 97.5% or 99% UCL is recommended. The Permittees believe that the percentage of UCL should be consistent with what ProUCL recommends if the software is to be used to calculate EPCs.</p> <p>Suggested language change:</p> <p>Page 158, lines 17 and 18, add the following sentence:</p> <p><u>The Permittees shall use the 95% UCL or greater dependant upon what the EPA ProUCL software recommends.</u></p>	<p>Permit Section 11.10.4.1.iv has been modified to reference an upper confidence limit (UCL) of 95% “or greater” instead of a 95% UCL. This section has also been modified to state that acute exposures must be evaluated “if conditions are identified” where there is the potential for acute exposures.</p> <p>The Renewal Permit has been changed as follows:</p> <p>The Permittees shall determine exposure point concentrations (EPCs) that are representative of the concentrations of chemicals in each given medium to which a receptor may be exposed.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
			<p><u>Current EPA methodology for handling non-detects and replicates in the risk assessment shall be applied.</u> EPA recommends a 95% <u>or greater</u> estimate of the upper confidence limit (<u>UCL ≥ 95%</u>) on the arithmetic mean be used as an EPC for chronic exposures. <u>If conditions are identified where</u> For acute exposures <u>must be evaluated</u>, the maximum detected site concentration shall be used as the EPC.</p>	
481	11.10.4.1. iv	<p>There is no guidance from EPA or NMED on how to conduct an acute assessment. Furthermore, the soil screening levels are for chronic exposure not acute. This condition is ambiguous and should be deleted from the draft permit or the section should be revised to fully describe how to perform acute risk assessment.</p> <p>Suggested language change:</p> <p>Page 158, lines 18 and 19, delete the following:</p> <p>For acute exposures, the maximum detected site concentration shall be used as the EPC.</p>	See response to comment above.	No
482	11.10.4.1. iv	<p>The Johnson and Ettinger model is used in determining residential indoor air concentrations not industrial. OSHA worker safety requirements are applicable for industrial environments.</p> <p>Suggested language change:</p> <p>Page 158, lines 24-30, modify the section as follows:</p> <p>EPA does not recommend estimating intakes for air inhalation pathway, but rather compares estimated volatile/particulate air concentrations adjusted for exposure frequencies, duration and time. For inhalation of volatiles/particulates from soil,</p>	The Johnson and Ettinger Model is cited as an example of EPA and Department accepted approaches, not as a requirement.	No

No.	Loc.	Comment	NMED Response	Δ
		<p>EPCs shall be determined using current EPA and/or Department methodology. based upon volatilization factor or particulate emission factor. Indoor air concentrations shall be determined using EPA and Department accepted approaches, such as the EPA recommended Johnson and Ettinger model. The Permittees shall evaluate the relevance of the vapor intrusion pathway. If there is a complete pathway, the Permittees shall assess this pathway using appropriate methodologies.</p>		
483	11.10.4.1.vi	<p>The context of the sentence “Cumulative effects for risk and hazard shall be determined” is unclear. In previous sections “cumulative” risk seems to mean “additive.” Whereas, in this section, it appears that “cumulative” means from all sources or exposures (<i>i.e.</i> soil, air, water, and biota).</p> <p>Suggested language change:</p> <p>Page 159, line 4, Please provide a definition of the word “cumulative” as used in the context: “Cumulative effects for risk and hazard shall be determined.”</p>	<p>The last sentence of Permit Section 11.10.4.1.vi, paragraph one has been modified to state “[c]umulative effects for risk and hazard <u>for all media and pathways</u> shall be determined”</p>	Yes
484	11.10.5	<p>Combining the Site-Specific Human Health Risk Assessment and the Site-Specific Ecological Risk Assessment (Section 11.10.5) and the related reports that go with these assessments into one Risk Assessment Report including both human health and ecological assessments is current practice and is efficient.</p> <p>Suggested language change:</p> <p>Page 159, Lines 14-22</p> <p>See the comment on this subject in Section 11.10.4.</p> <p>Refer to Section 11.10.4 in the text of the draft permit.</p>	<p>Permit Section 11.10.5 has been modified to add the following sentence. <u>“If the Department determines that an ecological risk assessment work plan is necessary, the Permittees shall submit to the Department for its review and approval a work plan that includes, at a minimum, the site-specific exposure assumptions and any additional sampling needed to support the risk assessment.”</u></p>	Yes
485	11.10.6.1	<p>The Permittees object to the requirement to develop background data for surface water.</p> <p>The Permittees have developed background data sets for the Consent Order, which the Department accepted. These background data sets address soil, sediment, tuff, and groundwater, including springs. The current Department-approved background data set should meet the permit requirement to “determine an appropriate background data set” in section 11.10.6, line 24. In addition, the requirement to determine background data for surface water is ambiguous. The current background data set includes “springs,” and</p>	<p>The first sentence of Section 11.10.6.1 has been changed to <u>“...and determining whether metals are present in the subject media (e.g., soil, groundwater, surface water, sediment) due to site activities.”</u></p> <p>The Permit does not explicitly require developing background data</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>the revised draft Permit omits any information on how a background data set for surface water could otherwise be determined.</p> <p>Suggested language change:</p> <p>Page 160, line 14, delete the words “surface water” from the first sentence of the Section:</p> <p>“...and determining whether metals are present in soil/groundwater/surface water tuff/sediment due to site activities.”</p>	<p>for surface water. The wording “surface water” in Section 11.10.6.1 is used as an example of a subject medium where metals might be present.</p>	
486	11.10.6.1	<p>Site attribution analysis is addressed by the revised draft Permit in Section 11.10.4.1iii. The Permittees have commented on that Section.</p> <p>Suggested language change:</p> <p>Page 160, Lines 18-24.</p> <p>Please see the comment on Section 11.10.4.1iii suggesting moving this text to Section 1.4.1.</p>	<p>The first sentence of Permit Section 11.10.6.1 has been modified to refer to “the subject media” and list soil, groundwater, surface water and sediment as examples.</p> <p>The Renewal Permit has been changed as follows:</p> <p>The 95% UTL for each metal shall be used as the background reference value for use in screening assessments and determining whether metals are present in <u>the subject media</u> (<i>e.g.</i>, soil, groundwater, surface water, sediment) due to site activities.</p>	Yes
487	11.11.2.3	<p>EPA recommends that mud rotary methods not be used at LANL due to the well documented problems identified over the past 5 years. Additives may be used in intervals above the target zone if telescoping casing constructions are used and the hole is adequately cleaned before drilling the final footage within the interval to be screened.</p>	<p>See the Department’s response regarding groundwater protection in the document titled General Response to Comments.</p>	No
488	Att. A	<p>We request that Building 185, Technical Area 55, not be allowed to be permitted due to unresolved seismic inconsistencies. For instance, <i>Evaluation of potential seismic hazards from Holocene-age surface-rupturing faults at Building 185, Technical Area</i></p>	<p>See the Department’s response regarding seismic hazard in the document titled General Response to Comments.</p>	No

No.	Loc.	Comment	NMED Response	Δ
		<p>55, <i>Los Alamos National Laboratory (LA-DR 0904042)</i> states,</p> <p><i>It is believed that the lineaments identified in aerial photographs near TA-55 reflect eroded fracture zones propagating upward from the subsurface trace of the Rendija Canyon fault.</i></p> <p>(Pg.56),</p> <p>yet Gardner et al. (1999) tells us,</p> <p><i>This study found that the Rendija Canyon fault, which is a single, simple down-to-the-west structure north of the Los Alamos townsite, splays to the southwest in a broad zone of deformation south of Los Alamos Canyon, through the Los Alamos County Landfill and TA3, and likely dies out just south of Two mile Canyon.</i> (Pg.53)</p> <p>If the Rendija Canyon fault dies out just south of Two-mile Canyon, which would be approx. 3000 ft to the west of TA-55, how can it have also propagated fracture zones near TA-55?</p>		
489	Att. A	<p>The section numbers within Attachment A do not appear consistent. Each of the Technical Areas represented within the attachment should have its own major section. Suggested change realigns the sections for consistency.</p> <p>Suggested language change:</p> <p>Suggested changes are illustrated in a revised Table of Contents for Attachment A included with this document as Appendix 7.</p>	The Department concurs. The proposed revised language has been added to the Renewal Permit.	Yes
490	A.1.1	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change:</p> <p>Change the reference to Attachment N within the section from “Figure 13” to “Figure 12”.</p>	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
491	A.1.2	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change:</p> <p>Change the reference to Attachment N within the section from ‘Figure 14’ to ‘Figure 13’.</p>	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
492	A.1.5	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change:</p> <p>Change the reference to Attachment N within the section from “Figure 5” to “Figure 4”.</p>	<p>The Department concurs. The proposed language has been added to the Renewal Permit.</p>	Yes
493	A.2	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change:</p> <p>Change the references to Attachment N within the section as follows:</p> <ul style="list-style-type: none"> • Page 6, Line 38 should be changed from “Figure 15” to “Figure 16”. • Page 7, Line 1 should be changed from ‘Figure 16” to “Figure 17”. 	<p>The Department concurs. The proposed language has been added to the Renewal Permit.</p>	Yes
494	A.2.1	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change:</p> <p>Change the reference to Attachment N within the section from “Figure 19” to “Figure 20”.</p>	<p>The Department concurs. The proposed language has been added to the Renewal Permit.</p>	Yes
495	A.2.2	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change:</p> <p>Change the reference to Attachment N within the section from “Figure 20” to “Figure 21”.</p>	<p>The Department concurs. The proposed language has been added to the Renewal Permit.</p>	Yes
496	A.2.3	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change:</p> <p>Change the reference to Attachment N within the section from “Figure 6” to “Figure 5”.</p>	<p>The Department concurs. The proposed language has been added to the Renewal Permit.</p>	Yes
497	A.3	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change:</p> <p>Change the reference to Attachment N within the first paragraph of the section from “Figure 21” to “Figure 22”.</p>	<p>The Department concurs. The proposed language has been added to the Renewal Permit.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
498	A.3	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the first paragraph of the page from “Figure 5” to “Figure 6”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
499	A.3.1	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 22” to “Figure 23”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
500	A.3.2	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 22” to “Figure 23”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
501	A.4	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the references within the first paragraph of the section as follows: <ul style="list-style-type: none"> • Change “Figure 23” in Line 35 to “Figure 24”. • Change “Figure 24” in Line 1 to “Figure 25”. 	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
502	A.4	Administrative – Suggested text change corrects a typographical error. Suggested language change: Delete “A.6.1” at the end of the section.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
503	A.4.1	Administrative – Suggested text change corrects a typographical error. Suggested language change: Delete “and” between the words canopy and 216.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
504	A.4.1	Administrative – Suggested text change corrects a typographical error.	The Department concurs. The proposed language has been	Yes

No.	Loc.	Comment	NMED Response	Δ
		Suggested language change: Change the reference to Attachment N within the section from “Figure 25” to “Figure 26”.	added to the Renewal Permit.	
505	A.4.1.1	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 25” to “Figure 26”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
506	A.4.1.2	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 25” to “Figure 26”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
507	A.4.1.3	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 25” to “Figure 26”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
508	A.4.1.4	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 25” to “Figure 26”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
509	A.4.1.5	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 25” to “Figure 26”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
510	A.4.1.6	Administrative – Suggested text change corrects a typographical error. Suggested language change:	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
		Change the reference to Attachment N within the section from “Figure 25” to “Figure 26”.		
511	A.4.1.7	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 25” to “Figure 26”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
512	A.4.1.8	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 25” to “Figure 26”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
513	A.4.1.9	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 25” to “Figure 26”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
514	A.4.2	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 26” to “Figure 27”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
515	A.4.2.1	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 27” to ‘Figure 28”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
516	A.4.2.1	Suggested deletion corrects an editorial error possibly created during the rearrangement of the section from the previous section. The concrete ring-wall that actually exists at the unit is described in the sentence before. There are no asphalt curbs within the unit. Suggested language change:	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
		Delete the sentence: “The interior floor perimeter of each dome is surrounded with a minimum 6-inch-wide asphalt curb.”		
517	A.4.2.2	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the three references to Attachment N within the section from “Figure 28” to “Figure 29”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
518	A.4.2.3	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 29” to “Figure 30”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
519	A.4.2.4	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 30” to “Figure 31”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
520	A.4.2.4	Administrative – Suggested text change corrects a typographical error. Suggested language change: Add “and” between the words stock and empty within the first sentence of the page.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
521	A.4.3	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 31” to “Figure 32”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
522	A.4.3.1	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 31” to “Figure 32”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
523	A.4.3.2	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the two references to Attachment N within the section from “Figure 31” to “Figure 32”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
524	A.4.4	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 32” to “Figure 33”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
525	A.4.4.1	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 32” to “Figure 33”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
526	A.4.4.2	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 32” to “Figure 33”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
527	A.4.5	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 33” to “Figure 34”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
528	A.4.6	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 34” to “Figure 35”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
529	A.4.7	Administrative – Suggested text change corrects a typographical error.	The Department concurs. The proposed language has been	Yes

No.	Loc.	Comment	NMED Response	Δ
		Suggested language change: Change the reference to Attachment N within the section from “Figure 35” to “Figure 36”.	added to the Renewal Permit.	
530	A.5	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 36” to “Figure 37”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
531	A.5.1	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 36” to “Figure 37”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
532	A.5.2	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the two references to Attachment N within the section from “Figure 36” to “Figure 37”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
533	A.5.2	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure X” to “Figure 37”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
534	A.5.3	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figures 8, 9, and 10” to “Figures 7, 8, and 9”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
535	A.5.4	Suggested changes are editorial in nature and create greater consistency within the draft Permit. Changes bring Attachment A into alignment with descriptions in Attachment D. They add information as to the locations of fire alarm pull boxes, smoke detectors, and	The Department concurs – suggested changes do not alter the level of protectiveness of the	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>evacuation buttons as well as additional information about communications while present at the TA-54, Area L and Area G permitted units.</p> <p>Suggested language change:</p> <p>Area L is equipped with an audible alarm system to alert personnel of a fire or the need to evacuate the area. This-These alarms can be activated by pulling a fire alarm pull box or by pushing the evacuation alarm button. These fire alarm pull boxes are located in Dome 215 alarms are located throughout Area L and are connected to the Los Alamos County Fire Department (LACFD) through the Facility's central alarm system at all times. <u>Evacuation alarms are located adjacent to the fenceline crash gates and other locations in Area L (see Attachment D, Table D-1).</u> In addition to the alarms there are numerous telephones located in and around the structures within Area L. These telephones ensure that personnel can contact on-site and Facility emergency personnel at all times. Many of these telephones also serve as emergency paging phones so that information can be announced throughout the area. <u>Alphanumeric pagers are also distributed to workers at Area L. Employees can be notified of an emergency situation and appropriate response actions through the use of a text message sent on the emergency alpha-numeric pagers. The emergency paging system can be utilized to alert workers of an emergency situation as well as appropriate response actions.</u></p> <p>On page 26, lines 13-30, modify the text to read as follows:</p> <p>The alarms can be activated by pulling a fire alarm or by pushing the evacuation alarm button. Fire alarms, and evacuation alarms, and strobe lights are in place at strategic locations to alert personnel of emergency conditions. These fire alarms are located throughout Area G and are connected to the LACFD through the Facility's central alarm system at all times. <u>Flame or smoke detection equipment is located within structures TA-54-226, TA-54-229, TA-54-230, TA-54-231, and TA-54-232. Security personnel and LAFD are notified upon activation of the flame or smoke detectors. Personnel working in Area G also carry pagers, cellular telephones, or two-way radios. Emergency paging telephones are in place so that information can be announced throughout the area. This equipment ensures that personnel can contact on-site and Facility emergency personnel at all times. Windsocks are at strategic locations to indicate wind direction and strength. PPE and emergency equipment</u></p>	<p>nature of the emergency response procedures at the permitted units. The proposed language has been added to the Renewal Permit.</p>	

No.	Loc.	Comment	NMED Response	Δ
		<p>supplies are stored at various locations throughout Area G. In addition, essential information for emergency personnel is located at the main gate to Area G in the event of an emergency after normal working hours or if Area G personnel are unavailable. There are different types of monitoring equipment located at the Area G CSUs that are used to qualitatively and quantitatively evaluate airborne contaminants. Alarms and strobe lights warn personnel when airborne concentrations exceed preset limits. Fire control equipment is located throughout Area G. This equipment includes ABC-rated or BC rated, water and carbon dioxide fire extinguishers, dry-chemical fire suppression systems, fire blankets, and several fire hydrants. Trained personnel can use the fire extinguishers and fire blankets to extinguish small, nonchemical fires. For larger fires, security personnel and the LACFD are alerted. Eyewash stations, showers, and other first aid and decontamination equipment are maintained at various locations within Area G. <u>Personnel working in Area G also carry alphanumeric pagers, cellular phones, or two-way radios. Emergency paging telephones are in place so that information can be announced throughout the area. This equipment ensures that personnel can contact on-site and Facility emergency personnel at all times. Windsocks are at strategic locations to indicate wind direction and strength. PPE and emergency equipment supplies are stored a various locations throughout Area G. There are different types of monitoring equipment located at the Area G CSUs that are used to qualitatively and quantitatively evaluate airborne contaminants. Alarms and strobe lights warn personnel when airborne concentrations exceed preset limits.</u></p>		
536	A.6	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change:</p> <p>Change the reference to Attachment N within the section from “Figure 37” to “Figure 38”.</p>	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
537	A.6.1	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change:</p> <p>Change the reference to Attachment N within the section from “Figure 38” to “Figure 40”.</p>	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
538	A.6.2	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 39” to “Figure 42”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
539	A.6.3	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 40” to “Figure 41”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
540	A.6.4	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 41” to “Figure 43”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
541	A.6.5	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 42” to “Figure 44”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
542	A.6.6	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 44” to “Figure 45”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
543	A.6.7	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 45” to “Figure 46”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
544	A.6.8	Administrative – Suggested text change corrects a typographical error.	The Department concurs. The proposed language has been	Yes

No.	Loc.	Comment	NMED Response	Δ
		Suggested language change: Change the reference to Attachment N within the section from “Figure 46” to “Figure 47”.	added to the Renewal Permit.	
545	A.6.8.1	Administrative – Suggested deletion removes reference to a figure that is not included within the draft Permit. Suggested language change: Delete the sentence “Figure H-3 shows the dimensions of the evaporator glovebox tank component and its support structure.”	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
546	A.6.8.1	Administrative – Suggested deletion removes reference to a figure that is not included within the draft Permit. Suggested language change: Delete the sentence “Figures H-4 and H-5 provide a legend and a piping and instrumentation diagram for the evaporator glovebox tank and component.”	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
547	A.6.9	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 47” to “Figure 48”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
548	A.6.10	Administrative – Suggested text change corrects a typographical error. Suggested language change: Change the reference to Attachment N within the section from “Figure 11” to “Figure 10”.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
549	A.6.8.1	These lines references figures (H-3, H-4, H-5) that do not exist. Please revise.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
550	A.5.2	Section A.5.2 references "Figure X" (page 24, line 27), which does not appear in the	The Department concurs. The reference has been changed in the	Yes

No.	Loc.	Comment	NMED Response	Δ
		Permit.	Renewal Permit.	
551	C.1.3.1	<p>Administrative – Typographical Error</p> <p>Suggested language change:</p> <p>Change the reference to Section “C.3.2.3” to “C.3.2.4” in the final sentence of the section.</p>	<p>The Department concurs. The proposed language has been added to the Renewal Permit.</p>	Yes
552	C.2.2	<p>The Permittees agree that there may be occasions when a comprehensive analysis for all constituents of a generated waste may be appropriate for waste characterization where there is no other information. However, the permit condition does not allow alternative options. The condition as written does not explain the terms “laboratory analysis” and “capable of measuring,” making it difficult for the facility to understand how the condition will be enforced.</p> <p>The new permit condition precludes the use of process knowledge or other acceptable knowledge (see Section 3.1.1, Attachment C) to determine whether hazardous constituents are present or to be used to limit the constituents otherwise analyzed for. EPA’s April 1994 guidance for waste analysis plans in permits supports the use of other waste information in addition to sampling and analysis for characterization (ECDIC-2002-011, OSWER 9938.4-03). Additionally, if a one-time analysis for all the potential hazardous constituents is conducted, subsequent analysis may be limited to only those identified in the initial sampling and analysis if no other waste generation process changes have occurred. The permit condition, as currently written, requires that all constituents must be analyzed at any time laboratory analysis is used as part of a hazardous waste characterization.</p> <p>Attachment C of the draft permit describes the use of laboratory analysis both as primary sampling and analysis (Section 3.1.2) where acceptable knowledge is insufficient for waste characterization and as additional characterization data, an allowable component of acceptable knowledge when appropriate (Section 3.1.1). Laboratory analysis supporting AK is often selective in terms of analytes measured. The proposed permit condition does not define which type of laboratory analysis is being considered.</p> <p>The use of the term “capable of measuring” in the condition is not sufficiently explained by the additional reference to SW-846 to resolve it’s meaning for compliance purposes.</p>	<p>The Department agrees that the term “capable of measuring” may be ambiguous so with the concurrence of the Permittees the following changes are made in the Renewal Permit to the following paragraph,</p> <p>When using laboratory analysis as part of a hazardous waste characterization pursuant to Attachment C (Waste Analysis Plan), Section C.3.1.2, the Permittees shall require the laboratory to report concentrations of all hazardous constituents listed at 40 CFR § 268.48, <i>Table UTS</i> that the analytical test method used is capable of measuring, as specified at the most recent version of the U.S. EPA’s <i>Test Methods for Evaluating Solid Wastes (SW-846)</i>. <u>When performing this laboratory analysis the Permittees will not be required to perform sample preparation or determinative</u></p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>SW-846 contains numerous sources for determining whether the contained methods are appropriate for analytes of concern. Chapter Two of SW-846 specifies the determinative methods for analysis of specified analytes but individual methods can potentially be used for much wider ranges of analytes. For example, Method 8260B (gas chromatography/ mass spectrometry) of SW-846 is used to determine volatile organic compounds for waste characterization. The method contains a table listing those compounds that can be determined by the method using the contained procedures (Section 1.1) and this table is generally in agreement with Table 2-1 of Chapter Two. However, the method further states that it can be used to quantitate most volatile organic compounds that have boiling points below 200°C (Section 1.3). This would potentially add many analytes in Table UTS that are not specifically listed for the method in SW-846 Table 2-1 where the appropriateness of the analytical requirements (e.g., detection limits, reproducibility) are not known. Additionally, there are six potential sample preparation techniques for Method 8260B (Section 1.2), none of which are appropriate for all the potential analytes capable of being measured by the method. The proposed permit condition does not resolve the applicability of any of these factors in determining how compliance will be achieved.</p> <p>Suggested language change:</p> <p>Page 16, lines 30-32, delete the following:</p> <p>The Permittees shall require the laboratory to report all constituents the laboratory method is capable of measuring as specified in the most recent version of the US EPA's Test Methods for Evaluating Solid Wastes (SW-846).</p>	<p><u>procedures other than those performed routinely for the target analytes.</u></p>	
553	C.3.2.4	<p>Suggested text change is consistent with operation of the unit and information presented in Attachment G.24.</p> <p>Suggested language change:</p> <p>Add “and corrosivity” to the sentence that reads “This waste stream typically exhibits the hazardous characteristics of toxic metals.”</p>	<p>The Department concurs. The proposed language has been added to the Renewal Permit.</p>	Yes
554	Table C-2	<p>Suggested text changes resolve a discrepancy in the terminology for cresol and incorporate operational revisions previously submitted to NMED. In some cases, this is because the tables already include o-cresol, m-cresol, and p-cresol (the forms of cresol)</p>	<p>The Department concurs – the proposed changes make the Permit more accurate and no less protective. The changes resolve</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>or the compound should not be included.</p> <p>Suggested language change:</p> <p>Revise the descriptions of Hazardous Constituents in the Waste Types as follows:</p> <p>Page 32, Spent Solvents, delete cresol from Potential Hazardous Waste Constituents and Potential Underlying Hazardous Constituents.</p> <p>Page 34, Contaminated Solid Wastes, delete cresol from Potential Hazardous Waste Constituents and Potential Underlying Hazardous Constituents.</p> <p>Page 36, Contaminated Non-Corrosive Aqueous and Non-Aqueous Solutions and Sludges, delete cresol from Potential Hazardous Waste Constituents and Potential Underlying Hazardous Constituents.</p> <p>Page 37, Unused/Off-Specification Commercial Chemical Products, delete cresol from Potential Hazardous Waste Constituents and Potential Underlying Hazardous Constituents.</p> <p>Page 37, Unused/Off-Specification Commercial Chemical Products, delete 1-dichlorobenzene from Potential Underlying Hazardous Constituents.</p> <p>Page 37, Unused/Off-Specification Commercial Chemical Products, add 1,2-dichloroethane to Potential Underlying Hazardous Constituents.</p> <p>Page 38, Gas Cylinder Waste, delete cresol from Potential Underlying Hazardous Constituents</p>	<p>terminology discrepancies and, in the case of Unused/Off-Specification Commercial Chemical Product and 1-Dichlorobenzene, limits the hazardous constituents that may be present in hazardous waste. The addition of 1,2-dichloroethane to the list of Potential Underlying Hazardous Constituents associated with Unused/Off-Specification Commercial Chemical Products simply reflects the fact that the table includes the associated waste code (D028) for the compound.</p>	
555	Table C-6	<p>Table C-6 should be revised in order to be consistent with the waste streams that may be treated at the Open Burn treatment units. Further discussion of the proposed changes to Table C-6 is found in Comment QQ in Part 2 of the Comments and revised Table C-6 is attached in Appendix 6.</p> <p>Suggested language change:</p> <p>Attachment C, page 59, replace Table C-6 in the revised draft Permit with Table C-6 in Appendix 6.</p>	<p>See the Department's response regarding open burning in the document titled General Response to Comments.</p>	Yes
556	Table C-6	<p>The waste descriptions included in Table C-6 of the draft Permit do not coincide with the descriptions of waste treated by open burning in Section C.1.3.2. Suggested changes</p>	<p>See the Department's response regarding open burning in the</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>bring the table into alignment with the descriptions in the waste analysis plan.</p> <p>Changes to the first row of the table coincide with the waste stream description for bulk solvent waste. The Permittees define this waste stream to only include HE and dimethyl sulfoxide, there would be no other Environmental Protection Agency Numbers other than D003 and D030.</p> <p>Changes to the second, fourth and fifth rows of the table add EPA Hazardous Waste Numbers from the table transmitted from the Permittees' permit application which have been omitted but are allowed for acceptance at the open burning treatment units as outlined in Attachment B of the draft Permit (<i>Part B Permit Application</i>).</p> <p>Additional changes in the description in the second row limit the acceptance of this waste stream.</p> <p>Deletion of the sixth row of the table is recommended because solvent in de minimus quantities is not itself a waste stream. Solvents may be accepted at the open burning treatment units as part of the other waste streams as recommended by the suggested changes.</p> <p>Suggested language change: Suggested changes are in Table C Appendix 6, revised -6.</p>	document titled General Response to Comments.	
557	Table C-12	<p>The waste descriptions included in Table C-12 of the draft Permit do not coincide with the descriptions of waste treated by open burning in Section C.1.3.2. Suggested changes bring the table into alignment with the descriptions in the waste analysis plan.</p> <p>Changes to the first row of the table coincide with the waste stream description for bulk solvent waste. The Permittees define this waste stream to only include HE and dimethyl sulfoxide, there would be no EPA Hazardous Waste Numbers other than D003 and D030.</p> <p>Recommend deleting "solvents" from the waste stream name to match the description in Section C.1.3.2.</p> <p>Delete the row "HE Commercial Chemical Products" as this is not a waste stream that will be accepted at the open burning treatment units.</p> <p>Change "Wet HE" to "HE Process Waste from Water Filtration" to match the</p>	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ																
		<p>description in Section C.1.3.2.</p> <p>Delete the row “HE-Contaminated Liquid Acids, Bases, and/or Inorganic Salt Solutions” as this is not a waste stream that will be accepted at the open burning treatment units.</p> <p>Suggested language change:</p> <p>Suggested changes in Appendix 6, revised are Table C-12.</p>																		
558	Table C-13	<p>Administrative –Table C-13 is all one row.</p> <p>Suggested language change:</p> <p>Include Table C-13 formatted as follows:</p> <p style="text-align: center;">Table C-13 Summary of Characterization Methods for High Explosives (HE) Waste and HE-Contaminated Waste</p> <table border="1"> <thead> <tr> <th>Parameters</th> <th>Method Numbers</th> <th>Test Method</th> <th>Rationale</th> </tr> </thead> <tbody> <tr> <td>HE in the Waste</td> <td>SW-846 (Appropriate analytical method from the Method 8300 series)^a</td> <td>High Performance Liquid Chromatography or Acceptable Knowledge^b</td> <td>Determine HE concentrations directly in homogeneous materials or by process information.</td> </tr> <tr> <td></td> <td></td> <td>DX-2 Spot Test, DeTech, or other screening methods</td> <td>Determine if HE is present in the waste stream.</td> </tr> <tr> <td></td> <td></td> <td>Acceptable Knowledge^b</td> <td>If all surfaces of heterogeneous waste cannot be directly tested or visually examined (e.g., debris or equipment) and the waste object was potentially contaminated with HE during its use.</td> </tr> </tbody> </table> <p><small>^a U.S. Environmental Protection Agency, 1986 and all approved updates, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846. ^b Acceptable knowledge is broadly defined as process knowledge, additional characterization data, and/or facility records of analysis, U.S. Environmental Protection Agency, 1994, "Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Waste, A Guidance Manual," OSWER 99/38.4-03, U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C.</small></p>	Parameters	Method Numbers	Test Method	Rationale	HE in the Waste	SW-846 (Appropriate analytical method from the Method 8300 series) ^a	High Performance Liquid Chromatography or Acceptable Knowledge ^b	Determine HE concentrations directly in homogeneous materials or by process information.			DX-2 Spot Test, DeTech, or other screening methods	Determine if HE is present in the waste stream.			Acceptable Knowledge ^b	If all surfaces of heterogeneous waste cannot be directly tested or visually examined (e.g., debris or equipment) and the waste object was potentially contaminated with HE during its use.	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes
Parameters	Method Numbers	Test Method	Rationale																	
HE in the Waste	SW-846 (Appropriate analytical method from the Method 8300 series) ^a	High Performance Liquid Chromatography or Acceptable Knowledge ^b	Determine HE concentrations directly in homogeneous materials or by process information.																	
		DX-2 Spot Test, DeTech, or other screening methods	Determine if HE is present in the waste stream.																	
		Acceptable Knowledge ^b	If all surfaces of heterogeneous waste cannot be directly tested or visually examined (e.g., debris or equipment) and the waste object was potentially contaminated with HE during its use.																	
559	Table C-19	<p>Suggested change requests the addition of EPA Hazardous Waste Numbers to the table to add clarity. These numbers are allowed for acceptance at the stabilization unit as outlined in Attachment B of the draft Permit (<i>Part B Permit Application</i>).</p> <p>Suggested language change:</p> <p>Add the Hazardous Waste Numbers D005, D010, and D011 and corresponding constituents and regulatory limits to the table.</p>	The Department concurs – the proposed change makes the Permit more accurate and no less protective. Table C-19 is altered to reflect wastes stabilized to date and allowable waste codes as specified in Attachment B (Part A Permit Application).	Yes																
560	Att. D	Suggested text changes have been included in a revised Attachment D, attached hereto in Appendix 7. All of the requested changes have been presented with editing marks to highlight changes made to the Attachment. Changes that have been made are	The Department concurs – the proposed change makes the Permit more accurate and no less	Yes																

No.	Loc.	Comment	NMED Response	Δ
		<p>administrative or editorial in nature and do not change procedures as presented within the Contingency Plan. Many changes update organizational names, change system references, or remove the names of specific entities to better reference the function of personnel that are mentioned within the plan. Other changes add clarity and edit the text within the attachment to better state the emergency response process. The Permittees will submit a permit modification request that reflects these changes to the Permittees' current LANL Hazardous Waste Facility Permit. The drafting of this permit modification is underway.</p> <p>Suggested language change: See Appendix 8 for suggested text changes.</p>	protective.	
561	D.1.6.2	<p>Administrative – Suggested text change corrects a typographical error.</p> <p>Suggested language change: Change the reference to Attachment N within the section from “Figure 48” to “Figure 49”.</p>	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
562	Att. E, Sections E.2.1, E.2.2, E.3.1, E.3.2, E.4.1, E.4.2, E.5.1, and E.5.2	<p>Administrative – During the last permit modification change to the Inspection Record Form, the general information was expanded from Items 1-6 to Items 1-7.</p> <p>Suggested language change: Change “(Items 1-6)” to “(Items 1-7)” on list item 1 for each of these sections.</p>	The Department concurs – the proposed change makes the Permit more accurate and no less protective.	Yes
563	E.5.1	<p>Suggested change corrects a typographical error.</p> <p>Suggested language change: Add “)” to the end of the section title.</p>	The Department concurs. The proposed symbol has been added to the Renewal Permit.	Yes
564	E.3.1	Suggested change is an editorial change that creates consistency between two sections of the Inspection Plan. The Permittees request that Section E.3.1 be made consistent with Section E.2.1 of the TA-55 portion of the Inspection Plan.	The Department disagrees – the inspection frequency for hazardous waste storage tanks	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>Suggested language change: Change the sentence to “An operating day includes when mixed waste is added to or emptied from a tank.”</p>	<p>will be made consistent between Sections E.3.1 and E.2.1 of the TA-55 portion of the Inspection Plan, but Section E.2.1 is altered instead of Section E.3.1.</p> <p>Hazardous waste storage tanks are require at 40 CFR § 246.195 to be inspected each “operational day.” The Department interprets this to mean each day that waste is present in the storage tank. The Department can find no basis to limit inspections to when waste is added to or emptied from a tank.</p> <p>EPA’s September 2005 Introduction to Tanks (EPA530-K-05-018) clarifies that "each operating day" has been defined as "every day the tank is in operation (i.e., storing or treating hazardous waste) and not necessarily just on days the facility is open for business," implying that the term “operating” applies to the facility and not the tank.</p>	
565	Att. E, TA-55 Section	<p>Suggested change corrects a typographical error.</p> <p>Suggested language change: Within the second sentence of the Introduction, change “general inspection Section” to “General Inspection Section”.</p>	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
566	F.2.1	<p>The suggested change is consistent with the changes suggested to Tables F.1 and F.2. In support of the scope of the Personnel Training Plan as stated in Section F.2, the Permittees understand that the requirements within Section F.2.1 pertain to “permitted unit hazardous/mixed waste workers, managers and supervisors of permitted unit hazardous/mixed waste workers, emergency responders, and uncontrolled area potential release site workers.”</p> <p>The requirements within this section to train appropriate waste characterization personnel and personnel that operate radiography equipment or conduct visual examinations (VE) of waste contents do not belong within this section.</p> <p>Personnel receive on-the-job training for these activities, therefore, this discussion should be moved to Section F.2.3 <i>On-the-Job Training</i>. This type of training should not be considered a Facility-wide course. Not all personnel at all of the permitted units conduct these activities.</p> <p>Suggested language change:</p> <p>Page 5, move the following text to Section F.2.3 On-the-Job Training:</p> <p>The Permittees shall ensure that training concerning the use of waste characterization documentation is included in a Facility waste documentation course. This training shall be provided to appropriate personnel, and provide detailed instructions on how to complete forms for characterizing wastes.</p> <p>Only properly trained personnel may operate radiography equipment or conduct visual examinations (VE) of waste contents. Radiography and VE procedure operators shall receive formal and on-the-job training in project requirements, system operations and standards, safe operating practices, application techniques, specific waste-generating practices, packaging configurations, parameter estimation, and identification of prohibited items. The Permittees shall train and test operators before they are qualified for radiography operation and VE, and shall requalify operators at least every two years.</p>	<p>The Department concurs (in part)</p> <p>- The proposed change regarding the radiography and visual examination training makes the Permit more accurate and no less protective. Moving the that paragraph from Section F.2.1 (<i>Facility-Wide Courses</i>) to Section F.2.3 (<i>On-the-Job Training</i>) is appropriate because of the limited number of personnel requiring the training. Retaining the paragraph in its entirety preserves the protectiveness of the Permit. Table F-2 is altered to reflect the radiography and VE training.</p> <p>The proposed change regarding the waste characterization training paragraph has not been made. This general requirement belongs in Section F.2.1 (<i>Facility-Wide Courses</i>) and can be fulfilled by attending the course listed in Table F-1 (<i>Facility-Wide Training Program Outline</i>) and titled <i>Waste Generation Overview Live</i>. The paragraph is altered to reference that course.</p>	Yes
567	Table F-1	<p>The requirement that a waste characterization course is “required for appropriate Facility personnel performing permitted unit waste characterization or generating or reviewing waste characterization documentation regardless of whether personnel work at a permitted unit” expands the scope of the Attachment F Personnel Training Plan.</p>	<p>The Department concurs (in part)</p> <p>– As written the Permit does inappropriately regulate personnel outside the permitted units.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>However, based on the Personnel Training Plan Introduction, the Permittees understand this requirement to be applicable to personnel who review and approve waste characterization documentation for the permitted units rather than all of the generators that send waste to each of the permitted units. The introduction of the plan on page 3 states, “[t]he primary objective of the training program is to prepare personnel to operate and maintain safely those areas managing hazardous and/or mixed waste. This training program applies to all employees of the Permittees and any subcontractors who work regularly at LANL permitted units and manage hazardous and/or mixed waste.”</p> <p>The Permittees suggest the deletion of the final row (and the associated footnote) of Table F.1 and additions to Table F.2 for the following reasons:</p> <ul style="list-style-type: none"> - Most generators of the waste managed at the permitted units do not enter or manage waste within the permitted units; therefore, this requirement cannot apply to them. - Most waste management handlers do not prepare or approve waste characterization documentation; therefore, they are not required to take this course. <p>Inclusion in Table F-2 of the personnel who review and approve waste characterization documentation, conduct radiography, or conduct visual examination is appropriate because they receive on-the-job training.</p> <p>Suggested language change:</p> <p>Page 10, Table F-1:</p> <p>Please delete the row that lists the course titled Waste Characterization and footnote “g” to the table.</p> <p>Page 11, Table F-2:</p> <p>Add the following bullets under both “Permitted unit-specific training will include, as applicable, the following topics:” and “OJT will include the following topics, as applicable:”</p> <ul style="list-style-type: none"> • Review and approve waste characterization documentation • Operation of radiography equipment • Visual examination (VE) of waste contents 	<p>Altering the Permit as proposed does not limit the Department’s authority to ensure personnel outside the permitted units are properly trained because The Department can use it’s authority at 40 CFR Part 262 (<i>Standards Applicable to Generators of Hazardous Waste</i>) § 262.34(a)(4) which requires compliance with § 265.16. These regulations require hazardous waste generators to complete and document training to perform their duties in a way that ensures the Facility’s compliance with the requirements of Part 265, including § 265.13, <i>General Waste Analysis</i>.</p> <p>The Department has altered Table F-1 as proposed for the reasons provided above. Furthermore, the course titled Waste Characterization is redundant with the course titled <i>Waste Generation Overview Live</i>.</p> <p>The Department has altered Table F-2 as proposed.</p>	

No.	Loc.	Comment	NMED Response	Δ
568	Att. G	There were no closure plans included for MDAs H, L, and G.	The comment is correct. See the Department's response regarding regulated units/alternative requirements in the document titled General Response to Comments.	No
569	Att. G	<p>Why do the closure plans included in Attachment G of the Revised Draft RCRA Permit allow for the option of disposing of low-level radioactive solid waste in the future at TA54, Area G?</p> <p>This option appears in a number of tables scattered throughout Attachment G of the Revised Draft RCRA Permit. See, for example, Revised Draft RCRA Permit at Table G.I-5, Table GA-6, Table G.6-2, and Table G.7-2. This is not an issue we recall seeing in the original draft permit circulated by NMED. In any event, many of the closure plans included in the Revised Draft RCRA Permit actually deal with units in Area G so it does not make sense to us to allow for any additional future waste disposal (low-level or otherwise) in Area G while NMED is trying, at the same time, to ensure clean closure of units in Area G. We therefore urge NMED to reconsider allowing for this option in the final permit to be issued.</p>	<p>The Department concurs - The Permittees are self-authorized to dispose of low-level radioactive non-mixed waste in any authorized on-site disposal area but the Department considers it imperative that that disposal area not be undergoing closure under RCRA. The Permittees can't properly close a hazardous waste management unit if it is being used at the same time. Closure under RCRA involves the cessation of acceptance of waste, generally hazardous waste, and then commencement of closure activities. Area G is undergoing closure under the site investigation and remedy selection processes in the Consent Order. As a practical matter, if the Permittees are allowed to leave all the waste in place and just monitor it, the addition of addition of wastes would change the physical characteristics and</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
			<p>potentially migration of contaminants. If the Permittees are allowed to keep the wastes in place and have a protective cover that would inhibit infiltration of water and inhibit migration of contaminants in the subsurface, continued waste disposal would inhibit that. If the Permittees are required to excavate all wastes they couldn't possibly tell the Department what their plan for excavation would be if they don't know what the final volume of waste will be. This would be true of any final remedy.</p> <p>Low-level radioactive solid waste generated from closure activities at above-ground hazardous waste management units should be prohibited from being disposed of in Area G. The Department acknowledges, however, that this is only part of the problem, because this only addresses low-level radioactive waste that's created or is attendant to closure of one or more of the 24 permitted units at the facility. The Permittees generate low-level radioactive waste in association with numerous other activities and at numerous other locations.</p>	

No.	Loc.	Comment	NMED Response	Δ
			<p>The Department wants the Permittees to also stop disposing of this waste but this is not a subject appropriately addressed in the Renewal Permit.</p> <p>The Renewal Permit contains the following altered language addressing places where the Permittees would be authorized to dispose of low-level radioactive, non-mixed waste from hazardous waste management units undergoing closure.</p> <p><u>TA-54 Area G or off-site radioactive waste disposal facility. Either an authorized onsite radioactive waste disposal area that is not undergoing closure under RCRA or its state analog or an authorized offsite radioactive waste disposal facility.</u></p>	
570	Att. G	<p>For each of the closure plans associated with TA-54 Areas G and L there is a requirement to conduct soil sampling. When corrective action is carried out at those locations a full site characterization will be completed and a remedy proposed/approved by NMED. Requiring LANL to sample and analyze soils that are scheduled to undergo corrective action within the next 3 to 5 years after a careful characterization (currently taking place) via a plan approved by NMED provides no benefit and is a waste of money that could be better spent on other important issues. These requirements should be deleted from each of the closure plans in the permit for units at TA-54 Areas G and L.</p>	<p>The Department disagrees – Waiting 3 to 5 years to perform soil sampling in association with above-ground hazardous waste management units being closed and the underlying pad being removed would diminish the possibility of identifying contaminant releases. The Renewal Permit requires soil</p>	No

No.	Loc.	Comment	NMED Response	Δ
			<p>sampling below sumps, catch basins, secondary containment areas, conveyance systems, spill locations, loading and unloading areas. Waiting a long time to perform this sampling not only increases the chance of sampling in the wrong location but also would result in the loss of volatile organic contaminants.</p> <p>Finally, soil sampling is only required to a relatively shallow depth. If the Permittees encounter contamination at a location that is above an area being investigated through the Consent Order, <i>e.g.</i>, units above Areas G and L, the Permittees may petition the Department to incorporate the remainder of the release investigation with the Consent Order investigation.</p>	
571	Att. G	<p>The Revised Draft Permit includes 26 closure plans in Attachment G. The plans were not part of the negotiations as many of the draft plans became available only near the time that the Stipulation was signed. Thus, no party agreed to the draft closure plans.</p> <p>SRIC and NRDC emphasize the importance of adequate closure plans to fulfill the requirements of the Resource Conservation and Recovery Act (RCRA) and the New Mexico Hazardous Waste Act. As the courts long ago ruled:</p> <p>While invariably described as a "cradle-to-grave" system, it [RCRA] in fact reaches (as we shall see) well beyond the grave. <i>American Iron & Steel Institute v. EPA</i>. 886 F.2d 390, 393 (D.C.Cir. 1989).</p> <p>Closure should ensure that the "grave or beyond the grave" conditions prevent future</p>	<p>The Department concurs (in part)</p> <p>Regarding Comment A, the Department agrees that it is contrary to adequate closure requirements to also allow for additional waste disposal in Area G, principally because the Permittees can't properly close a hazardous waste management unit if continued disposal is occurring</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>public health and environmental impacts from the hazardous and mixed wastes that have been treated and stored at LANL. The closure plans should provide for that result.</p> <p>SRIC and NRDC agree that the 26 units must be "clean closed." However, the draft closure plans are deficient in three major ways.</p> <p>A. Each of the closure plans has a table regarding Potential Waste Materials, Waste Types, and Disposal Options that allows low-level radioactive solid waste to be disposed at "TA-54 Area G or off-site radioactive waste disposal." SRIC and NRDC strongly object to allowing future waste disposal at TA-54, Area G. A long-standing concern of the public and the neighboring tribes are the multiple environmental and public health hazards posed by Area G. SRIC and NRDC support cleanup of Area G and do not support allowing additional waste disposal in Area G. Nine of the closure plans are for "clean closure" of units in TA-54 Area G, so it is contrary to adequate closure requirements to also allow for additional waste disposal in Area G. Each of the closure plans should be revised so that no waste disposal is allowed in Area G.</p> <p>B. Each of the closure plans have a provision that:</p> <p style="padding-left: 40px;">The Permittees shall take precautions to not remove or disturb the soil or tuff that overlies the regulated unit (covered under the March 1, 2005 Compliance Order on Consent (Order) (<i>see</i> Permit Section 9.3) beneath the permitted unit. The option of removing small areas of asphalt at sampling locations where contamination is suspected (<i>i.e.</i>, spill or staining sites) to allow sampling without disturbing the surrounding area prior to the general removal of the pad will be assessed at the time of the assessment.</p> <p>SRIC and NRDC object to that provision because it could prevent necessary remediation of some sites where contamination has spread below the structure or pad and into the soil or tuff. Such a provision also could prevent meeting the Clean Closure Performance Standard of Section 9.2.1:</p> <p>To achieve clean closure, the Permittees must:</p> <ol style="list-style-type: none"> 1. Remove all waste residues and hazardous constituents; and 	<p>at the same time. The Renewal Permit has been altered to disallow disposal of low-level radioactive waste at Area G and instead allow disposal of the waste at "an authorized onsite radioactive waste disposal area that is not undergoing closure under RCRA or its state analog or an authorized offsite radioactive waste disposal facility." See addition Department response on the subject above.</p> <p>Regarding Comment B – The Department limits the disturbance of soils above the regulated units to ensure a comprehensive and coordinated cleanup of the both the above-ground hazardous waste management units and the MDAs. Should the above-ground units be found to have shallow soil contamination, that contamination will be fully delineated. The Department will determine whether that delineation will occur independent or concurrently with investigations performed under the Consent Order. The Clean</p>	

No.	Loc.	Comment	NMED Response	Δ
		<p>2. Ensure contaminated media do not contain concentrations of hazardous constituents greater than the clean-up levels established in accordance with Permit Sections 11.4 and 11.5. For soils the cleanup levels shall be established based on residential use. The Permittees must also demonstrate that there is no potential to contaminate groundwater.</p> <p>The provision that could limit remediation below the surface should be deleted from each closure plan.</p> <p>C. Each closure plan contains a performance standard to control hazardous waste residues, hazardous constituents, and, as applicable, contaminated media such that they do not exceed a total excess cancer risk of 10^{-5} for carcinogenic substances. SRIC and NRDC object to the 10^{-5} and instead support a 10^{-6} standard, as previously described in #2 above.</p>	<p>Closure Performance Standard of Section 9.2.1 applies to the closure of the entirety of the MDA including soils contaminated by the above ground units.</p> <p>Regarding Comment C, it is the Department's policy to remediate sites to a level not to exceed a total excess cancer risk of 10^{-5} for carcinogenic substances. The cleanup levels in the Proposed Permit are based on federal and State regulatory standards and they follow Department and EPA guidance. They are the same as the cleanup levels that the Department has applied at other facilities and the Consent Order. They are also the same clean up levels established by the New Mexico Water Quality Control Commission (WQCC) regulations at 20.6.2.WW NMAC, 20.6.2.3103 NMAC, 20.7.10 NMAC.</p> <p>The Department has relied on the following guidance to establish the cleanup levels discussed in the Renewal Permit: the federal Safe Drinking Water Act, Maximum</p>	

No.	Loc.	Comment	NMED Response	Δ
			<p>Contaminant Levels (MCLs); EPA <i>Risk Assessment Guidance for Superfund</i>; and NMED's <i>Technical Background Document for Development of Soil Screening Levels</i>.</p> <p>Finally, this issue was not addressed at the hearing on the Renewal Permit nor in the post-hearing briefs by any party.</p>	
572	Att. G, Sections 4.2	<p>This section requires the Permittees to notify NMED at least 60 days prior to conducting a structural assessment. However, Attachment G requires the Permittees to make notification of closure at least 45 days before the Permittees begin closure, and to make notice of the Permittees intent to conduct a structural assessment at least 20 days before final receipt of waste. The notification requirement in this section would require the Permittees to notify NMED of the intent to conduct a structural assessment before they notify NMED of the closure of a unit.</p> <p>The Permittees suggest that the permit requirement be changed so that the notification of the structural assessment could come at the same time as the notification for closure at 45 days prior to beginning closure activities. The structural assessment must be conducted prior to beginning decontamination activities but after all waste has been removed from the unit, therefore, it would be beneficial to plan this at the time of notification for closure.</p> <p>This section provides that the Permittees “shall begin closure of a permitted unit no later than 90 days after the date on which the unit receives the known final volume of hazardous waste,” and cites 40 CFR §113(a) as authority for the requirement. 40 CFR does not address when a permittee shall begin closure, rather it requires that a permittee treat, remove from the unit or facility, or dispose on-site, all hazardous wastes in accordance with the approved closure plan within 90 days. Attachment G contains the details of closure activities, therefore Permittees suggest that 9.4.1 refer to Attachment G.</p>	<p>The Department concurs - the structural assessment notification should be simultaneous with the 45 day notification of closure.</p> <p>Section 4.2 in the closure plans, as well as each closure plans' schedule table has been changed. See response associated with Permit Section 9.4.6.2.</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>Suggested language change:</p> <p>Page 99, lines 31-33, modify sentence to read as follows:</p> <p>The Permittees shall notify the Department <u>of the closure and the structural assessment at the same time, that is, 45 days prior to initiating closure. at least 60 days prior to conducting the assessment to provide the Department the opportunity to participate in the unit's physical condition review.</u></p> <p>Suggested text change:</p> <p>The Permittees shall <u>remove all hazardous wastes from a permitted unit begin closure of a permitted unit</u> no later than 90 days after the date on which the unit receives the known final volume of hazardous waste or, if there is a reasonable possibility that the permitted unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous wastes, in accordance with 40 CFR §264.113(a).</p>		
573	Att. G, Sections 4.2	<p>Section 4.2 of the closure plans states that the records review and structural assessment must occur within ten days of final receipt of waste. This timeframe is very short as these units have generally operated for a long period of time. The Permittees propose that the majority of the records review could be initiated prior to this schedule milestone and could be amended to include any relatively late additions within this period. The suggested text change incorporates this concept.</p> <p>Suggested language change:</p> <p>Revise the text in the fourth paragraph of Section 4.2 as follows:</p> <p>Within ten days after the final receipt of hazardous waste, the Permittees will <u>finalize the records review, conduct the structural assessment</u> conduct the review and assessment and submit an amended closure plan, if necessary, to the Department for review and approval as a permit modification in accordance with Permit Section 9.4.8.</p>	The Department concurs - the records review and the structural assessment should be “finalized” within 10 days of completing waste removal or within 100 days of final receipt of waste, whichever happens first. Section 4.2 in each closure plan has been changed to reflect this. See response associated with Permit Section 9.4.6.2.	Yes
574	Att. G, Sections 4.2	The closure plans require that “Within five days after the final receipt of hazardous waste, the permitted unit will be emptied of all stored waste.” The time period is unreasonably short and does not comport with 40 CFR §264.113(a), which allows 90 days to treat, remove from the unit or facility, or dispose of on-site, all hazardous	The Department concurs. Section 4.2 in each closure plan reflects this change. See response associated with Permit Section	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>wastes.</p> <p>Suggested language change:</p> <p>Within ninetyfive days after the final receipt of hazardous waste, the permitted unit will be emptied of all stored waste.</p>	9.4.6.2.	
575	All closure plans at Section 2.0	<p>The Attachments referenced at the end of the last sentence of the section includes Attachment B (Part A Application) which is a listing of hazardous waste codes each Technical Area is authorized for. Not all these codes will necessarily be managed in an individual unit. The tables listing the actual waste constituents and codes managed based on records review were included with the closure plans submitted by the Permittees in April 2009. Adding the word potential is consistent with the language in sections 5.2.1.a. of the plans that requires the determination of the specific hazardous constituents at the records review. Additionally, tables listing constituents have been deleted from certain plans (e.g., Hazardous Waste Constituents of Concern at the TA-54, Area G Pad 1 Outdoor Container Storage Unit). Request for inclusion of these tables into the closure plans is also requested by the Permittees.</p> <p>Adjustments to the requested language changes must be made to accommodate the treatment units in Attachments G.2, G.3, and G.24.</p> <p>Suggested language change:</p> <p>Section 2.0:</p> <p>Change the sentence at the end of this section from:</p> <p>“Permit Part 3 (Storage in Containers), Permit Attachment A (Technical Area Unit Descriptions), Permit Attachment B (Part A Application), and Permit Attachment C (Waste Analysis Plan) include information about waste management procedures and potential hazardous waste constituents stored at the permitted unit.”</p>	The Department disagrees – Permit Section 9.4.6.1 requires the Permittees to update the list of hazardous waste constituents in the Sampling and Analysis Plan “to accurately reflect at the time of closure the hazardous wastes managed at the unit.”	No
576	Att. G, Sections 4.1(b)	<p>Establishing residential soil cleanup levels is not appropriate for outdoor units at LANL. The units are included within the area that will be affected by the corrective action closure of SWMUs at each of the sites. As such, the appropriate soil cleanup criteria regarding the use of residential or industrial exposure factors have not been determined pending approval of the remediation options being proposed. There is no discussion presented in the revised draft Permit or the Fact Sheet for using a more conservative</p>	The Department disagrees – Sections 4.1(b) all address alternatives should the Permittees not be able to attain residential soil cleanup levels, <i>i.e.</i> , clean closure. The Sections reference	No

No.	Loc.	Comment	NMED Response	Δ
		<p>exposure factor for the unit if an industrial receptor is chosen for the basis of the corrective action risk assessment. Residual soil contamination levels at the unit may be appropriate for future industrial land use, the overall cleanup levels determined for each unit, and the final soil surface associated with the unit may not be exposed depending upon the final remediation option selected.</p> <p>Suggested language change:</p> <p>Revise Section 4.1(b) to allow for potential of industrial land use after closure of each unit.</p>	<p>Renewal Permit Section 11.4 that states in part “the Permittees may propose cleanup levels ... based on current and reasonably foreseeable future land use, <i>e.g.</i>, residential, recreational, industrial.” This is consistent with the closure performance standards in Renewal Permit Section 9.2.</p>	
577	Att. G, Tables G.X-2	<p>Table 2 (Potential Waste Materials, Waste Types, and Disposal Options) of each of the closure plans lists Area G as a potential disposal option. Because the final corrective measure remedy as a result of the Consent Order for Area G has not been decided, new wastes should not be added to this landfill.</p>	<p>The Department concurs - the Department agrees that it is contrary to adequate closure requirements to also allow for additional waste disposal in Area G, principally because the Permittees can't properly close a hazardous waste management unit if continued disposal is occurring at the same time. The Renewal Permit has been altered to disallow disposal of low-level radioactive waste at Area G and instead allow disposal of the waste at “an authorized onsite radioactive waste disposal area that is not undergoing closure under RCRA or its state analog or an authorized offsite radioactive waste disposal facility.” See addition Department response on</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
578	Att. G	<p>The Closure Plans for several of the TA-54 units state “<i>The asphalt pad, and all the materials associated with the pad (e.g., concrete ring wall, sump, minimum of six inches of the base course and soil underlying the pad), will be removed after the assessment. If, after the removal of the pad (and underlying soil and base course material), the remaining surface shows evidence that the removal to that point has not gathered all appropriate soils and materials associated with the pad (e.g., additional concrete or base course materials), additional soil and materials will be removed. The Permittees shall take precautions to not remove or disturb the soil or tuff that overlies the regulated unit (covered under the March 1, 2005 Compliance Order on Consent (Order) (see Permit Section 9.3)) beneath the permitted unit.</i>” Closure here is focused on removing soils and materials associated with the pad, and seems to not necessarily be focused on removing contaminated soils. Please explain the phrase “<i>shall take precautions to not remove or disturb the soil or tuff that overlies the regulated unit.</i>” We request that contaminated soil be removed to within 6" of the top of the regulated unit or to a minimum of 6" below the materials associated with the pad, which ever one is deeper.</p>	<p>the subject above.</p> <p>The Department disagrees - If after removal of all material associated with the above-ground hazardous waste management unit located above a regulated unit, e.g., the asphalt pad and base course material, there is contamination that has migrated into the material used to cover the regulated unit, the Department wishes that all corrective actions be performed in association with that regulated unit. The Department assumes that there will be a clear distinction between the materials associated with the above-ground and the below-ground units.</p>	No
579	G.1, Section 6.1	<p>The number of areas to be sampled within the closure plan doubled from the closure plan submitted to NMED in April 2009 without explanation. The extra samples do not seem to be driven by the requirements in Part 9.4.7.1.i, because the sample areas presented within the closure plan submitted by the Permittees met the requirements of one sample every 900 square feet.</p> <p>Suggested language change:</p> <p>Page 6, Section 6.1, Second paragraph:</p> <p>Please justify the requirement for extra samples or change the third, fourth, and fifth sentences of the paragraph as from :</p> <p>“A total of 10 <u>17</u> wipe samples will be collected from Room 9010; four <u>eight</u> from the floor, two <u>four</u> from each of the longer walls, and one <u>five</u> from the shorter walls. A total of three <u>five</u> wipe samples will be collected from Room 9020; one <u>two</u> from</p>	<p>The Department disagrees. The Permittees proposed in certain closure plans to decontaminate via washing and wiping down with sponges rather than decontaminate via steam-cleaning or pressure washing, as the permit requires. The Department believes that decontamination via pressure washing and steam cleaning is more reliable in the removal of hazardous constituents than washing by hand. Therefore, the additional sampling locations</p>	No

No.	Loc.	Comment	NMED Response	Δ
		the floor, one two from the wall, and one from the floor drain. A total of two four wipe samples will be collected from Room 9030; one two from the floor and one two from the wall.”	were added to the closure plans.	
580	TA-16 Closure Plans	The closure soil sampling plan does not specifically indicate the types of samples to be taken; discrete or the multi-increment sampling (MIS) approach. EPA recommends that the MIS approach be used. However, if the MIS approach is not used, then many discrete samples (more than 4) are needed to adequately characterize the site for closure.	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes
581	G.1, Section 4.2	The reference to verification sampling within the fifth paragraph is incomplete. Closure of this unit will require verification chip sampling and may require verification wipe sampling. Suggested language change: Page 8, Section 4.2, Fifth paragraph: Soil sampling, and decontamination verification wipe sampling, and chip sampling will be conducted to demonstrate that soils, surfaces, and related equipment at the permitted unit meet the performance standards in Permit Section 9.2.”	The Department agrees. The language in the closure plan has been changed as proposed.	Yes
582	G.2, Section 6.1	Administrative – typographical error Suggested language change: Page 9, Section 6.1: Change “form” to “from” in the first sentence of the section.	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes
583	G.2 Section 6.1	The requirement to collect a soil sample beneath the asphalt directly in front of the unit requires justification. Because the unit is an open burning treatment unit, pathways for exposure include runoff, air dispersion, and particulate deposition from air. There is no subsurface aspect to the treatment unit that would cause concern for migration beneath an asphalt pad in front of the unit. Additionally, soil samples will be collected from the areas around the unit to determine the concentration of any hazardous constituents that may have migrated from the unit and a soil monitoring program has been written into Part 6 of this draft Permit so the	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>concentrations of these constituents can be monitored as they change over time.</p> <p>The Permittees recommend that a wipe sample be collected from the surface of the asphalt and analyzed for high explosives compounds to determine whether contamination from the operations at the permitted unit has occurred.</p> <p>Suggested language change:</p> <p>Page 10, Section 6.1, (b):</p> <p>Please change the requirement to:</p> <p>one wipe soil sample <u>will be collected</u> from beneath the asphalt pad where waste to be treated is unloaded off the vehicle;</p>		
584	G.2, Section 6.1, Figure G.2-2	<p>The storm water discharge point is a rocked area where no soil is available for collection. The Permittees suggest moving the location to just above the rocked area, where storm water has flowed.</p> <p>Suggested language change:</p> <p>Page 10, Section 6.1(c):</p> <p>Please change the requirement from:</p> <p>“one soil sample above <u>at</u> the storm water discharge point; and</p>	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes
585	G.2, Section 6.1	<p>The requirement to collect a surface water sample is confusing and needs clarification. There is no surface water within the area surrounding the open burning treatment units. However; collection of a storm water run-off sample could occur during closure activities if there is precipitation during that timeframe. Otherwise, prior to closure, water monitoring requirements within Part 6, Section 6.5.2 apply.</p> <p>Suggested language change:</p> <p>Page 10, Section 6.1 (d):</p> <p>Suggest deleting the requirement or clarifying that a storm water sample will be collected at the storm water monitoring station if precipitation that causes run-off</p>	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes
586	G.2, Section 6.4	<p>The table that listed the potential constituents of concern for the unit was removed from the version of the closure plan submitted to the NMED in April 2009.</p>	See the Department’s response regarding open burning in the document titled General Response	Yes

No.	Loc.	Comment	NMED Response	Δ																				
		<p>Suggested language change:</p> <p>Page 13, Section 6.4:</p> <p>Please include the following table with the following modifications in a revised closure plan.</p> <table border="1"> <thead> <tr> <th colspan="3">Table G.2-6 Hazardous Waste Constituents of Concern at the TA-16-388 Flash Pad^a</th> </tr> <tr> <th>Category</th> <th>EPA Hazardous Waste Numbers</th> <th>Specific Constituents</th> </tr> </thead> <tbody> <tr> <td>High Explosives (HE) and associated compounds</td> <td>D003</td> <td>HMX, RDX, TNT, PETN, Tetryl, and Other Nitrobenzenes and Nitrotoluenes</td> </tr> <tr> <td>Toxic Metals</td> <td>D004, D005, D006, D007, D008, D009, D010, D011</td> <td>Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver</td> </tr> <tr> <td rowspan="2">Organic Compounds</td> <td>D030, D036, F004</td> <td>2,4-Dinitrotoluene, Nitrobenzene</td> </tr> <tr> <td>F002, F003, F004, F005</td> <td>Acetone, Ethanol, Benzene, MEK, Methylene Chloride, Toluene, MIBK, Xylene, Ethyl Acetate, Methanol</td> </tr> <tr> <td>Other Constituents of Concern</td> <td></td> <td>Dioxins/Furans, Perchlorate</td> </tr> </tbody> </table> <p>^a Based on the unit operating record. EPA = U.S. Environmental Protection Agency HMX = cyclotetramethylenetetranitramine RDX = cyclonite TNT = trinitrotoluene PETN = pentaerythrioltetranitrate (2,2-bis[(nitroxy)methyl]-1,3-propanediol dinitrate) MEK= methyl ethyl ketone MIBK = 4-methyl-2-pentanone</p>	Table G.2-6 Hazardous Waste Constituents of Concern at the TA-16-388 Flash Pad ^a			Category	EPA Hazardous Waste Numbers	Specific Constituents	High Explosives (HE) and associated compounds	D003	HMX, RDX, TNT, PETN, Tetryl, and Other Nitrobenzenes and Nitrotoluenes	Toxic Metals	D004, D005, D006, D007, D008, D009, D010, D011	Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver	Organic Compounds	D030, D036, F004	2,4-Dinitrotoluene, Nitrobenzene	F002, F003, F004, F005	Acetone, Ethanol, Benzene, MEK, Methylene Chloride, Toluene, MIBK, Xylene, Ethyl Acetate, Methanol	Other Constituents of Concern		Dioxins/Furans, Perchlorate	to Comments.	
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587	G.2, Table G.2-3	<p>If, as the resolution to the previous comment to Section 6.4, Table G.2-6 is included in the closure plan a method for the analysis of dioxin and furan congeners must be added to Table G.2-3 for completeness.</p> <p>Suggested language change:</p> <p>Pages 19-20, Table G.2-3:</p> <p>Add the following:</p>	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes																				

No.	Loc.	Comment	NMED Response	Δ															
		<table border="1"> <thead> <tr> <th>Analyte</th> <th>EPA SW-846 Analytical Method^a</th> <th>Test Methods/ Instrumentation</th> <th>Target Detection Limit^b</th> <th>Rationale</th> </tr> </thead> <tbody> <tr> <td colspan="5" style="text-align: center;"><i>Other Analysis</i></td> </tr> <tr> <td>Dioxins/Furans</td> <td>8290</td> <td>GC/MS</td> <td>1.0 to 200 ug/L</td> <td>Determine the dioxin/furan concentration in the samples.</td> </tr> </tbody> </table>	Analyte	EPA SW-846 Analytical Method ^a	Test Methods/ Instrumentation	Target Detection Limit ^b	Rationale	<i>Other Analysis</i>					Dioxins/Furans	8290	GC/MS	1.0 to 200 ug/L	Determine the dioxin/furan concentration in the samples.		
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Dioxins/Furans	8290	GC/MS	1.0 to 200 ug/L	Determine the dioxin/furan concentration in the samples.															
588	G.3, Section 6.1, Figure G.3-6	<p>The requirement to collect a soil sample at the storm water discharge point is confusing. The Permittees suggest moving the location to just outside the fenced area around the unit where storm water has flowed.</p> <p>Suggested language change:</p> <p>Page 4, third paragraph:</p> <p>The first sentence should be changed from:</p> <p>“Five soil samples and one surface water sample will be collected in accordance with Permit Section 9.4.7.1.ii.b (see Figures G.3-1 and G.3-2, respectively); four samples from soils surrounding the permitted unit and one sample outside the unit boundary where at the stormwater <u>has flowed. discharge point.</u>”</p>	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes															
589	G.3, Section 6.1	<p>There is no surface water within the area surrounding the open burning treatment units, however; collection of a storm water run-off sample could occur during closure activities if there is precipitation during that timeframe. Otherwise, prior to closure, water monitoring requirements within Part 6, Section 6.5.2 apply.</p> <p>Suggested language change:</p> <p>Page 4, Section 6.1 (d):</p> <p>Suggest deleting the requirement in the final sentence of the section or clarifying that a storm water sample will be collected at the storm water monitoring station if precipitation that causes run-off occurs during the time of closure activities.</p>	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes															
590	G.3, Section 6.4	<p>The table that listed the potential constituents of concern for the unit was removed from the version submitted to the NMED in April 2009.</p> <p>Suggested language change:</p>	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes															

No.	Loc.	Comment	NMED Response	Δ
		<p>Page 13, Section 6.4: Please include the table as follows in a revised closure plan.</p>		
591	G.6, Section 6.1(f), Figure G.6-2	<p>The requirement for ten samples along the drainage swale is not consistent with the requirement at Part 9.4.7.ii.a and is not technically necessary. The Part 9 requirement is limited to samples taken within a permitted unit, which does not apply as the drainage swale is outside the limits of Pad 1. A sample taken where any potential run-off occurs would be applicable to the third condition and the Permittees have also proposed the rock check dam location as a point to determine the extent of any potential contamination. The amended closure plan does not provide a rationale for the need for other samples located progressively along the swale and it is not clear why this would be necessary if the beginning and end points for this potential contamination pathway are sampled. This sampling scheme was not proposed in the Permittees' submitted closure plan draft.</p> <p>Suggested language change:</p> <p>Section 6.1(f), Page 6: The requirement for ten samples along the swale south of Pad 10 should be deleted and Figure G.6-2 should be revised.</p>	<p>The Department disagrees (in part). In order to be protective of human health and the environment, soil sampling is vital in order to ensure that the closure performance standards at PS 9.2 and 40 CFR 264.111 are met. The requirements at 40 CFR 264.112(b)(1) and (5) reflect the importance of this issue. While sampling the actual discharge point of stormwater run-off is necessary (<i>see</i> permit requirement 9.4.7.1.ii.a (3)), the Bureau believes it is not sufficient sampling coverage to ensure that Pads 1 & 3, and the areas affected by their stormwater run-off, is adequately evaluated for potential releases transported by stormwater, specifically if the soil sample collected at the stormwater discharge point detects hazardous constituents.</p> <p>The first issue raised in this comment is that the Part 9 requirements apply only to the area within the permitted unit; the Department does not agree. For example, the stormwater</p>	Yes

No.	Loc.	Comment	NMED Response	Δ
			<p>discharge location (<i>see</i> permit requirement 9.4.7.1.ii.a (3)) for Pads 1, 3, & 10 is not within the confines of the permitted unit yet there is agreement that this rock check dam location must be sampled to ensure no hazardous constituents have mobilized via stormwater run-off.</p> <p>The Department believes that if stormwater has been in contact with the permitted unit, in this case the asphalt pad, and is allowed to flow off the unit to discharge, the Permittees are then responsible for ensuring that the closure requirements are fulfilled, particularly along that path of stormwater run-off. Again, the requirements at 40 CFR 264.112(b)(1) and (5) support this argument.</p> <p>In regards to the second issue raised in this comment, the Department believes that this requirement <i>is</i> technically necessary mainly if the results of the soil samples collected at the beginning and end points of this potential contamination pathway (stormwater run-off) detect hazardous constituents.</p>	

No.	Loc.	Comment	NMED Response	Δ
			In this case, the Department proposes revised language in Attachments G.6 and G.7 which require the Permittees to sample these locations along the swale in the event that at closure, the results of the soil samples collected at the beginning (the stormwater run-off point at the SE corner of the pad) and end points (the discharge point at the rock check dam) detect hazardous constituents.	
592	Figure G.6-1	The location of the sump in Building 412 should be shown in the southeast corner rather than the southwest corner of the building. Suggested language change: Page 23: Revise Figure G.6-1 to illustrate the sump in Building 412 correctly.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
593	Figure G.6-1	Clarification is needed to emphasize that the “Storm water sampling location” labeled on Figure G.6-1 is actually a soil sample that will be collected at a point of storm water flow. Suggested language change: Page 23: Revise Figure G.6-1 to clarify the soil sample at the southeastern corner of Pad 1.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
594	Figure G.6-2	The location of the rock check dam on Figure G.6-2 is not correct. The location should be moved further south to just below the contour line. Also, the structure arrangement on Pad 10 does not match the arrangement in Figure G.11-1. Suggested language change:	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>Page 24:</p> <p>Revise Figure G.6-2 to accurately illustrate the rock check dam south of Pad 10 and the correct arrangement of structures on Pad 10.</p>		
595	Att. G, Section 6.1(d)	<p>The requirement for nine samples along the drainage swale is not consistent with the requirement at Part 9.4.7.ii.a and is not technically necessary. The Part 9 requirement is limited to samples taken within a permitted unit, which does not apply as the drainage swale is outside the limits of Pad 3. A sample taken where any potential run-off occurs would be applicable to the third condition and the Permittees have also proposed the rock check dam location as a point to determine the extent of any potential contamination. The amended closure plan does not provide a rationale for the need for other samples located progressively along the swale and it is not clear why this would be necessary if the beginning and end points for this potential contamination pathway are sampled. This sampling scheme was not proposed in the Permittees submitted closure plan draft, April 2009.</p> <p>Suggested language change:</p> <p>Section 6.1(d), Page 6:</p> <p>Delete the requirement for the extra nine samples along the swale to Pad 10.</p> <p>Revise Figure G.7 to remove these sample locations.</p>	The Department disagrees (in part). See response to comment associated with Section 6.1(f)	Yes
596	Figure G.7-1	<p>The structure arrangement on Pad 10 as shown in Figure G.7-1 does not match the arrangement in Figure G.11-1.</p> <p>Suggested language change:</p> <p>Page 22:</p> <p>Revise Figure G.7-1 to accurately illustrate the arrangement of structures on Pad 10.</p>	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
597	Figure G.7-2	<p>The location of the rock check dam on Figure G.7-2 is not correct. The location should be moved further south to just below the contour line. Also, the structure arrangement on Pad 10 does not match the arrangement in Figure G.11-1.</p> <p>Suggested language change:</p>	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>Page 23: Revise Figure G.7-2 to accurately illustrate the rock check dam south of Pad 10 and the correct arrangement of structures on Pad 10.</p>		
598	Figure G.8-1	<p>The loading zone sample locations for Sheds 144, 145, 146, 177, 1027, and 1028 should be on the eastern side of the structures.</p> <p>Suggested language change: Page 23: Revise Figure G.8-1 to accurately illustrate the unloading areas for the sheds on Pad 5.</p>	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
599	G.9, Section 2.0, Section 6.1(a) and Figure G.9-1	<p>The requirement to sample in front of the storage sheds should not apply to the five sheds located on Pad 6 because they do not manage mixed waste. The requirement is only appropriate for the transportainer structure 491.</p> <p>Suggested language change: Section 2.0, Page 1: Remove the reference to the “five storage sheds” in the third paragraph of Section 2.0. Section 6.1(a), Page 6: Delete the requirement to sample in front of the five storage sheds. Page 22: Revise Figure G.9-1 to remove these soil sample locations.</p>	The Department concurs. The proposed language and revised figure have been added to the Renewal Permit.	Yes
600	G.10, Section 2.0, Section 6.1(a) and Figure G.10-1	<p>The requirement to sample the loading zones for structures 484 and 574 is not appropriate because these storage sheds have not been used to manage waste containers.</p> <p>Suggested language change: Section 2.0, Page 1: Remove the reference to the “one transportainer, and two storage sheds” at the end of</p>	The Department concurs. The proposed language and revised figure have been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
		<p>the second paragraph of Section 2.0.</p> <p>Section 6.1(a), Page 6: Delete the requirement to sample in front of the transportainer and each of the storage sheds.</p> <p>Page 28: Revise Figure G.10-1 to remove these soil sample locations.</p>		
601	G.11, Figure G.11-1	<p>The location of the rock check dam on Figure G.11-1 is not correct. The location should be moved south and west to just below the contour line.</p> <p>Suggested language change: Page 22: Revise Figure G.11-1 to accurately illustrate the rock check dam south of Pad 10.</p>	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
602	G.14, Section 1.0	<p>The major portion of the unit is a dome over a concrete pad and the sampling requirements are those for an outdoor unit; therefore, the Permittees recommend revision of the description.</p> <p>Suggested language change: Section 1.0, Page 1: The closure plan for this unit should be redefined as an outdoor unit including changes in the title and introduction.</p>	The Department disagrees. Permittees describe and define it as an indoor unit in their application.	No
603	G.14, Section 6.1(b)(iv) and Figure G-14.1	<p>There are two large vehicle doors at Dome 33. These are at the western and the south-east ends (see Figure G-26 in the TA-54 Part B permit application, Rev. 3, June 2003). The sample locations should be adjusted to represent this. Additionally, there is only one door on the western end and therefore, only one sample should be collected there.</p> <p>Suggested language change: Section 6.1(b)(iv), Page 6: Sample locations 4 and 5 should be combined into one location. Revise Figure G-14.1 combine these sample locations to accurately represent the</p>	The Department concurs. The proposed language and revised figure have been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
		locations of the roll-up doors.		
604	G.16, Section 6.1(b)	<p>The rationale for two samples from each of the longer walls is not justified. The total area of the High Bay Unit is 3200 square feet. The requirement in Permit part 9 is one sample per 900 square feet and the result is one sample per wall.</p> <p>Suggested language change:</p> <p>Section 6.1(b), Page 5:</p> <p>Please change the requirement as follows:</p> <p>“b. four six from the walls (one two from <u>each wall</u>)-of the longer walls and one from each of the shorter walls) (see Figure G.16-1);</p>	The Department disagrees.	No
605	G.17, Section 6.1(c) and Figure G.17-1	<p>Sampling from the swale does not fulfill requirements for Permit Part 9. The drain goes to the outfall where there was originally a sample location. NMED removed this location and inserted the two swale sample locations. Suggest removing these sample locations and adding back the one original location at the outfall. Also, data pulled from RACER on the outfall does not show contaminants of concern above ppb levels.</p> <p>Suggested language change:</p> <p>Section 6.1(c), Page 10:</p> <p>Remove the requirement to sample within the swale and reinsert the soil sample location at the storm water discharge point that was included with the closure plan submitted by the Permittees in April 2009.</p> <p>Revise Figure G.17-1 to reflect these changes.</p>	The Department disagrees.	No
606	G.18, Section 1.0 and title of document	<p>Suggest change corrects an editorial error. B40 is an area within the basement, not a room.</p> <p>Suggested language change:</p> <p>Page 1:</p> <p>Remove the word “Room” from the first sentence of the closure plan.</p>	The Department disagrees. The Permittees referred to all the units in the basement of TA-55 as “rooms” in their application.	No
607	G.19, Section	Suggest change corrects an editorial error. K13 is an area within the basement, not a room.	The Department disagrees. The Permittees referred to all the units	No

No.	Loc.	Comment	NMED Response	Δ
	1.0 and title of document	Suggested language change: Page 6: Remove the word “Room” from the first sentence of the closure plan.	in the basement of TA-55 as “rooms” in their application.	
608	G.19, Section 6.1	The number of areas to be sampled on the floor and wall of the unit within the closure plan doubled from the closure plan submitted to NMED in April 2009 without explanation. The extra samples do not seem to be driven by the requirements in Part 9.4.7.1.i, because the sample areas presented within the closure plan submitted by the Permittees met the requirements of one sample every 900 square feet or at least on sample from the floor and wall. Suggested language change: Page 10, Section 6.1, Second paragraph: Please change the last sentence as follows: A total of <u>three five</u> wipe samples will be collected: <u>one two</u> from the floor; <u>one two</u> from the wall; and one from the pillar.	The Department disagrees.	No
609	G.20, Section 1.0 and title of document	Suggest change corrects an editorial error. B05 is an area within the basement, not a room. Suggested language change: Page 1: Remove the word “Room” from the first sentence of the closure plan.	The Department disagrees. The Permittees referred to all the units in the basement of TA-55 as “rooms” in their application.	No
610	G.20, Section 2.0	Construction of TA-55 was completed in 1979. Suggested language change: Section 2.0, Page 1 Change text to reflect that TA-55, Building PF4 was constructed in 1979.	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
611	G.21, Section	Suggest change corrects an editorial error. B45 is an area within the basement, not a	The Department disagrees. The Permittees referred to all the units	No

No.	Loc.	Comment	NMED Response	Δ
	1.0 and title of document	<p>room.</p> <p>Suggested language change:</p> <p>Page 6:</p> <p>Remove the word “Room” from the first sentence of the closure plan.</p>	in the basement of TA-55 as “rooms” in their application.	
612	G.21, Section 6.1	<p>The number of areas to be sampled on the wall of the unit within the closure plan doubled from the closure plan submitted to NMED in April 2009 without explanation. The extra sample does not seem to be driven by the requirements in Part 9.4.7.1.i, because the sample areas presented within the closure plan submitted by the Permittees met the requirements of one sample every 900 square feet or at least one sample from the floor and wall.</p> <p>Suggested language change:</p> <p>Page 10, Section 6.1, Second paragraph:</p> <p>Change the second to the last sentence to read as follows:</p> <p>A total of three four wipe samples will be collected: two from the floor; and one two from the wall.</p>	The Department disagrees.	No
613	G.22, Section 6.1	<p>The number of areas to be sampled on the walls of the unit within the closure plan doubled from the closure plan submitted to NMED in April 2009 without explanation. The extra samples do not seem to be driven by the requirements in Part 9.4.7.1.i, because the sample areas presented within the closure plan submitted by the Permittees met the requirements of one sample every 900 square feet or at least one sample from the floor and wall.</p> <p>Suggested language change:</p> <p>Page 5, Section 6.1, Second paragraph:</p> <p>Change the second sentence to read as follows:</p> <p>In compliance with Permit Section 9.4.7.1.i, this closure plan will ensure the collection of at least 148 wipe samples; eight wipe samples from the floor, one from each of the shorter walls, and two four from each of the longer walls.</p>	The Department disagrees.	No

No.	Loc.	Comment	NMED Response	Δ
614	G.23, Section 1.0	<p>Suggested change corrects a typographical error.</p> <p>Suggested language change:</p> <p>Page 1:</p> <p>Remove “the basement of” from the first sentence of the closure plan.</p>	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes.
615	G.23, Section 5.3.1	<p>The requirement within the closure plan to remove “(t)he storage tanks, piping and the glovebox and all materials associated with the permitted unit in Room 401 (tanks, ancillary equipment, glovebox, etc.)” prior to the structural assessment is confusing. The structural assessment conducted on a permitted unit after it has been emptied of waste and prior to beginning closure activities. Removal of the tanks and ancillary equipment is a closure activity for this unit because the tank storage system is the permitted unit.</p> <p>Suggested language change:</p> <p>Page 4, Section 5.3.1:</p> <p>Please revise the last sentence to read as follows:</p> <p>The storage tanks, piping, and the glovebox, and all materials associated with the permitted unit in Room 401 (tanks, ancillary equipment, glovebox, etc.) will be removed <u>in accordance with this section, before the assessment.</u></p>	The Department disagrees – A structural assessment is intended to identify areas where contaminants might have left the permitted unit. Renewal Permit Section 9.4.6.2 defines structural assessment in part as an examination of “evidence of a release (e.g., stains) or damage (e.g., cracks, gaps, chips) to the flooring or building materials ...” The examination of floors requires removal of at a minimum the tanks, ancillary equipment, and glovebox.	No
616	G.23, Section 5.3.2	<p>The requirements within this section need to be clarified to state that decontamination will be conducted on the secondary containment of the permitted unit. No storage of hazardous waste occurs within Room 401 itself. It is used as secondary containment for the storage tank system permitted unit and the cementation permitted unit located within the room.</p> <p>Suggested language change:</p> <p>Page 4, Section 5.3.2:</p> <p>Please revise the first sentence of the second paragraph of the section to read as follows:</p> <p>Decontamination of the permitted <u>unit’s secondary containment</u> and equipment related to the permitted unit will be conducted by first removing loose material (e.g.,</p>	The Department disagrees – The entirety of Room 401 requires decontamination. This room is no different than other permitted units whose rooms are used to store hazardous waste. Furthermore, the Permittees have never defined the secondary containment of the room to only extend two feet above the floor.	No

No.	Loc.	Comment	NMED Response	Δ
		<p>dust, dirt) through sweeping followed by washing using a wipe-down method with a solution consisting of a surfactant detergent (e.g., Alconox®) and water mixed in accordance with the manufacturer’s recommendations.”</p> <p>Page 5, Section 5.3.2:</p> <p>Please revise the fourth paragraph of the section to read as follows:</p> <p>The entirety of the unit’s <u>secondary containment</u> floors will be decontaminated <u>directly below the unit</u>. To ensure that decontamination of the walls is conducted to a sufficient height, all walls in the permitted unit will be decontaminated to a height of <u>2+1</u> ft. Ceilings of the permitted unit, walls above <u>2+1</u> ft, and the areas outside of the permitted unit will be presumed to be free of contamination unless there is some physical indication of contamination (e.g., staining), the records review reveals that large amounts of liquid volatile or semi-volatile organic waste was stored in the permitted unit, or a spill or release occurred within the permitted unit that could have affected the ceiling or the walls above <u>2+1</u> ft.”</p>		
617	G.23, Section 6.1	<p>A total number of samples has not been provided within this closure plan.</p> <p>Suggested language change:</p> <p>Page 5, Section 6.1:</p> <p>Revise the last sentence of the paragraph to read as follows:</p> <p>If the entire floor of the secondary containment room is decontaminated, a total of <u>5X</u> wipe samples will be collected: one from the floor and one from each wall.</p>	The Department concurs. The proposed language has been added to the Renewal Permit.	Yes
618	G.24, Section 5.3.1	<p>The requirement within the closure plan to remove “(t)he pH column, vacuum trap, two motor-driven mixers, four impellers, piping and the glovebox and all other materials in Room 401 associated with the permitted unit” prior to the structural assessment is confusing. The structural assessment is conducted on a permitted unit after it has been emptied of waste and prior to beginning closure activities. Removal of the mixers and ancillary equipment is a closure activity for this unit because the cementation unit is the permitted unit.</p>	The Department disagrees – See the Department’s response associated with G.23, Section 5.3.1.	No

No.	Loc.	Comment	NMED Response	Δ
		<p>Suggested language change:</p> <p>Page 4, Section 5.3.1:</p> <p>Revise the last sentence of the section to read as follows:</p> <p>The pH column, vacuum trap, two motor-driven mixers, four impellers, piping and the glovebox and all other materials in Room 401 associated with the permitted unit will be removed <u>in accordance with this section.</u> before the structural assessment.</p>		
619	Att. I	The attachment incorrectly references Section 2.5 as including a requirement to submit particular figures.	The Department concurs – The reference to the submittal of figures for TA-54 Area G, H, and L identifying fences, entry gates, and entry stations has been removed from the Permit. See Figures 7 and 8.	Yes
620	Att. I	The attachment incorrectly omits the Section 6.5.2 requirement to submit annual storm water sampling report.	See the Department’s response regarding open burning in the document titled General Response to Comments.	Yes
621	Att. J	We request that Building 185, Technical Area 55, not be allowed to be permitted due to unresolved seismic inconsistencies. Please include all of the references listed in the Permittees’ seismic report (LA-DR 0904042) in the administrative record.	<p>The Department is uncertain what “unresolved seismic inconsistencies” are being referred to in this comment and therefore cannot respond. See the Department’s response regarding seismic hazards in the document titled General Response to Comments.</p> <p>Regarding the references associated with LA-UR 09-04042, the Bureau’s LANL</p>	No

No.	Loc.	Comment	NMED Response	Δ
			administrative record associated with the Renewal Permit included 14 of the 22 referenced documents at the time of the permit hearing. The Bureau has since received the remaining documents and has added them to the LANL AR. Because they arrived at the Bureau after the close of the permr hearing they will not be considered a portion of the record associated with the formulation of the Permit.	
622	Table J-1	<p>Based on the Permittees comment on the designation of regulated units, above, the Permittees propose that Table J-1 be revised to provide the accurate identification of regulated units.</p> <p>Suggested language change:</p> <p>Page 3, revise the row identified as TA-54 "G" as follows: Material Disposal Area <u>Pit 29 and Shaft 124.</u></p> <p>Page 5, revise the row identified as TA-54 "H" as follows: Material Disposal Area H <u>Shaft 9</u></p> <p>Page 5, revised the row identified as TA-54 "L" as follows: Material Disposal Area L <u>Shafts 1, 13-17, 19-34 and Impoundments B and D</u></p>	The Department disagrees. - See the Department's response regarding regulated units/alternative requirements in the document titled General Response to Comments.	No
623	Table K-1	<p>The title to Table K-1 is "SWMUs and AOCs Requiring Corrective Action". The list seemed awfully long until the following statement was found on page 203:</p> <p><i>"Corrective measures options shall include the range of available options including, but not limited to, a no action alternative, institutional controls"</i></p> <p>Suggesting that a no action alternative is a corrective action is a way to inflate the number of "corrective actions" required and to give a misleading indication that things</p>	Comment noted. The lists provided in Attachment K are a way of tracking all solid waste management units (SWMUs) and areas of concern (AOCs) at LANL. Cleanup of these sites are not covered under the Permit, but	No

No.	Loc.	Comment	NMED Response	Δ																								
		are much worse at LANL than they really are. NMED should use standard RCRA terminology for this RCRA permit and title Table K-1 "RCRA Facility Investigation Units."	under the March 1, 2005 Order on Consent (Order). Therefore, the titles of the tables in Attachment K will remain unchanged.																									
624	Table K-1	<p>Sites subject to the corrective action requirements of Module VIII of the current LANL RCRA Permit are listed in Tables A and C of Module VIII (Table B contains a high priority subset of the sites listed in Table A). These sites are identified as SWMUs. Corrective action units that are not listed in Module VIII are identified as AOCs.</p> <p>Table K-1 contains sites that are identified as AOCs but which are listed in Table A or Table C of Module VIII and should be identified on Table K-1 as SWMUs. These sites are identified within the suggested change column along with the corresponding Table in Module VIII.</p> <p>Suggested language change:</p> <p>Table K-1 should be revised to identify these sites as SWMUs.</p> <table border="1"> <tbody> <tr><td>SWMU 03-052(f)</td><td>Listed in Table C</td></tr> <tr><td>SWMU 16-005(a)</td><td>Listed in Table C</td></tr> <tr><td>SWMU 16-005(c)</td><td>Listed in Table C</td></tr> <tr><td>SWMU 16-005(d)</td><td>Listed in Table C</td></tr> <tr><td>SWMU 16-005(e)</td><td>Listed in Table C</td></tr> <tr><td>SWMU 16-005(g)</td><td>Listed in Table A</td></tr> <tr><td>SWMU 16-005(h)</td><td>Listed in Table C</td></tr> <tr><td>SWMU 16-005(j)</td><td>Listed in Table C</td></tr> <tr><td>SWMU 16-005(k)</td><td>Listed in Table C</td></tr> <tr><td>SWMU 16-005(l)</td><td>Listed in Table C</td></tr> <tr><td>SWMU 16-005(m)</td><td>Listed in Table C</td></tr> <tr><td>SWMU 16-005(n)</td><td>Listed in Table A</td></tr> </tbody> </table>	SWMU 03-052(f)	Listed in Table C	SWMU 16-005(a)	Listed in Table C	SWMU 16-005(c)	Listed in Table C	SWMU 16-005(d)	Listed in Table C	SWMU 16-005(e)	Listed in Table C	SWMU 16-005(g)	Listed in Table A	SWMU 16-005(h)	Listed in Table C	SWMU 16-005(j)	Listed in Table C	SWMU 16-005(k)	Listed in Table C	SWMU 16-005(l)	Listed in Table C	SWMU 16-005(m)	Listed in Table C	SWMU 16-005(n)	Listed in Table A	The Department concurs. Table K-1 has been revised as suggested by the commenter.	Yes
SWMU 03-052(f)	Listed in Table C																											
SWMU 16-005(a)	Listed in Table C																											
SWMU 16-005(c)	Listed in Table C																											
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No.	Loc.	Comment	NMED Response	Δ						
		<table border="1"> <tr> <td>SWMU 16-024(e)</td> <td>Listed in Table C</td> </tr> <tr> <td>SWMU 39-002(a)</td> <td>Listed in Table A</td> </tr> </table> <p>A summary of the requested changes to Tables K-1, K-2, and K-3 is included with this document as Appendix 4</p>	SWMU 16-024(e)	Listed in Table C	SWMU 39-002(a)	Listed in Table A				
SWMU 16-024(e)	Listed in Table C									
SWMU 39-002(a)	Listed in Table A									
625	Table K-1	<p>Sites subject to the corrective action requirements of Module VIII are listed in Tables A and C of Module VIII (Table B contains a high priority subset of the sites listed in Table A). These sites are identified as SWMUs. Corrective action units that are not listed in Module VIII are identified as AOCs.</p> <p>Table K-1 contains sites that are identified as SWMUs but which are not listed in Table A or Table C of Module VIII and should be identified on Table K-1 as AOCs. These sites are identified within the suggested change column.</p> <p>Suggested language change:</p> <p>Table K-1 should be revised to identify these sites as AOCs.</p> <table border="1"> <tr> <td>AOC 00-030(n)</td> </tr> <tr> <td>AOC 00-030(o)</td> </tr> <tr> <td>AOC 00-030(p)</td> </tr> <tr> <td>AOC C-21-001</td> </tr> <tr> <td>AOC 35-018(a)</td> </tr> <tr> <td>AOC 43-001(a2)</td> </tr> </table> <p>A summary of the requested changes to Tables K-1, K-2, and K-3 is included with this document as Appendix 4.</p>	AOC 00-030(n)	AOC 00-030(o)	AOC 00-030(p)	AOC C-21-001	AOC 35-018(a)	AOC 43-001(a2)	The Department concurs. Table K-1 has been revised as suggested by the commenter.	Yes
AOC 00-030(n)										
AOC 00-030(o)										
AOC 00-030(p)										
AOC C-21-001										
AOC 35-018(a)										
AOC 43-001(a2)										
626	Tables K-1 and K-3	<p>Sites that are not listed in Tables A and C of Module VIII do not require a Class III permit modification to remove them from these tables once NMED has determined that no further corrective actions are required. Sites not listed in Module VIII and which</p>	The Department concurs. Tables K-1 and K-3 have been revised as suggested by the commenter.	Yes						

No.	Loc.	Comment	NMED Response	Δ								
		<p>have already been issued certificates of completion without controls should be listed in Table K-2.</p> <p>Table K-1 contains sites that are not listed in Table A or Table C of Module VIII and which have been issued certificates of completion without controls by NMED under the Consent Order. These sites should not be listed in Table K-1, but should be listed in Table K-3, <i>Corrective Action Complete Without Controls</i>. These sites are identified within the suggested change column, along with the date that the certificates of completion were issued by NMED.</p> <p>Suggested language change:</p> <p>Table K-1 should be revised by removing these sites and, as necessary, Table K-3 should be revised to include or delete these sites, as indicated below.</p> <table border="1"> <tbody> <tr> <td>AOC 00- 030(k)</td> <td>Certificate of completion, corrective action complete without controls issued 12/6/06 (not listed in Table K-3 but should be)</td> </tr> <tr> <td>AOC 00- 033(b)</td> <td>Certificate of completion, corrective action complete without controls issued 2/23/06 (should be listed in Table K-3)</td> </tr> <tr> <td>AOC 00- 034(a)</td> <td>Certificate of completion, corrective action complete without controls issued 12/6/06 (not listed in Table K-3 but should be)</td> </tr> <tr> <td>AOC C- 19-001</td> <td>Certificate of completion, corrective action complete without controls issued 6/27/06 (already listed in Table K-3).</td> </tr> </tbody> </table>	AOC 00- 030(k)	Certificate of completion, corrective action complete without controls issued 12/6/06 (not listed in Table K-3 but should be)	AOC 00- 033(b)	Certificate of completion, corrective action complete without controls issued 2/23/06 (should be listed in Table K-3)	AOC 00- 034(a)	Certificate of completion, corrective action complete without controls issued 12/6/06 (not listed in Table K-3 but should be)	AOC C- 19-001	Certificate of completion, corrective action complete without controls issued 6/27/06 (already listed in Table K-3).		
AOC 00- 030(k)	Certificate of completion, corrective action complete without controls issued 12/6/06 (not listed in Table K-3 but should be)											
AOC 00- 033(b)	Certificate of completion, corrective action complete without controls issued 2/23/06 (should be listed in Table K-3)											
AOC 00- 034(a)	Certificate of completion, corrective action complete without controls issued 12/6/06 (not listed in Table K-3 but should be)											
AOC C- 19-001	Certificate of completion, corrective action complete without controls issued 6/27/06 (already listed in Table K-3).											

No.	Loc.	Comment	NMED Response	Δ										
		A summary of the requested changes to Tables K-1, K-2, and K-3 is included with this document as Appendix 4.												
627	Tables K-1 and K-3	<p>Table K-1 includes some AOCs that were previously negotiated by NMED and LANL to have approved decisions of “no further action (NFA).” In the March 2005 Order on Consent, NMED specifically recognized that AOCs identified in a January 21, 2005 letter from EPA to NMED that received a prior NFA decision from EPA had no further corrective action requirements (See Section III.A of the Consent Order). These AOCs should be removed from Table K-1.</p> <p>Table K-1 contains sites that are not listed in Table A or Table C of Module VIII and which were previously determined to require no further action by EPA. These sites should not be listed in Table K-1, but should be listed in Table K-3, <i>Corrective Action Complete Without Controls</i>. These sites, which are all included in the January 21, 2005 EPA letter, are identified within the suggested change column.</p> <p>Suggested language change:</p> <p>Table K-1 should be revised by removing these sites and Table K-3 should be revised by adding AOC 52-002(g).</p> <table border="1"> <tbody> <tr> <td>AOC C-20-001</td> <td>On EPA 1/21/05 letter (already listed in Table K-3)</td> </tr> <tr> <td>AOC C-20-002</td> <td>On EPA 1/21/05 letter (already listed in Table K-3)</td> </tr> <tr> <td>AOC C-20-003</td> <td>On EPA 1/21/05 letter (already listed in Table K-3)</td> </tr> <tr> <td>AOC 43-001(b1)</td> <td>On EPA 1/21/05 letter (already listed in Table K-3)</td> </tr> <tr> <td>AOC C-</td> <td>On EPA 1/21/05 letter (already listed in Table</td> </tr> </tbody> </table>	AOC C-20-001	On EPA 1/21/05 letter (already listed in Table K-3)	AOC C-20-002	On EPA 1/21/05 letter (already listed in Table K-3)	AOC C-20-003	On EPA 1/21/05 letter (already listed in Table K-3)	AOC 43-001(b1)	On EPA 1/21/05 letter (already listed in Table K-3)	AOC C-	On EPA 1/21/05 letter (already listed in Table	The Department concurs. Tables K-1 and K-3 have been revised as suggested by the commenter.	Yes
AOC C-20-001	On EPA 1/21/05 letter (already listed in Table K-3)													
AOC C-20-002	On EPA 1/21/05 letter (already listed in Table K-3)													
AOC C-20-003	On EPA 1/21/05 letter (already listed in Table K-3)													
AOC 43-001(b1)	On EPA 1/21/05 letter (already listed in Table K-3)													
AOC C-	On EPA 1/21/05 letter (already listed in Table													

No.	Loc.	Comment	NMED Response	Δ								
		<table border="1"> <tr> <td>51-001</td> <td>K-3)</td> </tr> <tr> <td>AOC C-51-002</td> <td>On EPA 1/21/05 letter (already listed in Table K-3)</td> </tr> <tr> <td>AOC 52-002(g)</td> <td>On EPA 1/21/05 letter (should be listed in Table K-3)</td> </tr> <tr> <td>AOC 63-002</td> <td>On EPA 1/21/05 letter (already listed in Table K-3)</td> </tr> </table> <p>A summary of the requested changes to Tables K-1, K-2, and K-3 is included with this document as Appendix 4.</p>	51-001	K-3)	AOC C-51-002	On EPA 1/21/05 letter (already listed in Table K-3)	AOC 52-002(g)	On EPA 1/21/05 letter (should be listed in Table K-3)	AOC 63-002	On EPA 1/21/05 letter (already listed in Table K-3)		
51-001	K-3)											
AOC C-51-002	On EPA 1/21/05 letter (already listed in Table K-3)											
AOC 52-002(g)	On EPA 1/21/05 letter (should be listed in Table K-3)											
AOC 63-002	On EPA 1/21/05 letter (already listed in Table K-3)											
628	Table K-1	<p>Once NMED has determined that no further corrective action is necessary, a Class 3 permit modification should not be required to remove sites from Tables A and C of Module VIII. Sites not listed in Module VIII and for which NMED made a determination of NFA prior to the effective date of the Consent Order should be listed in Table K-3.</p> <p>Table K-1 contains sites that are not listed in Table A or Table C of Module VIII and which were determined to require no further action by NMED prior to the effective date of the Consent Order. These sites should not be listed in Table K-1, but should be listed in Table K-3, <i>Corrective Action Complete Without Controls</i>. These sites are identified within the suggested change column.</p> <p>Suggested language change:</p> <p>Table K-1 should be revised by removing these sites and Table K-3 revised by adding these sites.</p> <table border="1"> <tr> <td>AOC 00-030(i)</td> <td>Site was proposed for NFA in the VCA Completion Report for Consolidated Unit 00-003-99</td> </tr> </table>	AOC 00-030(i)	Site was proposed for NFA in the VCA Completion Report for Consolidated Unit 00-003-99	The Department concurs. Tables K-1 and K-3 have been revised as suggested by the commenter.	Yes						
AOC 00-030(i)	Site was proposed for NFA in the VCA Completion Report for Consolidated Unit 00-003-99											

No.	Loc.	Comment	NMED Response	Δ
		and AOC 00-030(i). NMED approved the VCA Completion Report and concurred with NFA on January 30, 2002. Add to Table K-3 with corrective action completed date of 1/30/2002.		
		AOC 21-030 NFA approved 6/21/04 as part of approval of Voluntary Corrective Action Report for SWMU 21-024(f) and AOCs C-21-015 and 21-030 (already listed in Table K-3)		
		AOCs C-06-006, C-06-007, C-06-008, C-06-009, C-06-010, C-06-011, C-06-012, C-06-013, C-06-014, C-06-015, C-06-016, C-06-017, C-06-018, C-06-020, and C-06-021 These AOCs were proposed for NFA in the RFI Report for TA-6. NMED approved the RFI Report and concurred with NFA on March 14, 2000. Add to Table K-3 with corrective action completed date of 3/14/2000.		
		AOCs 73-007, C-73-005(a), C-73-005(b), NFA approved 3/28/01 as part of approval of RFI Report for Consolidated Unit 73-005-99.		

No.	Loc.	Comment	NMED Response	Δ				
		<table border="1"> <tr> <td>C-73-005(c), C-73-005(d), C-73-005(e), and C-73-005(f),</td> <td>Add to Table K-3 with corrective action completed date of 3/28/01.</td> </tr> </table> <p>A summary of the requested changes to Tables K-1, K-2, and K-3 is included with this document as Appendix 4.</p>	C-73-005(c), C-73-005(d), C-73-005(e), and C-73-005(f),	Add to Table K-3 with corrective action completed date of 3/28/01.				
C-73-005(c), C-73-005(d), C-73-005(e), and C-73-005(f),	Add to Table K-3 with corrective action completed date of 3/28/01.							
629	Tables K-1 and K-3	<p>SWMUs that have been removed from Table C of Module VIII through a Class III permit modification prior to the effective date of the Consent Order are approved for NFA and require no controls and should be listed in Table K-3.</p> <p>Table K-1 contains sites that are listed in Table C.1 of Module VIII. These sites have been removed from Table C by NMED through a Class III permit modification. These sites should not be listed in Table K-1, but should be listed in Table K-3, <i>Corrective Action Complete Without Controls</i>. These sites are identified in the suggested change column.</p> <p>Suggested language change:</p> <p>Table K-1 should be revised by removing these sites.</p> <table border="1"> <tr> <td>SWM U 03- 032</td> <td>Listed in Module VIII Table C.1, Class III permit modification effective 05-02-01 (already listed in Table K-3)</td> </tr> <tr> <td>SWM U 03- 045(i)</td> <td>Listed in Module VIII Table C.1, Class III permit modification effective 05-02-01 (already listed in Table K-3)</td> </tr> </table>	SWM U 03- 032	Listed in Module VIII Table C.1, Class III permit modification effective 05-02-01 (already listed in Table K-3)	SWM U 03- 045(i)	Listed in Module VIII Table C.1, Class III permit modification effective 05-02-01 (already listed in Table K-3)	The Department concurs. Tables K-1 and K-3 have been revised as suggested by the commenter.	Yes
SWM U 03- 032	Listed in Module VIII Table C.1, Class III permit modification effective 05-02-01 (already listed in Table K-3)							
SWM U 03- 045(i)	Listed in Module VIII Table C.1, Class III permit modification effective 05-02-01 (already listed in Table K-3)							

No.	Loc.	Comment	NMED Response	Δ						
		<p>A summary of the requested changes to Tables K-1, K-2, and K-3 is included with this document as Appendix 4.</p>								
630	Table K-1	<p>SWMUs that have not been removed from Tables A or C of Module VIII of the current LANL permit through a Class III permit modification should be included in Table K-1.</p> <p>Table K-1 does not contain several sites that have not previously been approved for NFA or received a certificate of completion. These sites are identified in the suggested change column.</p> <p>Suggested language change:</p> <p>Table K-1 should be revised by adding these sites.</p> <table border="1"> <tbody> <tr> <td>SWM U 03- 029</td> <td>Listed in Module VIII Table C (should be listed in Table K-1)</td> </tr> <tr> <td>SWM U 16- 032(c)</td> <td>Listed in Module VIII Table C (should be listed in Table K-1)</td> </tr> <tr> <td>SWM U 36- 006</td> <td>Listed in Module VIII Table A (should be listed in Table K-1)</td> </tr> </tbody> </table> <p>A summary of the requested changes to Tables K-1, K-2, and K-3 is included with this document as Appendix 4.</p>	SWM U 03- 029	Listed in Module VIII Table C (should be listed in Table K-1)	SWM U 16- 032(c)	Listed in Module VIII Table C (should be listed in Table K-1)	SWM U 36- 006	Listed in Module VIII Table A (should be listed in Table K-1)	<p>The Department concurs. Table K-1 has been revised as suggested by the commenter.</p>	Yes
SWM U 03- 029	Listed in Module VIII Table C (should be listed in Table K-1)									
SWM U 16- 032(c)	Listed in Module VIII Table C (should be listed in Table K-1)									
SWM U 36- 006	Listed in Module VIII Table A (should be listed in Table K-1)									
631	Table K-1	<p>Several sites that were originally contained in the 1988 SWMU Report and listed in the original 1990 Module VIII were renumbered in the 1994 modification of Module VIII. The new numbers are the numbers used in the current version of Module VIII. The old numbers are no longer contained in Module VIII and should not be used in the Permit.</p> <p>Table K-1 contains sites that have been renumbered and are duplicates of other sites already listed in Table K-1. These sites are identified below, along with the numbers of</p>	<p>The Department concurs. Tables K-1 and K-3 have been revised as suggested by the commenter. Also, language will be added to each Table, where appropriate, to identify whether or not a SWMU/AOC number is</p>	Yes						

No.	Loc.	Comment	NMED Response	Δ										
		<p>the duplicate sites.</p> <p>Suggested language change:</p> <p>Table K-1 should be revised by removing these sites.</p> <table border="1"> <tr> <td>SWMU 00-002</td> <td>1990 SWMU Report (Vol. 1, pg. 11) shows that this site was being renumbered from 00-002 to 61-006. SWMU 61-006 is included in Table K-1.</td> </tr> <tr> <td>SWMU 15-009(l)</td> <td>The 1988 SWMU Report identified SWMU 15-009(k) as a septic tank having structure number 15-293. The 1990 SWMU Report (Vol. 1, pg. 36) noted that septic system 15-293 had never been constructed and proposed deleting SWMU 15-009(k). The 1990 SWMU Report (Vol. 1, pg. 27) also proposed adding two new septic system SWMUs in TA-15. These were designated as SWMU 15-009(k), which was associated with structure 15-67, and SWMU 15-009(l), which was associated with structure 15-00. Septic tank 15-67, however, was renumbered to structure 36-61 and was already designated as SWMU 36-006(b). Because the newly added SWMU 15-009(k) was a duplicate of SWMU 36-006(b), it was deleted and SWMU 15-009(l) (associated with 15-00) was renumbered as SWMU 15-009(k), which is listed in Table K-1.</td> </tr> <tr> <td>SWMU 15-012(c)</td> <td>1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(c) to 15-014(m). SWMU 15-014(m) is included in Table K-3 and Module VIII Table A.1.</td> </tr> <tr> <td>SWMU 15-012(d)</td> <td>1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(d) to 15-014(k). SWMU 15-014(k) is included in Table K-1 and Module VIII Table A.</td> </tr> <tr> <td>SWMU 15-012(e)</td> <td>1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(e) to 15-014(l). SWMU 15-014(l) is included in Table K-1 and Module VIII Table A.</td> </tr> </table>	SWMU 00-002	1990 SWMU Report (Vol. 1, pg. 11) shows that this site was being renumbered from 00-002 to 61-006. SWMU 61-006 is included in Table K-1.	SWMU 15-009(l)	The 1988 SWMU Report identified SWMU 15-009(k) as a septic tank having structure number 15-293. The 1990 SWMU Report (Vol. 1, pg. 36) noted that septic system 15-293 had never been constructed and proposed deleting SWMU 15-009(k). The 1990 SWMU Report (Vol. 1, pg. 27) also proposed adding two new septic system SWMUs in TA-15. These were designated as SWMU 15-009(k), which was associated with structure 15-67, and SWMU 15-009(l), which was associated with structure 15-00. Septic tank 15-67, however, was renumbered to structure 36-61 and was already designated as SWMU 36-006(b). Because the newly added SWMU 15-009(k) was a duplicate of SWMU 36-006(b), it was deleted and SWMU 15-009(l) (associated with 15-00) was renumbered as SWMU 15-009(k), which is listed in Table K-1.	SWMU 15-012(c)	1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(c) to 15-014(m). SWMU 15-014(m) is included in Table K-3 and Module VIII Table A.1.	SWMU 15-012(d)	1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(d) to 15-014(k). SWMU 15-014(k) is included in Table K-1 and Module VIII Table A.	SWMU 15-012(e)	1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(e) to 15-014(l). SWMU 15-014(l) is included in Table K-1 and Module VIII Table A.	<p>duplicative or has been renumbered.</p>	
SWMU 00-002	1990 SWMU Report (Vol. 1, pg. 11) shows that this site was being renumbered from 00-002 to 61-006. SWMU 61-006 is included in Table K-1.													
SWMU 15-009(l)	The 1988 SWMU Report identified SWMU 15-009(k) as a septic tank having structure number 15-293. The 1990 SWMU Report (Vol. 1, pg. 36) noted that septic system 15-293 had never been constructed and proposed deleting SWMU 15-009(k). The 1990 SWMU Report (Vol. 1, pg. 27) also proposed adding two new septic system SWMUs in TA-15. These were designated as SWMU 15-009(k), which was associated with structure 15-67, and SWMU 15-009(l), which was associated with structure 15-00. Septic tank 15-67, however, was renumbered to structure 36-61 and was already designated as SWMU 36-006(b). Because the newly added SWMU 15-009(k) was a duplicate of SWMU 36-006(b), it was deleted and SWMU 15-009(l) (associated with 15-00) was renumbered as SWMU 15-009(k), which is listed in Table K-1.													
SWMU 15-012(c)	1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(c) to 15-014(m). SWMU 15-014(m) is included in Table K-3 and Module VIII Table A.1.													
SWMU 15-012(d)	1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(d) to 15-014(k). SWMU 15-014(k) is included in Table K-1 and Module VIII Table A.													
SWMU 15-012(e)	1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(e) to 15-014(l). SWMU 15-014(l) is included in Table K-1 and Module VIII Table A.													

No.	Loc.	Comment	NMED Response	Δ						
		<table border="1"> <tr> <td>SWMU 15-012(f)</td> <td>1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(f) to 15-014(i). SWMU 15-014(i) is included in Table K-1 and Module VIII Table A.</td> </tr> <tr> <td>SWMU 15-012(g)</td> <td>1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(g) to 15-014(j). SWMU 15-014(j) is included in Table K-1 and Module VIII Table A.</td> </tr> <tr> <td>AOC 36-009</td> <td>1993 RFI Work Plan for Operable Unit 1093, which includes former TA-27, indicates that the bazooka impact area identified as SWMU 27-003 is the same as the mortar impact area identified as SWMU 36-009. 1994 RFI Work Plan for Operable Unit 1130, which includes TA-36, indicates that SWMU 36-009 is being addressed in OU 1093 as SWMU 27-003. EPA's 1994 modification to Module VIII drops SWMU 36-009 because it is the same site as SWMU 27-003. SWMU 27-003 is listed in Table K-1.</td> </tr> </table> <p>A summary of the requested changes to Tables K-1, K-2, and K-3 is included with this document as Appendix 4.</p>	SWMU 15-012(f)	1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(f) to 15-014(i). SWMU 15-014(i) is included in Table K-1 and Module VIII Table A.	SWMU 15-012(g)	1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(g) to 15-014(j). SWMU 15-014(j) is included in Table K-1 and Module VIII Table A.	AOC 36-009	1993 RFI Work Plan for Operable Unit 1093, which includes former TA-27, indicates that the bazooka impact area identified as SWMU 27-003 is the same as the mortar impact area identified as SWMU 36-009. 1994 RFI Work Plan for Operable Unit 1130, which includes TA-36, indicates that SWMU 36-009 is being addressed in OU 1093 as SWMU 27-003. EPA's 1994 modification to Module VIII drops SWMU 36-009 because it is the same site as SWMU 27-003. SWMU 27-003 is listed in Table K-1.		
SWMU 15-012(f)	1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(f) to 15-014(i). SWMU 15-014(i) is included in Table K-1 and Module VIII Table A.									
SWMU 15-012(g)	1990 SWMU Report (Vol. 1, pg. 15) shows that this site was being renumbered from 15-012(g) to 15-014(j). SWMU 15-014(j) is included in Table K-1 and Module VIII Table A.									
AOC 36-009	1993 RFI Work Plan for Operable Unit 1093, which includes former TA-27, indicates that the bazooka impact area identified as SWMU 27-003 is the same as the mortar impact area identified as SWMU 36-009. 1994 RFI Work Plan for Operable Unit 1130, which includes TA-36, indicates that SWMU 36-009 is being addressed in OU 1093 as SWMU 27-003. EPA's 1994 modification to Module VIII drops SWMU 36-009 because it is the same site as SWMU 27-003. SWMU 27-003 is listed in Table K-1.									
632	Table K-1	<p>Several SWMUs in Table K-1 were never identified by EPA as corrective action units or were deleted as corrective action units by EPA in the 1994 modification to Module VIII. SWMUs 21-016(d) and 21-016(e) were listed in May 1990 Module VIII but were not included in 1994 modification of Module VIII.</p> <p>Table K-1 contains SWMUs that were proposed for deletion in the 1990 SWMU Report and which were subsequently removed from Module VIII by EPA in the 1994 modification to Module VIII. These sites are identified in the suggested change column.</p> <p>Suggested language change:</p> <p>Table K-1 should be revised by removing these sites.</p> <table border="1"> <tr> <td>SWMU 21-016(d)</td> <td>SWMU 21-016(d) is identified in 1988 SWMU Report as a sump associated with MDA T (SWMU 21-016[a]). The 1990 SWMU Report (Vol. 1, pg. 36) proposes deleting this SWMU since it has</td> </tr> </table>	SWMU 21-016(d)	SWMU 21-016(d) is identified in 1988 SWMU Report as a sump associated with MDA T (SWMU 21-016[a]). The 1990 SWMU Report (Vol. 1, pg. 36) proposes deleting this SWMU since it has	The Department concurs. Table K-1 has been revised as suggested by the commenter.	Yes				
SWMU 21-016(d)	SWMU 21-016(d) is identified in 1988 SWMU Report as a sump associated with MDA T (SWMU 21-016[a]). The 1990 SWMU Report (Vol. 1, pg. 36) proposes deleting this SWMU since it has									

No.	Loc.	Comment	NMED Response	Δ				
		<table border="1"> <tr> <td></td> <td> <p>been incorporated into SWMU 21-016(a) and the TA-21 section of the report (Vol. 2) does not list this site. The NMED-approved Investigation Work Plan for MDA T indicates that the sump comprising former SWMU 21-016(d) is part of SWMU 21-016(a). SWMU 21-016(a) is listed in Table K-1.</p> </td> </tr> <tr> <td>SWMU 21-016(e)</td> <td> <p>SWMU 21-016(e) is identified in 1988 SWMU Report as a sump associated with MDA T (SWMU 21-016[a]). The 1990 SWMU Report (Vol. 1, pg. 36) proposes deleting this SWMU since it has been incorporated into SWMU 21-016(a) and the TA-21 section of the report (Vol. 2) does not list this site. The NMED-approved Investigation Work Plan for MDA T indicates that the sump comprising former SWMU 21-016(e) is part of SWMU 21-016(a). SWMU 21-016(a) is listed in Table K-1.</p> </td> </tr> </table> <p>A summary of the requested changes to Tables K-1, K-2, and K-3 is included with this document as Appendix 4.</p>		<p>been incorporated into SWMU 21-016(a) and the TA-21 section of the report (Vol. 2) does not list this site. The NMED-approved Investigation Work Plan for MDA T indicates that the sump comprising former SWMU 21-016(d) is part of SWMU 21-016(a). SWMU 21-016(a) is listed in Table K-1.</p>	SWMU 21-016(e)	<p>SWMU 21-016(e) is identified in 1988 SWMU Report as a sump associated with MDA T (SWMU 21-016[a]). The 1990 SWMU Report (Vol. 1, pg. 36) proposes deleting this SWMU since it has been incorporated into SWMU 21-016(a) and the TA-21 section of the report (Vol. 2) does not list this site. The NMED-approved Investigation Work Plan for MDA T indicates that the sump comprising former SWMU 21-016(e) is part of SWMU 21-016(a). SWMU 21-016(a) is listed in Table K-1.</p>		
	<p>been incorporated into SWMU 21-016(a) and the TA-21 section of the report (Vol. 2) does not list this site. The NMED-approved Investigation Work Plan for MDA T indicates that the sump comprising former SWMU 21-016(d) is part of SWMU 21-016(a). SWMU 21-016(a) is listed in Table K-1.</p>							
SWMU 21-016(e)	<p>SWMU 21-016(e) is identified in 1988 SWMU Report as a sump associated with MDA T (SWMU 21-016[a]). The 1990 SWMU Report (Vol. 1, pg. 36) proposes deleting this SWMU since it has been incorporated into SWMU 21-016(a) and the TA-21 section of the report (Vol. 2) does not list this site. The NMED-approved Investigation Work Plan for MDA T indicates that the sump comprising former SWMU 21-016(e) is part of SWMU 21-016(a). SWMU 21-016(a) is listed in Table K-1.</p>							
633	Table K-1	<p>Several sites listed in Table K-1 were identified in the 1990 SWMU Report but were subsequently renumbered or incorporated into other SWMUs. Although identified in the 1990 SWMU Report, these sites were not listed in Module VIII by EPA. The actual or potential releases associated with these sites have been incorporated into other sites that are listed in Table K-1. Therefore, including these sites in Table K-1 would be duplicative and is not necessary.</p> <p>The revised SWMU descriptions and designations have been included in work plans or other documents approved by EPA or NMED. The original designations contained in the 1990 SWMU Report were not included by EPA in the 1994 modification to Module VIII and are not in the current version of Module VIII. These sites are identified in the suggested change column.</p> <p>Suggested language change:</p> <p>Table K-1 should be revised by removing these sites.</p> <table border="1"> <tr> <td>SWMU</td> <td>SWMU 35-010(misc) has been renumbered to AOC 35-010(e).</td> </tr> </table>	SWMU	SWMU 35-010(misc) has been renumbered to AOC 35-010(e).	The Department concurs. Table K-1 has been revised as suggested by the commenter.	Yes		
SWMU	SWMU 35-010(misc) has been renumbered to AOC 35-010(e).							

No.	Loc.	Comment	NMED Response	Δ
		<p>35-010(misc) The 1990 SWMU Report identifies five SWMUs, 35-010(a-d) and 35-010(misc), as being associated with the TA-35 sanitary lagoon and sand filter. SWMU 35-010(misc) is identified as being associated with Structure TA-35-215, which is the sand filter. In the 1992 RFI Work Plan for OU 1129, which includes TA-35, these five sites are identified as SWMUs 35-010(a-e). SWMU 35-101(e) is identified as the discharge headwall, which is part of structure TA-35-215, and is the same site as SWMU 35-010(misc). The 1994 modification to Module VIII contained SWMUs 35-010(a-d). The discharge from the sand filter (formerly SWMU 35-010[misc]) is currently identified as AOC 35-010(e) and is listed in Table K-1.</p>		
	SWMU 49-001(misc)	SWMU 49-001(misc) has been incorporated into SWMUs 49-001(a-g). The 1990 SWMU Report identifies SWMUs 49-001(a-g) and 49-001(misc) as comprising MDA AB. No descriptive information is provided concerning SWMU 49-001(misc). The 1992 RFI Work Plan for OU 1144, which includes TA-49, notes that SWMU 49-001(misc) is a nonspecific category mentioned in the 1990 SWMU Report that is addressed under SWMUs 49-001(a-g). SWMUs 49-001(a-g) are currently listed in Module VIII and are listed in Table K-1.		
	SWMU 50-011(misc)	SWMU 50-011(misc) has been incorporated into SWMU 50-011(a). The 1990 SWMU Report identifies SWMUs 50-011(a-b) and 50-011(misc) as comprising septic systems at TA-50. No descriptive information is provided concerning SWMU 50-011(misc), but a referenced historical document indicates that it is the leach field for a decommissioned septic system. SWMU 50-011(a) is described as a septic tank, manhole, and distribution box. The 1992 RFI Work Plan for OU 1147, which includes TA-50, describes SWMU 50-011(a) as including the septic tank, manhole, distribution box, and leach field. Therefore, the leach field (50-011[misc]) has been incorporated into the septic system (50-011[a]). SWMU 50-011(a) is currently listed in Module VIII		

No.	Loc.	Comment	NMED Response	Δ
		<p>and Table K-1.</p> <p>SWMU 54-007(misc) is identified in the 1990 SWMU Report as one of the SWMUs associated with septic systems in TA-54, along with SWMUs 54-007(a-e). SWMUs 54-007(a-e) were described as the septic systems associated with five septic tanks at TA-54. No descriptive information or structure number was provided for SWMU 54-007(misc). SWMUs 54-007(a-d) were listed by EPA in Module VIII. The investigations and voluntary corrective actions conducted at these sites have considered releases from all components of these septic systems (i.e., tanks, drain lines, outfalls). Therefore, whatever component of the five septic systems was represented by SWMU 54-007(misc) has been incorporated into SWMUs 54-007(a-d) and AOC 54-007(e). SWMUs 54-007(a) and (d) are listed in Table K-1 and SWMUs 54-007(b) and (c) and AOC 54-0047(e) have been approved for NFA and are listed in Table K-3.</p> <p>A summary of the requested changes to Tables K-1, K-2, and K-3 is included with this document as Appendix 4.</p>		
634	Table K-1	<p>SWMU 16-009(b) was incorporated into SWMU 16-019, which is listed in Table K-1. SWMU 16-009(b) was deleted from Module VIII when EPA modified Module VIII in 1994.</p> <p>Suggested language change:</p> <p>Table K-1 lists SWMU 16-009(b), but this site was incorporated into SWMU 16-019 and deleted as a separate site. Table A of the May 1990 version of Module VIII lists SWMUs 16-009(a) and 16-009(b). The 1990 SWMU Report proposes deleting SWMU 16-009(b) because it is a burn area that was part of Material Disposal Area R and addressed in SWMU 16-019. When EPA modified Module VIII in 1994, SWMU 16-009(b) was deleted from Table A. Table K-1 should be revised by removing SWMU 16-009(b).</p> <p>A summary of the requested changes to Tables K-1, K-2, and K-3 is included with</p>	The Department concurs. Table K-1 has been revised as suggested by the commenter.	Yes

No.	Loc.	Comment	NMED Response	Δ						
		this document as Appendix 4.								
635	Table K-1	<p>Table K-1 lists two SWMUs that are permitted units actively managing hazardous wastes and that are listed in Table J-1. Units should not be listed in both Table J-1 and Table K-1. These sites are identified in the suggested change column.</p> <p>Suggested language change:</p> <p>Table K-1 should be revised by removing these sites.</p> <table border="1"> <tr> <td>SWMU 16-010(c)</td> <td>SWMU 16-010(c) is a flash pad used for open burning of waste explosives and is designated as structure 16-388. This unit is also listed in Table J-1 of the draft Permit.</td> </tr> <tr> <td>SWMU 16-010(d)</td> <td>SWMU 16-010(d) is a burn tray used for open burning of waste explosives and is designated as structure 16-389. This unit is also listed in Table J-1 of the draft Permit.</td> </tr> </table> <p>A summary of the requested changes to Tables K-1, K-2, and K-3 is included with this document as Appendix 4.</p>	SWMU 16-010(c)	SWMU 16-010(c) is a flash pad used for open burning of waste explosives and is designated as structure 16-388. This unit is also listed in Table J-1 of the draft Permit.	SWMU 16-010(d)	SWMU 16-010(d) is a burn tray used for open burning of waste explosives and is designated as structure 16-389. This unit is also listed in Table J-1 of the draft Permit.	The Department concurs. Table K-1 has been revised as suggested by the commenter.	Yes		
SWMU 16-010(c)	SWMU 16-010(c) is a flash pad used for open burning of waste explosives and is designated as structure 16-388. This unit is also listed in Table J-1 of the draft Permit.									
SWMU 16-010(d)	SWMU 16-010(d) is a burn tray used for open burning of waste explosives and is designated as structure 16-389. This unit is also listed in Table J-1 of the draft Permit.									
636	Table K-1	<p>Table K-1 lists AOCs and SWMUs that are closed units not in post-closure care and that are listed in Table J-3. Units should not be list in both Table J-3 and Table K-1. These sites are identified in the suggested change column. Please delete these from Table K-1</p> <p>Suggested language change:</p> <p>Table K-1 should be revised by removing these sites.</p> <table border="1"> <tr> <td>SWMU 16-008(b)</td> <td>SWMU 16-008(b) is a former surface impoundment. This unit was closed under RCRA and is listed in Table J-3 as TA-16 Surface Impoundment.</td> </tr> <tr> <td>SWMU 16-010(b)</td> <td>SWMU 16-010(b) is a former flash pad used for open burning of waste explosives that is designated as structure 16-387. This unit was closed under RCRA and is listed in Table J-3 as TA-16-387.</td> </tr> <tr> <td>SWMU</td> <td>SWMU 16-010(e) is a filter vessel formerly used for open</td> </tr> </table>	SWMU 16-008(b)	SWMU 16-008(b) is a former surface impoundment. This unit was closed under RCRA and is listed in Table J-3 as TA-16 Surface Impoundment.	SWMU 16-010(b)	SWMU 16-010(b) is a former flash pad used for open burning of waste explosives that is designated as structure 16-387. This unit was closed under RCRA and is listed in Table J-3 as TA-16-387.	SWMU	SWMU 16-010(e) is a filter vessel formerly used for open	The Department concurs. Table K-1 has been revised as suggested by the commenter.	Yes
SWMU 16-008(b)	SWMU 16-008(b) is a former surface impoundment. This unit was closed under RCRA and is listed in Table J-3 as TA-16 Surface Impoundment.									
SWMU 16-010(b)	SWMU 16-010(b) is a former flash pad used for open burning of waste explosives that is designated as structure 16-387. This unit was closed under RCRA and is listed in Table J-3 as TA-16-387.									
SWMU	SWMU 16-010(e) is a filter vessel formerly used for open									

No.	Loc.	Comment	NMED Response	Δ												
		<table border="1"> <tr> <td>16-010(e)</td> <td>burning of waste explosives that is designated as structure 16-401. This unit was closed under RCRA and is listed in Table J-3 as TA-16-401.</td> </tr> <tr> <td>SWMU 16-010(f)</td> <td>SWMU 16-010(f) is a filter vessel formerly used for open burning of waste explosives that is designated as structure 16-406. This unit was closed under RCRA and is listed in Table J-3 as TA-16-406.</td> </tr> <tr> <td>SWMU 16-010(j)</td> <td>SWMU 16-010(j) is a former filter bed. This unit was closed under RCRA and is listed in Table J-3 as TA-16-394.</td> </tr> <tr> <td>SWMU 16-018</td> <td>SWMU 16-018 is a former waste pile (MDA P). This unit was closed under RCRA and is listed in Table J-3 TA-16, Material Disposal Area P.</td> </tr> <tr> <td>SWMU 40-003(a)</td> <td>SWMU 40-003(a) is a former explosive scrap burn pile. This unit was closed under RCRA and is listed in Table J-3 as TA-40, Scrap Detonation Unit.</td> </tr> <tr> <td>AOC 54-009</td> <td>AOC 54-009 consists of former waste treatment tanks. This unit was closed under RCRA and is listed in Table J-3 as TA-54-L, Bldg. 35, Storage/Treatment Tanks (4).</td> </tr> </table> <p>A summary of the requested changes to Tables KP-1, K-2, and K-3 is included with this document as Appendix 4.</p>	16-010(e)	burning of waste explosives that is designated as structure 16-401. This unit was closed under RCRA and is listed in Table J-3 as TA-16-401.	SWMU 16-010(f)	SWMU 16-010(f) is a filter vessel formerly used for open burning of waste explosives that is designated as structure 16-406. This unit was closed under RCRA and is listed in Table J-3 as TA-16-406.	SWMU 16-010(j)	SWMU 16-010(j) is a former filter bed. This unit was closed under RCRA and is listed in Table J-3 as TA-16-394.	SWMU 16-018	SWMU 16-018 is a former waste pile (MDA P). This unit was closed under RCRA and is listed in Table J-3 TA-16, Material Disposal Area P.	SWMU 40-003(a)	SWMU 40-003(a) is a former explosive scrap burn pile. This unit was closed under RCRA and is listed in Table J-3 as TA-40, Scrap Detonation Unit.	AOC 54-009	AOC 54-009 consists of former waste treatment tanks. This unit was closed under RCRA and is listed in Table J-3 as TA-54-L, Bldg. 35, Storage/Treatment Tanks (4).		
16-010(e)	burning of waste explosives that is designated as structure 16-401. This unit was closed under RCRA and is listed in Table J-3 as TA-16-401.															
SWMU 16-010(f)	SWMU 16-010(f) is a filter vessel formerly used for open burning of waste explosives that is designated as structure 16-406. This unit was closed under RCRA and is listed in Table J-3 as TA-16-406.															
SWMU 16-010(j)	SWMU 16-010(j) is a former filter bed. This unit was closed under RCRA and is listed in Table J-3 as TA-16-394.															
SWMU 16-018	SWMU 16-018 is a former waste pile (MDA P). This unit was closed under RCRA and is listed in Table J-3 TA-16, Material Disposal Area P.															
SWMU 40-003(a)	SWMU 40-003(a) is a former explosive scrap burn pile. This unit was closed under RCRA and is listed in Table J-3 as TA-40, Scrap Detonation Unit.															
AOC 54-009	AOC 54-009 consists of former waste treatment tanks. This unit was closed under RCRA and is listed in Table J-3 as TA-54-L, Bldg. 35, Storage/Treatment Tanks (4).															
637	Table K-3	<p>Some of the AOCs listed in Table K-3 do not have an entry for corrective action completed date. These AOCs were approved for NFA by NMED prior to the effective date of the Consent Order. The document approval date should be used as the corrective action completed date for AOCs.</p> <p>These sites are identified in the suggested change column, along with documents where NFA was approved.</p> <p>Suggested language change:</p>	<p>The Department concurs (in part). Table K-3 has been revised as suggested by the commenter except for the corrective action complete date for AOC 00-030(i) and the AOCs at TA-73. Those AOCs had corrective action complete when the Department</p>	Yes												

No.	Loc.	Comment	NMED Response	Δ
		Table K-3 should be revised by incorporating the changes indicated below.	approved the permit modification for the associated consolidated units on 09/05/03.	
	AOC 00-030(i)	Site was proposed for NFA in the VCA Completion Report for Consolidated Unit 00-003-99 and AOC 00-030(i). NMED approved the VCA Completion Report and concurred with NFA on January 30, 2002. Add corrective action completed date of 1/30/2002.		
	AOCs C-06-003, C-06-006, C-06-007, C-06-008, C-06-009, C-06-010, C-06-011, C-06-012, C-06-013, C-06-014, C-06-015, C-06-016, C-06-017, C-06-018, C-06-020, and C-06-021	These AOCs were proposed for NFA in the RFI Report for TA-6. NMED approved the RFI Report and concurred with NFA on March 14, 2000. Add corrective action completed date of 3/14/2000.		
	AOCs 73-007, C-73-005(a), C-73-005(b), C-73-005(c), C-73-005(d), C-73-005(e), and C-73-005(f),	These AOCs were proposed for NFA in the RFI Report for Consolidated Unit 73-005-99. NMED approved the RFI Report and concurred with NFA on March 28, 2001. Add corrective action completed date of 3/28/2001		

No.	Loc.	Comment	NMED Response	Δ				
		<p>A summary of the requested changes to Tables K-1, K-2, and K-3 is included with this document as Appendix 4.</p>						
638	Table K-3	<p>SWMUs 35-006 and 35-011(a) were removed from Table A of Module VIII prior to the effective date of the Consent Order and should be identified as having corrective action complete without controls.</p> <p>Suggested language change:</p> <p>SWMUs 35-006 and 35-011(a) were removed from Table A of Module VIII by a Class III permit modification approved May 2, 2001. Table K-3 should be revised by adding SWMUs 35-006 and 35-011(a) with corrective action completed dates of 5/2/2001.</p> <p>A summary of the requested changes to Tables K-1, K-2, and K-3 is included with this document as Appendix 4.</p>	The Department concurs. Table K-3 is revised as suggested by the commenter.	Yes				
639	Table K-1	<p>Table K-1 contains sites that are also listed in Table J-1. Table J-1 contains permitted units. New releases from permitted units are subject to corrective action under the Permit rather than under the Consent Order. Under the conditions of the draft Permit, these permitted units are subject to clean closure, which would address historical releases from these units. Because new and historical releases from these units will be addressed under the Permit, these units should not also be identified as corrective action units under the Consent Order. This would lead to potentially conflicting requirements, and is unnecessarily confusing.</p> <p>These sites are identified in the suggested change column, along with the corresponding Table J-1 permitted unit.</p> <p>Suggested language change:</p> <p>Table K-1 should be revised by removing these units.</p> <table border="1"> <tbody> <tr> <td>SWMU 54-001(a) (Structure 215)</td> <td>Listed in Table J-1 as part of TA-54 Area L Outdoor Pad.</td> </tr> <tr> <td>AOC 54-001(b)</td> <td>Listed in Table J-1 as part of TA-54 Area L</td> </tr> </tbody> </table>	SWMU 54-001(a) (Structure 215)	Listed in Table J-1 as part of TA-54 Area L Outdoor Pad.	AOC 54-001(b)	Listed in Table J-1 as part of TA-54 Area L	The Department concurs. Table K-1 is revised as suggested by the commenter.	Yes
SWMU 54-001(a) (Structure 215)	Listed in Table J-1 as part of TA-54 Area L Outdoor Pad.							
AOC 54-001(b)	Listed in Table J-1 as part of TA-54 Area L							

No.	Loc.	Comment	NMED Response	Δ																				
		<table border="1"> <tr> <td>(Structure 31)</td> <td>Outdoor Pad.</td> </tr> <tr> <td>AOC 54-001(d) (Structure 39)</td> <td>Listed in Table J-1 as part of TA-54 Area L Outdoor Pad.</td> </tr> <tr> <td>AOC 54-001(e) (Structure 32)</td> <td>Listed in Table J-1 as part of TA-54 Area L Outdoor Pad.</td> </tr> <tr> <td>AOC 54-002 (Structure 216)</td> <td>Listed in Table J-1 as part of TA-54 Area L Outdoor Pad.</td> </tr> <tr> <td>AOC 54-015(a) (Shed 8)</td> <td>Listed in Table J-1 as TA-54 Area G Storage Shed 8.</td> </tr> <tr> <td>AOC 54-015(c) (Pad 1)</td> <td>Listed in Table J-1 as part of TA-54 Area G Pad 1.</td> </tr> <tr> <td>AOC 54-015(d) (Pad 2)</td> <td>Now part of Pad 10, listed in Table J-1 as TA-54 Area G Pad 10.</td> </tr> <tr> <td>AOC 54-015(e) (Pad 3)</td> <td>Listed in Table J-1 as part of TA-54 Area G Pad 3.</td> </tr> <tr> <td>AOC 54-015(f) (Pad 4)</td> <td>Now part of Pad 10, listed in Table J-1 as TA-54 Area G Pad 10.</td> </tr> <tr> <td>AOC 54-015(j) (Dome 49)</td> <td>Listed in Table J-1 as part of TA-54 Area G Pad 5.</td> </tr> </table> <p>A summary of the requested changes to Tables K-1, K-2, and K-3 is included with this document as Appendix 4.</p>	(Structure 31)	Outdoor Pad.	AOC 54-001(d) (Structure 39)	Listed in Table J-1 as part of TA-54 Area L Outdoor Pad.	AOC 54-001(e) (Structure 32)	Listed in Table J-1 as part of TA-54 Area L Outdoor Pad.	AOC 54-002 (Structure 216)	Listed in Table J-1 as part of TA-54 Area L Outdoor Pad.	AOC 54-015(a) (Shed 8)	Listed in Table J-1 as TA-54 Area G Storage Shed 8.	AOC 54-015(c) (Pad 1)	Listed in Table J-1 as part of TA-54 Area G Pad 1.	AOC 54-015(d) (Pad 2)	Now part of Pad 10, listed in Table J-1 as TA-54 Area G Pad 10.	AOC 54-015(e) (Pad 3)	Listed in Table J-1 as part of TA-54 Area G Pad 3.	AOC 54-015(f) (Pad 4)	Now part of Pad 10, listed in Table J-1 as TA-54 Area G Pad 10.	AOC 54-015(j) (Dome 49)	Listed in Table J-1 as part of TA-54 Area G Pad 5.		
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640	Tables K-1, K-2, and K-3	<p>Many of the unit type descriptions contained in Tables K-1, K-2, and K-3 appear to be outdated. LANL has revised and updated these descriptions to reflect current site status and to provide better consistency of descriptions of similar sites.</p> <p>Suggested language change:</p> <p>Updated unit type descriptions for those units that do not match current LANL</p>	The Department concurs. Tables K-1 and K-3 are revised as suggested by the commenter.	Yes																				

No.	Loc.	Comment	NMED Response	Δ
		descriptions are included with this document as Appendix 4.		
641	Att. M	The total cost for closure should be \$26,452, 303.00. This is number EPA got when totaling the closure costs for each hazardous waste unit in Attachment M. (Please note that the cents column was not added when totaling the costs). Please revise accordingly. Also, please note that the closure costs for the MDAs were not included.	See the Department's response regarding financial assurance in the document titled General Response to Comments.	Yes
642	Att. M	Based on the general comment on Financial Assurance above, the Permittees object to the inclusion of cost estimates for financial assurance and request that this section be deleted. Suggested language change: Delete Attachment M	See the Department's response regarding financial assurance in the document titled General Response to Comments.	Yes
643	Att. N	Some of the figures are not in numerical order.	The Department disagrees – Hard copies of the Permit may have been compiled incorrectly.	No
644	Att. N	During the negotiations, the Permittees indicated that a number of the figures in Attachment N needed to be updated and replaced with new figures to be provided by the Permittees. Some of the changes are needed to be consistent with the closure plans and some are clarifications or updates to the figures. The updated figures identified below are included in Appendix 5, attached to these comments.	The Department concurs. The figures have been included in the Renewal Permit.	Yes
645	Att. N, Figure 5	Update of Figure 5 clarifies access control via barricades placed on roadways versus access gates. Suggested language change: Updated figure is included with this document as part of Appendix 5.	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
646	Att. N, Figure 6	Update of Figure 6 removes the added area at the TA-50-69 Outdoor Pad, because the request to permit this area was withdrawn by the Permittees. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
647	Att. N, Figure 7	Update of Figure 7 cleans up overlapping text and clarifies labeling on structures.	The Department concurs. The revised figure has been added to	Yes

No.	Loc.	Comment	NMED Response	Δ
		Suggested language change: Updated figure is included with this document as part of Appendix 5.	the Renewal Permit.	
648	Att. N, Figure 8	Update of Figure 8 creates consistency with other figures that contain the TA-54 Area L Outdoor Pad within the Permit. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
650	Att. N, Figure 9	Update of Figure 9 includes a correction of the boundary for the TA-54-38 West Indoor permitted unit. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
651	Att. N Figure 10	Updated Figure 10 removes the added area at the TA-55 Outdoor Pad, because the request to permit this area was withdrawn by the Permittees. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
652	Att. N, Figure 11	Updated Figure 11 depicts current Facility boundary. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
653	Att. N, Figure 13	Updated Figure 13 removes sample areas that are only required for the figures within the closure plans. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
654	Att. N, Figure 14	Updated Figure 14 removes sample areas that are only required for the figures within the closure plans. Suggested language change:	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
		Updated figure is included with this document as part of Appendix 5.		
655	Att. N, Figure 15	Updated Figure 15 removes sample areas that are only required for the figures within the closure plans. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
656	Att. N, Figure 16	Updated Figure 16 depicts current Facility boundary. Suggested language change: Updated figure is included with this document as part of Appendix 5.	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
657	Att. N, Figure 17	Updated Figure 17 removes outlines of units and structures that no longer exist at the site. Suggested language change: Updated figure is included with this document as part of Appendix 5.	See the Department's response regarding open burning in the document titled General Response to Comments.	Yes
658	Att. N, Figure 22	Updated Figure 22 depicts current Facility boundary. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
659	Att. N, Figure 23	Updated Figure 23 removes the added area at the TA-50-69 Outdoor Pad, because the request to permit this area was withdrawn by the Permittees. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
660	Att. N, Figure 24	Updated Figure 24 depicts current Facility boundary Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
661	Att. N,	Updated Figure 26 cleans up overlapping text and clarifies labeling on structures.	The Department disagrees. The	No

No.	Loc.	Comment	NMED Response	Δ
	Figure 26	Suggested language change: Updated figure is included with this document as part of Appendix 5.	new figure does not reflect all structures, <i>i.e.</i> , the permacon. The figure from the 7/6/09 draft permit is included in the Renewal Permit.	
662	Att. N, Figure 28	Updated Figure 28 clarifies the boundary of the unit and removes illustration of the storage configuration which is dynamic. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
663	Att. N, Figure 29	Updated Figure 29 clarifies the boundary of the unit and removes illustration of the storage configuration which is dynamic. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
664	Att. N, Figure 30	Updated Figure 30 clarifies the boundary of the unit and removes illustration of the storage configuration which is dynamic. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
665	Att. N, Figure 31	Updated Figure 31 clarifies the boundary of the unit and clarifies the current configuration of characterization trailers. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
666	Att. N, Figure 32	Updated Figure 32 clarifies the boundary of the unit and removes illustration of the storage configuration which is dynamic. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
667	Att. N,	Updated Figure 33 clarifies the boundary of the unit and removes illustration of the	The Department concurs. The revised figure has been added to	Yes

No.	Loc.	Comment	NMED Response	Δ
	Figure 33	<p>storage configuration which is dynamic.</p> <p>Suggested language change:</p> <p>Updated figure is included with this document as part of Appendix 5.</p>	the Renewal Permit.	
668	Att. N, Figure 34	<p>Updated Figure 34 removes the illustration of the storage configuration which is dynamic.</p> <p>Suggested language change:</p> <p>Updated figure is included with this document as part of Appendix 5.</p>	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
669	Att. N, Figure 35	<p>Updated Figure 35 removes the illustration of the storage configuration which is dynamic.</p> <p>Suggested language change:</p> <p>Updated figure is included with this document as part of Appendix 5.</p>	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
670	Att. N, Figure 36	<p>Updated Figure 36 clarifies features around the unit and removes illustration of the storage configuration which is dynamic.</p> <p>Suggested language change:</p> <p>Updated figure is included with this document as part of Appendix 5.</p>	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
671	Att. N, Figure 37	<p>Updated Figure 37 includes the entire areas requested for the TA-54-38 West Indoor and TA-54-38 Outdoor Pad permitted units.</p> <p>Suggested language change:</p> <p>Updated figure is included with this document as part of Appendix 5.</p>	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
672	Att. N, Figure 38	<p>Updated Figure 38 depicts the current Facility boundary.</p> <p>Suggested language change:</p> <p>Updated figure is included with this document as part of Appendix 5.</p>	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
673	Att. N, Figure 39	<p>Updated Figure 39 includes TA-55-185 as a permitted unit.</p> <p>Suggested language change:</p>	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes

No.	Loc.	Comment	NMED Response	Δ
		Updated figure is included with this document as part of Appendix 5.		
674	Att. N, Figure 47	Updated Figure 47 corrects the reagent transfer device venting path. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
675	Att. N, Figure 48	Updated Figure 48 makes corrections to the paths for the vacuum trap venting and the compressed air. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
676	Att. N, Figure 49	Updated Figure 49 depicts the current Facility boundary. Suggested language change: Updated figure is included with this document as part of Appendix 5.	The Department concurs. The revised figure has been added to the Renewal Permit.	Yes
677	Att. O	When is this section to be completed and what hazardous waste units are to be included? Does the postclosure plan cover the same requirements as this attachment?	The Department will add long-term monitoring and maintenance plans to the Attachment as they are approved by the Department. No hazardous waste management units will have such plans. Instead they will have post-closure care plans as warranted. Long-term monitoring and maintenance plans apply only to SWMUs or AOCs requiring such plans. The plans will include requirements to implement any controls, including long-term monitoring, maintenance of an engineered cover or maintenance of a fence to restrict access for SWMUs or AOCs where	No

No.	Loc.	Comment	NMED Response	Δ
			corrective action is complete. These controls are similar to those for permitted units addressed under post-closure care.	

LANL Renewal Permit (November 2010)

General Response to Comments

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1. Open Burn

Public comment

The Department has received numerous comments both for and against the Department permitting the open burn process. Approximately 1,400 individuals registered their opposition to continued open burning, principally by signing petitions or submitting a form letter. Approximately 140 individuals registered their support.

Against:

The principal objection to open burning is that the use of unconfined burning to treat high explosives results in uncontrolled releases to the atmosphere. Citizens have cited unacceptable risks to wildlife, public health, and the environment. Commenters point out that open burning is particularly objectionable to persons with allergies or other sensitivities to airborne pollutants.

Those opposed to open burning suggest that alternative treatment methods to open burning exist that would be more protective of human health and the environment. These individuals generally support requiring the Permittees to utilize a confined burn facility as an alternative to open burning.

Pro:

The principal argument in support of issuing the open burn permit is that disallowing open burning of HE would prevent or curtail important defense and national security missions at LANL. Commenters suggest that denying the open burn permit has direct and important impacts on homeland security, aviation security, terrorism prevention and response, military effectiveness and safety, and nuclear weapons policy. They suggest that national security is paramount, and environmental protection comes second.

Another concern regarding the denial is a perceived increased risk to the public and occupational risks if the explosive wastes are alternatively required to be transported on public highways to an off-site facility. These comments state generally that burning HE and HE-containing items in a controlled, remote part of LANL is far safer than requiring additional handling and shipping of these materials to another site.

Supporters suggest that the Department's evaluation of the LANL risk assessment documents lacks clarity with respect to what level of risk is deemed acceptable. Many supporters question the Department's protection of a small population of "neither threatened nor endangered deer mice."

Some supporters suggest that the quantity of emissions from LANL's open burn activities are negligible relative to the amount of pollution emitted by fireplaces and internal combustion engines in this state.

Supporters frequently suggest that the Department appears to be motivated by political rather than technical factors in issuing its intent to deny and that the Department's permitting policy is inappropriately tied to public opinion. Some supporters suggest that denial of the OB permit means lost jobs and revenue for New Mexico.

The Permittees object to the Department's proposal to deny their request for a permit to treat high explosive hazardous waste by open burning at TA-16. The Permittees provided considerable testimony at the hearing asserting that their high explosive open burning process is safe and had they been provided the opportunity they could have demonstrated the accuracy of this proposal.

The Permittees argue that the Department did not give them notice that a more refined analysis, based on the lowest-observed adverse effect level ("LOAEL") would be necessary. They then suggest that the Department proposes to deny the permit based on grounds that, as a consequence, were unknown to them.

The Permittees assert that the Department issued the Notice of Intent to Deny based on the results of the air modeling that was flawed in various respects, showed a potential risk from only one of the burn units, and that it used ammonium perchlorate as a surrogate. The Permittees further argue that the risk analysis based on soil sampling is "flawed" because past burn activities are not necessarily representative of future burn activities.

The Permittees make two procedural arguments. First, they contend that the Department failed to complete a technical review of the permit application, in particular the January 2010 risk assessment. Second, the Permittees contend that the Department "refused" to consider the second revision of the risk assessment, which the Permittees submitted for the record on May 6, 2010 during the hearing. The Permittees argue this refusal deprives them of their due process rights. In support of their contention, the Permittees state that the Department's expert "was directed to 'not review'" the submitted revised risk assessment.

The Permittees next argue that the Department's proposal to deny the permit based on public opposition is "unreasonable." The Permittees contend that the "unsubstantiated public opinion" would not alone support permit denial. Finally, the Permittees contend that the Department's proposal to deny the open burn permit based on possible alternatives to open burning is "unreasonable" and "not based on substantial evidence."

Department response

The Department's denial of the Permittees' application for a permit to open burn hazardous wastes is due principally to an apparent unacceptably high ecological risk to small animal biota as described above, and the Permittees' failure to address this risk and resolve the uncertainties in the assessment in their application. Documentation, provided by the Permittees just prior to and during the hearing and asserted by the Permittees to demonstrate that these risks were inappropriately determined and that procedures could be put in place to minimize or eliminate the creation of additional contaminants of concern, was provided too late. The Department's denial also is in part due to considerable public opposition to open burning and the Permittees' incomplete evaluation of alternatives to the process.

The Department upholds its February 2, 2010 intent to deny the application for open burning fundamentally because the Department can only act on information in the record at the time that it makes the determination. The Department cannot act on, other than through denial, unfounded assertions, speculation, or reports and analysis and tests done that have never been submitted for consideration. At some point, over the years of looking at the application, and trying to work with the Permittees to obtain those materials, the Department has to make a determination. The Department clearly cannot use for its determination information or tests that were submitted after the determination was made. Clearly, the revised risk assessment and thermal data submitted by the Permittees on March 19, 2010 had not been reviewed by the Department by February 2, 2010, the date the Bureau was done drafting the Permit and put its decision forward. Critical technical information needs to be in the application and it needs to be in the administrative record.

Nevertheless, the ecological risk assessments that the Permittees prepared showed elevated risk levels for certain indicator species. The elevated risk levels were expressed as hazard index ratios greater than 1.0. As a matter of agency policy, the Department applies a target level for ecological risk of no greater than 1.0. The Department has established this target level for all hazardous waste facilities in the State and the Department established this target level in the March 1, 2005 Consent Order.

The Permittees contend that “[b]ased on EPA guidance, typically a hazard index of 1 to 10 may not indicate adverse effects to organisms, while ratios less than 3 are conservatively acknowledged to not indicate adverse effects to organisms.” The Permittees attribute this statement to EPA. However, they also referenced a 1983 published paper written by Dourson and Stara, two EPA employees. The Dourson and Stara paper contains a significant caveat: “[This article] has not been subject to [EPA’s] required peer and administrative review and, therefore, does not necessarily reflect the view of the Agency and no official endorsement should be inferred.” The statement attributed to EPA is not based on EPA guidance. And it is contrary to the Department’s written, consistently-applied policy.

Regarding the Permittees argument that the Department did not give them notice that a more refined analysis based on the lowest-observed adverse effect level (“LOAEL”) is necessary, the Permittees mischaracterize the significance of a LOAEL analysis. The Department does not deny the permit based on the lack of a LOAEL analysis. The Department denied the permit because the screening risk assessment shows an elevated ecological risk, one that exceeds the Department’s target risk levels. A more refined risk assessment, such as one that uses a LOAEL analysis, might well show a lower ecological risk level. If the NOAEL-based assessment results

in a hazard quotient greater than the target level of 1.0, additional refinements are needed. Typically, a less conservative toxicity reference value based on the LOAEL is applied.

The Permittees had every opportunity and reason to perform a more refined site-specific risk assessment that utilizes the LOAEL in the risk calculation. The Permittees were made aware long before the hearing of the need for a LOAEL analysis or the need for further refinement of the risk assessment because the laboratory was provided with advance copies of drafts of the Fact Sheet for the July 6, 2009 permit. That Fact Sheet says "a risk assessment [referring to a risk assessment on the open burning units at 388 and 399] must include a statistically appropriate number of soil samples and may either confirm or refute the screening levels assessment's prediction of an unacceptable level of risk to biotic receptors. Such a risk assessment has not been conducted." This language suggests that the screening level assessment showed that there may be unacceptable risk and that a more refined risk assessment needs to be done. Subsequent to that, this issue of a more refined risk assessment was discussed with the Permittees on July, August, and November of 2009. On January 13, 2010 the Department informed the Permittees in clear and uncertain language that we intended to deny the permit because the risk assessment was equivocal and the Department must err on the side of the protection of human health and the environment. Finally, the February 2, 2010 Fact Sheet presents performing a LOAEL analysis as being a possible way of refining the risk assessment. The normal procedure when a screening level risk assessment fails is to perform a more refined or a site-specific analysis. There are a number of ways to do that and utilizing a LOAEL is one way. This process of regulator-regulatee communication is typical of the permit application process. It was the responsibility of the Permittees to prepare a risk assessment, refined as necessary, to demonstrate that open burning could be conducted without creating an elevated risk to humans or to ecological receptors, and to include that risk assessment in their permit application. They did not do so.

The Department has other concerns regarding the Permittees' January 8, 2010 risk assessment besides the lack of a LOAEL analysis. That assessment does not consider spatial analysis or the patterns of concentrations of contaminants on the ground and their coincidence and co-location with predicted patterns from the laboratory's air model. That assessment does not address whether or not the contamination is due to historical practices near the burn sites.

Regarding the Permittees' assertion that the Department issued the Notice of Intent to Deny based on the results of the air modeling and that the Department's air modeling was flawed, while these arguments are not well-founded on their merits, they are largely beside the point. The Department and the Permittees did not rely on the air modeling to reach the conclusion that open burning at TA-16 would create elevated risk. The Department used the modeling as a first step to conclude that there was a potential for elevated risk, and more importantly, to assess the depositional pattern of contaminants. In evaluating the ecological risk, however, the Department, and the Permittees, relied on the actual data from the chemical analysis of soil samples taken from the TA-16 burn grounds.

Regarding the Permittees' argument that the risk analysis based on soil sampling is "flawed" because past burn activities are not necessarily representative of future burn activities, the Permittees' have failed to demonstrate how open burn activities will change from the past to the future. The Department remains concerned that, from an emissions standpoint, the materials proposed to be burned might be capable of generating dioxins and furans through the treatment process of burning. The Permittees' Thermal Data Collection Report presented March 19, 2010 has some issues that the Department might have been able to resolve had there been time to

perform a detailed review, *e.g.*, there is only temperature data from TA-16-388 and there is no data from TA-16-399.

Regarding the Permittees' contention that the Department "refused" to consider the second revision of the risk assessment, the Permittees do not mention that the expert had been handed the document during her cross-examination at the hearing and had been given the opportunity to review it during a one-hour recess in the midst of her cross-examination. That witness testified that the document requires a thorough reading and review before concluding any technical decision. The Permittees further state that the Department's testimony on whether the Department would consider the revised risk assessment "was conflicting and inconsistent." On the one hand, according to the Permittees, the Department testified that the Bureau could not consider information submitted after the Notice of Intent to Deny, while on the other hand the Department testified that the Department would consider all public comments submitted during the comment period. The Department did not consider the revised risk assessment when it issued the proposed Notice of Intent to Deny on February 2, 2010 because the Permittees had not then submitted the document. There was nothing inconsistent, conflicting, or at all incorrect in the Department's testimony. And, more to the point, there was no denial of due process.

Regarding the Permittees' argument that the Department's proposal to deny the permit based on public opposition is "unreasonable," in support of their argument, they minimize the public opposition as consisting of form letters and a petition; as making no reference "to studies, monitoring, modeling or any other factual support"; and as being uninformed because the risk assessment showed no potential for adverse effects to human health.

Of course, the Department has not relied on public opposition alone. The primary basis for the denial is the elevated ecological risk. But public opposition is nevertheless an important consideration. The Department Secretary is required by law to "give due consideration and the weight he [or] she deems appropriate to all comments received during a public comment period." As the New Mexico Supreme Court recently stated, the courts have "emphasized that legislative policy favors the public's ability to participate meaningfully in the landfill permitting process." The courts have also "recognized the importance of vindicating the general public's right to participate in the permitting process and the important interest in insuring that modifications to a landfill permit do not adversely affect the quality of life of the surrounding community." And the courts "have protected and promoted the role of public input in the Department's decision to issue a permit." Although the court was discussing a landfill permit, its observations are equally compelling here.

Regarding the Permittees' contention that the Department's proposal to deny the open burn permit based on possible alternatives to open burning is "unreasonable" and "not based on substantial evidence," this consideration was not the primary basis for the denial. But the lack of an up-to-date analysis of alternatives to open burning, and the likely existence of such alternatives, is nevertheless an important consideration.

The Permittees did not satisfactorily demonstrate to the Department by the time decisions had to be made on February 2, 2010 that a viable alternative for the proposed OB wastes or a portion of the wastes does not exist. In fact, it was revealed to the Department at the hearing that a large percent of the proposed wastes could be shipped off-site. At the hearing a LANL witness testified that the maximum quantity of high explosive wastes that could be burned at TA-16

could be reduced to 6,000. This limit was not part of the permit application nor was it proposed in any document submitted subsequent to the permit application.

Regarding confined burning of high explosive waste, the Department would prefer this technology and the associated capability of controlling and monitoring emissions to the atmosphere. The Department believes that confined burn boxes are available for small scale explosions involving small amounts of waste and that these units cannot accommodate large pieces of HE contaminated equipment, *e.g.*, vents or duct work.

It has not been demonstrated to the Department that these large pieces of equipment could not be either transported to another treatment facility, either in their present form or in a way in which they're desensitized or stabilized, and they must be treated onsite. Another limitation on confined burn units is its ability to treat particular types of explosive wastes due to the availability of oxygen needed to completely destroy those wastes.

The Permittees assert that the high-explosive waste currently treated at the open burn units cannot be safely transported on roads and that U.S. Department of Transportation regulations prohibit such transport for that reason. The Department disagrees with that assertion. High explosive transportation risks are not addressed in New Mexico's Hazardous Waste Act and Hazardous Waste Regulations and are therefore beyond the Department's authority to regulate, however the Department believes that the transportation of stabilized high-explosives is allowed under the Department of Transportation regulations outlined in 49 CFR. The explosive waste generated at LANL would be shippable as long as it was stabilized properly as a D003 EPA Hazardous Waste. In fact, all reactive wastes that are treated at TA-16 are transported from the point of generation to the treatment units by vehicle, albeit not on public roads. The Permittees have not provided any information in their permit application or in any supplemental material demonstrating that the wastes generated at LANL for treatment at TA-16 should be not considered stable, or cannot be stabilized, and are therefore unsafe for transport.

The stability of explosive wastes generated at LANL and treated at TA-16 can be stabilized depending on the form of the explosive and other factors. RDX, by itself and in combination with other materials, can be stabilized, but the Department has not been provided with information about what steps the laboratory takes to stabilize these wastes. These explosives are generally manufactured to be stable to be able to be transported, and these types of substances are frequently transported on public highways. These compounds are generally designed to be transported, to be safe, and they generally need an ignition source other than simply transporting them to cause a burn or a detonation.

National Security/Economics: The Department understands that LANL's explosive research program has national security and economic ramifications. However, national security and economics are not factors addressed in hazardous waste permitting under New Mexico's Hazardous Waste Act and Hazardous Waste Regulations.

Changed Permit provisions

None.

2. Information Repository

Public Comment

The Department received numerous comments regarding an information repository at LANL associated with its hazardous waste operations. Approximately 120 commenters, including the U.S. EPA, support a permit requirement that LANL establish both a physical and electronic repository. The Permittees and three commenters suggest that the electronic repository should suffice.

Proponents of both a physical and electronic repository often reference the U.S. EPA's enhanced public participation guidelines calling for early, often, meaningful and continuous public involvement. Inclusion of a physical repository is argued to be an act of restorative justice and a means to meet the needs of all communities, including both urban and rural communities and future generations. "A basic tenet of democracy is transparency and all community members should have access to the information needed to make informed comment and decisions."

Comment in support for having an information repository containing paper copies of relevant documents generally requests that the repository be located in the Espanola Valley, preferably at Northern New Mexico College. These commenters explain that they live in a community that is directly affected by experiments performed at LANL and that they are very concerned about the environmental health risk associated with these activities. They explain that their concern stems principally from a lack of information about LANL and their inability to understand the many technical and legal issues associated with LANL's hazardous waste management and cleanup.

Comment justifying a physical information repository often refers to difficulties associated with an electronic repository, particularly difficulties operating and getting access to computers and the internet. These commenters reference their concerned neighbors that cannot afford computers or have had difficulties obtaining access to computers at area libraries, or simply lack the technical skills to access an electronic repository. One commenter states "it is a form of disrespect to people who have maintained the land for generations to impose this technology on them without helping them." Another commenter points out that most people in Northern New Mexico do not have broadband internet access.

Commenters propose that Northern New Mexico College is the appropriate location for a physical information repository. They argue that a physical information repository at an institute of high learning would facilitate participation and meaningful involvement and provide a place for individual, student, and community learning and research about LANL's hazardous waste operations. Commenters propose that the physical repository have an on-site staff trained in its maintenance and able to assist local citizens in their quest for information. The physical repository should include "permit documents, maps, regulations and any equipment necessary to download, print and/or copy the information."

Comment arguing that the information repository should be limited to an electronic repository references the timeliness of adding documents to such a repository and the ability to ensure it is not tampered with and remains accurate. Support for limiting the repository to an electronic

form refers to the unnecessary consumption of physical resources associated with a physical repository, particularly the necessary paper and the fuel needed to transport people to the repository. Supporters of an electronic repository point out that access to such a repository is preferable for working people because it is available 24/7. It is the Permittees' position that a virtual repository will provide the most accessibility and will support the goals of transparency and providing information to the public.

Commenters propose that the information repository contain historical documents associated with hazardous waste at LANL and corrective actions documents, including those associated with the March 2005 Compliance Order on Consent.

One commenter points out that "66 percent of residents of Rio Arriba speak a language other than English" and suggests that the repository should be available in the appropriate languages of the impacted communities as requested.

Department Response

The Department is committed to issuing hazardous waste permits in a context of transparency and public participation. To accomplish this, the Department has encouraged the Permittees to collaborate with interested parties to determine an effective and reasonable information repository.

The Department considers an electronic information repository in comparison to a physical repository to be more readily accessible and therefore more likely to be utilized, and that an electronic information repository will engage the maximum number of interested persons. The Department has found that there are more than 1,000 computers available for public use in connecting to the Internet at locations in northern New Mexico. Such computer access, together with privately owned computers, provides many more points of access to the information repository than would be given by a single physical office. The Department considers the permit requirements associated with an electronic information repository to be easier to enforce because the Department can get access to an internet-based information repository at any time.

The Department nevertheless also supports a physical repository, as has been expressed by most commenters on this issue. The Renewal Permit provides for the permittees to have both a physical information repository containing paper documents and an electronic information repository accessible through the Internet.

The Department does have some reservations about a physical repository. The Department's experience is that physical information repositories are often incomplete and the documents are difficult to retrieve. Physical repository documents and maps are susceptible to theft and tampering and they impose a burden on third parties to ensure that documents are not removed or altered. All in all, physical repositories are shown not to work very well.

At the hearing the Department heard for the first time from an official that of Northern New Mexico College that the College supports locating the IR at its facility. The Department considers Northern New Mexico College an appropriate location for this physical repository. The Department also understands that many commenters have expressed a vision for Northern New Mexico College that is something broader than just information under the permit or an information repository, that it would support environmental education efforts throughout Northern New Mexico.

As stated above, the Renewal Permit requires the Permittees inform the Department within 180 days of the effective date of the permit of the location, nature and normal business hours of the physical information repository. That provision works both ways. One, it gives the Permittees time to work out these details with the college or perhaps, if that falls through, with another entity that might house the physical repository, as well as providing time to have discussions with the Department or with other parties who have an interest in such a physical repository.

In any event, the Department maintains a physical copy of documents in the information repository in its Administrative Record, which is also available for public access at the Environment Department, Hazardous Waste Bureau office

Changed Permit provisions

1.10 INFORMATION REPOSITORY

The Permittees shall establish both an electronic Information Repository (IR) accessible through the internet on the Permittees' environmental web site and a physical IR containing paper documents. (See 40 CFR § 124.33(d))

The Permittees shall ensure that the electronic and physical IRs contain, unless specified otherwise, the following documents:

- (1) The Permittees' Part A and Part B Permit Applications associated with the permit renewal;
- (2) A link to this Permit as it appears on the Department's website (electronic IR only);
- (3) Permit modification requests associated with this Permit submitted pursuant to 40 CFR § 270.42 and any associated Department responses;
- (4) The Waste Minimization Report submitted pursuant to Permit Section 2.9;
- (5) The Biennial Report submitted pursuant to Permit Section 2.12.5;
- (6) Corrective action documents submitted pursuant to Permit Part 11;
- (7) Notices of deficiency or disapproval (NODs), NOD responses, final approval letters, and Department directions associated with the documents identified in Paragraphs 1, 3 and 6, above; and
- (8) Notices of violation (NOV), administrative compliance orders, responses required by the Department, and Department directions associated with this Permit.

(See 40 CFR § 124.33(c))

Within 180 days of the effective date of this Permit, the Permittees shall establish the electronic IR, and inform the Department of the location, nature, and normal business hours of the physical IR. (See 40 CFR §§124.33 and 270.30(m)).

The Permittees shall add new documents to the IRs within ten days after the documents are submitted to, or received from, the Department. (See 40 CFR § 124.33(f))

The Permittees shall inform the public of the existence of each ~~the~~ IRs by the following methods:

- (9) written notice to all individuals on the facility mailing list 30 days after the IR becomes operational;
- (10) public notice in area newspapers, including the *Santa Fe New Mexican*, the *Albuquerque Journal*, the *Rio Grande Sun*, the *Taos News*, and the *Los Alamos Monitor* when the IR becomes operational;
- (11) continuous notice on the Permittees' environmental home page of the existence of the IRs; and
- (12) in the public notice for any of the Permittees' requested permit modifications.

(See 40 CFR § 124.33(e))

The Permittees shall ensure that the electronic IR includes an electronic index of the documents contained in the IR that identifies each ~~all~~ document by titles, publications dates, authors, and any identification number, such as a Los Alamos Unrestricted Release (LAUR) numbers, ~~where applicable~~. The Permittees shall ensure that all-any documents maintained in the electronic IR are searchable by title, date, author, identification number, and individual words and phrases, and that all such documents are printable.

The Permittees shall conduct annual training to inform inexperienced computer users of how they can access and utilize the electronic IR. The Permittees shall inform the public of this training 30 days prior to the training by methods specified in Permit Section 1.10(9) through (11). The Permittees shall document the training content and all efforts to inform the public in the Facility Operating Record.

3. Public Participation

Public Comment

Almost all comment regarding public participation generally suggests that the permit include specific, detailed, and mandatory requirements for the Department, DOE, and LANL to consistently and without fail to provide enhanced participation for timely, continuous, and meaningful contact with the public regarding hazardous waste management at LANL. Some comment suggests that to date the Department, DOE and LANL have been very lax in fulfilling these public participation requirements. One commenter states “there is a perception that government agencies ‘go through the motions’ of asking for and receiving public comment and opinions but that those comments and opinions are disregarded and big business interests prevail.”

Many commenters suggest the permit must address public participation with the Consent Order and the corrective action process associated with Areas G, H, and L.

Department Response

The public's participation in LANL's hazardous waste management activities has been, and will likely continue to be, significant. The Department concurs with the principle premise of the comment and includes in the Renewal Permit the numerous requirements referenced above to make public participation early, often, meaningful and continuous. The Department is committed to issuing hazardous waste permits in a context of transparency and public participation.

Several provisions in the Renewal Permit are not specifically based in RCRA or the HWA but serve to address concerns of nearby communities. For instance, there is a requirement for a Community Relations Plan and an Information Repository. Members of the public may receive e-mail notification of occurrences or notices of interest made to the Department under the Permit. Sampling data from environmental media investigations are to be made public through the Risk Analysis Communication Evaluation Reduction (RACER) data base. Based on public concerns there is notice to the Department of the prospective transfer of land that is subject to the Permit.

Furthermore, the Environment Department received a great deal of public comment expressing opposition to open burning of hazardous wastes at TA-16. During the 2009 public comment period on the revised draft permit, the Department received approximately 1,400 public comments opposing open burning. The Department must consider those public comments, both under its regulations, and it also must consider public opposition under the recent New Mexico Supreme Court decision in Colonias Development Council versus Rhino Environmental.

Permit Section 1.12 requires the Permittees to develop a community relations plan. This permit section is more comprehensive than most other New Mexico hazardous waste facility permit requirements regarding community relations plans. For example, within 180 days of the effective date of the permit, LANL must submit this document to the Department. It is one of the few documents submitted to the Department that is not subject to the Department's approval. The permit requires the Permittees to seek out input from the public, including local governments and pueblos, about what should be in the community relations plan, how these organizations can be better involved in the implementation of the permit, how they can be better informed about activities that LANL undertakes in relation to the permit, and what LANL can do to facilitate that involvement in an ongoing basis. Not only must LANL seek out that input, they must document that they received that input and they must put documentation of that input into their facility operating record. This permit section requires the Permittees to update the plan every year at which time LANL must ask the communities, the interested parties, and the pueblos, again how they can be better informed. Again, all input LANL receives must be documented in the facility operating record and it must be posted on their website for everybody to see. Through this process the Department will know what input was accepted and rejected by LANL and may better be able to facilitate community relations.

The Department is committed to conducting government-to-government consultation on matters of hazardous waste regulation at LANL that are of interest to affected pueblos. Such consultation is in keeping with the January 17, 2003 *Statement of Policy and Process* executed by Governor Richardson and reaffirmed in Executive Order No. 2005-004. DOE, as a federal agency, will continue to communicate with tribes and pueblos on a government-to-government basis in the same manner that state agencies do.

Permit Section 1.13 requires the Permittees to give interested members of the public notification by electronic mail upon the occurrence of certain notices made to the Department through the course of LANL's implementation of the permit. These notifications run the gamut from operational notices to certain corrective actions that the permittees might conduct under the permit to requests for variances from certain provisions under the permit. Interested persons would need to know that this e-mail notification exists. The laboratory has certain permit responsibilities to inform the public of this opportunity. Persons who are interested in these notifications would indicate so through the Permittees' website, providing their e-mail address and requesting e-mail notification. When specific events occur, the Permittees would have seven days to provide notification of that event electronically to the interested persons and they would have to provide an electronic link to associated documents. There are 18 such events and associated notifications in the permit for which the laboratory must provide electronic notification. A similar provision in the Waste Isolation Pilot Plant (WIPP) hazardous waste permit has proven very effective at keeping the public informed and often helps the Department make better decisions because it gets better input from the public.

Permit Section 1.10 requires the Permittees to establish an electronic information repository. The comments and responses associated with the information repository are addressed elsewhere in this response document.

RACER refers to Risk Analysis Communication Evaluation Reduction, a publicly accessible database of environmental data pertinent to LANL and environs though the internet. The RACER web site is administered and maintained by the New Mexico Community Foundation, and can be accessed at: <http://www.racernm.com>. Permit Section 1.10.1 provides that each month the Permittees must enter into the RACER database all data from sampling of environmental media conducted under the Proposed Permit that are entered into LANL databases. This time period begins when data is added to the Permittees' databases. It may take considerably longer than one month between collecting a sample, having it analyzed, verifying that analysis, and finally placing that data in a LANL database. These data are not associated with hazardous waste characterization.

From July 2008 to March 2009 the Department hosted a series of "Listening Sessions" to better understand northern New Mexico residents' issues and perceptions regarding LANL. The intent of the sessions was to provide a forum for the public to express their concerns and perceptions and for the Department to listen. The Department believes that by listening to what people had to say, the Department would often be better able to answer questions and to address communities' interests in Department regulatory actions at LANL.

The Department maintains an administrative record associated with LANL hazardous waste permitting activities. This record is available for the public to review during normal business hours. The record contains all documents associated with the Renewal Permit, including but not limited to permit applications, past permits, correspondence between the Permittees and the Department, public comments, and reference documents.

Changed Permit provisions

Other than the changes made in the Permit to information repository requirements, the Department has not made other alterations regarding public participation.

4. Environmental Justice

Public Comment

The Department has received numerous comments regarding environmental justice or injustice related to LANL operations in general and its hazardous waste operations in particular. Environmental justice claims range from New Mexico being a nuclear sacrifice zone, there being a high incidence of cancer in communities surrounding LANL, Native Americans' loss of traditional life styles, and the need to translate associated documents into the languages of impacted communities. However, the majority of environmental justice comments relate to the public's difficulty in participation in LANL's hazardous waste activity and the need for a physical information repository. These comments generally suggest that people of color, lower socioeconomic status, or both, do not have the necessary computer resources to access information regarding LANL's hazardous wastes through an electronic information repository and therefore a physical repository at NNMC would have a positive impact on participation and meaningful involvement.

Commenters suggest that the federal government, specifically the Department of Energy, has targeted New Mexico as a place where the activities of the "nuclear weapons complex ... have a free run" because the concerns of the Hispanic and Native American people who live here can be ignored. Other commenters plea that government officials must understand the high rates of cancer that we have in our communities, that we're affected by many of the things that go on at Los Alamos, and that Los Alamos and the state must study this situation.

Commenters state that the traditional and spiritual ways of life in indigenous nations near Los Alamos have been interrupted historically for centuries without compensation or protective measures, much less nation-to-nation diplomacy. Other commenters suggest that language is an issue with the recent census reporting that 66 percent of residents of Rio Arriba speak a language other than English. One commenter suggests "the repository should be available in the appropriate languages of the impacted communities ..."

Finally, commenters suggest that the government, both state and federal, doesn't listen to the needs of the community and instead dictates those needs. "[T]he community has historically at these meetings come and told you what they want, but you have consistently come and told us what we need."

Department Response

The Department is keenly aware that communities of color and minority or socioeconomically disadvantaged populations are living in the vicinity of LANL. We take it as our responsibility, to the extent practical and within the bounds of the law, to protect the interests of people in those communities. In so doing, we have paid attention to both New Mexico's and the EPA's environmental justice guidance and we have met the requirements under the Governor's Executive Environmental Justice Order during the development of the Renewal Permit. That Order requires utilization of available environmental and public health data to evaluate any potential incremental adverse impacts to low-income communities and communities of color from the management of hazardous wastes. The Department used these data and other information to establish the environmental performance standards in the Renewal Permit that ensure that there are no unacceptable risks to *any* population from the management of the hazardous wastes. Because there are no adverse human health or environmental impacts at the

LANL facility boundary, there cannot be any disparate impacts to any particular segment of the public beyond the facility boundary.

We have specifically incorporated the following concepts in our public involvement activities:

- 1) Meaningful outreach and public participation early and throughout the decision-making process is critical to identify and resolve issues, and also to assure proper consideration of public concerns.
- 2) Ensure that decision-making processes are open and accessible to all interested groups, including those with limited financial and technical resources, English proficiency, and/or past experience participating in environmental decision-making.
- 3) Full engagement of as many members of the affected community as possible in the discussions and decisions made regarding issues in their community.

As EPA has advised, the Department has sought to tap community views and concerns early in the permitting process. Notices and letters to interested persons are issued in Spanish as well as English. We conducted many listening sessions throughout northern New Mexico promptly after the first draft permit was made public, and after issuance of the Revised Draft Permit we held a large public meeting near Española. We have included representatives of minority communities in discussions of contested permit terms. The Department frequently consults with representatives of affected pueblos, including the San Ildefonso and Santa Clara Pueblos, on a government-to-government basis. Further, there are specific provisions in the Renewal Permit that enable affected communities to participate in the administration of the Permit. Many of the items about which e-mail notice would be given are also occasions for comment or participation by the public.

As New Mexico's guidance advises, the Department has considered impacts to vulnerable populations. When performing air dispersion models and risk assessments associated with the proposed open burning operations, the Department prohibits unacceptable exposures to all populations, including vulnerable populations outside the facility boundary. The Department carefully considers groundwater water quality impacts from all hazardous waste operations and past releases to ensure the availability of the resource to all populations. The Department has included a waste minimization requirement in the Renewal Permit. The Renewal Permit includes terms that require the Permittees provide information on hazardous releases from the facility and other exposures and risks to impacted communities.

Many of the comments regarding environmental justice involve topics that are outside the scope of the hazardous waste permit and the Department's regulatory authority. The Department does not have authority to direct the DOE's mission at LANL nor does it have authority regarding the environmental management of radionuclides. New Mexico's Environment Department is not responsible for, nor does it have any knowledge of, the existence of high rates of cancer in communities surrounding LANL that can be directly attributed to LANL. Regarding the suggestion to translate all documents in the information repository into the languages spoken by affected communities, the Department strives to translate all applicable documents and meetings, but given the voluminous amount of documentation associated with LANL's hazardous waste program, the multiple languages spoke in the affected communities, the limited resources to perform the translations, and the apparent satisfaction of the affected communities with documents in English, the Department is not requiring all documents in the information

repository be translated. The Department has historically, and will in the future, through the information repository, the community relations plan, fact sheets and public notices associated with particular actions, e-mail notifications, and listening sessions, listen to all interested parties.

Finally, the majority of the actions addressed by the Renewal Permit are ongoing actions previously authorized under interim status at 40 CFR Part 265. The Renewal Permit significantly increases the protective requirements associated with these actions. Though these actions have been occurring for a considerable period, the Department has no plausible evidence that the facility's hazardous waste operations has had, or will have, a disproportionate impact on a minority or low-income segment of the community.

Changed Permit provisions

None

5. Emergency Preparedness

Public Comment

Several commenter raised concerns regarding LANL's emergency preparedness and whether the facility should be allowed to manage hazardous waste in light of several recent revelations. "Over the past 10 years, serious deficiencies in the DOE/LANL Emergency Management and Response Division have been found by several government auditing agencies, including the DOE Inspector General, the Government Accountability Office and the Defense Nuclear Facility Safety Board. The expert reports described serious problems with LANL fire protection before the Cerro Grande Fire of 2000. Now new expert reports describe the ongoing failure to provide fire protection." The commenters continue, "I object to NMED allowing DOE/LANL to continue to manage hazardous waste without meeting the emergency management, planning, preparedness and response requirements. NMED must conduct a full investigation into the recommendations of the expert reports and require their implementation before the permit is finalized for the 26 hazardous waste management units."

One commenter defends LANL's fire protection program and explains that recent audits findings have little relevance to the hazardous waste operations. "The Fire Department is a separate entity from the Laboratory. The DOE/Laboratory has an agreement with them to provide assistance in a time of need. Training is provided to the Fire Department to better enable them to be safely responsive to any emergencies anywhere within the Laboratory. The waste management operations represent only a very small component of that responsibility."

Department Response

Permit Section 2.10, *Preparedness and Prevention*, satisfies the regulations by requiring the Permittees to maintain and operate the permitted units in a manner that minimizes the possibility of a fire, explosion, or release of hazardous constituent to the environment or that otherwise might threaten human health. The Permit Section requires maintenance of specific emergency equipment, requires each permitted unit to have fire water at an adequate pressure and volume, requires equipment to mitigate impacts of a power outage, requires maintenance of an environmental monitoring network to detect releases, requires testing and maintenance of emergency response equipment, requires that during hazardous waste management activities all personnel have access to an internal and external alarm or emergency communication device without entering another building, and requires the Permittees to maintain agreements with local

emergency response authorities. Permit Section 2.11, *Contingency Plan*, outlines all necessary procedures to respond to an emergency at a hazardous waste management unit. During the hearing the Department argued for a new permit condition that would require LANL to ensure that emergency responders are at all times aware of the hazardous they face when responding to emergencies at hazardous waste management units.

During the hearing LANL witnesses testified that LANL has addressed most of the internal audit findings and corrected deficiencies. Witnesses testified that LANL has made improvements in hazardous survey process, improved the hazard assessment process, addressed training and qualifications of responsible individuals, and completed a cooperative agreement with the Los Alamos County. Witnesses testified that “LANL has increased its ER budget by 45% and its personnel by 20 to 25 percent, constructed a new Emergency Operations Center, and purchased new equipment. The Los Alamos Fire Department is classified highest in ISO (Insurance Service Office) rating and the Baseline Needs Assessment (BNA) establishes that LANL has sufficient personnel. The Baseline Needs Assessment suggests that 24 people are necessary and LANL funds the LAFD to have 37.” A LANL witness testified, “LANL has the equipment and the capability to perform the actions specified in the Permit.”

The Permittees have demonstrated compliance with all specific 40 CFR Part 264 Subpart C requirements for hazardous waste emergency preparedness and prevention and therefore the Department cannot deny the permit for commenter’s claims that there may be problems “somewhere at the Facility.” Furthermore, the commenters have not provided “expert reports” describing threats to the Permittees’ waste management practices.

Changed Permit provisions

Permit Section 2.10.5, *Arrangements with Local Authorities*, has been altered as follows:

The Permittees shall maintain its preparedness and prevention agreement with the Los Alamos County Emergency Management and Response Office and support agreements with the Los Alamos County Fire Department, the Los Alamos County Police Department, and the Los Alamos Medical Center (*see* 40 CFR § 264.37).

The Permittees shall provide the Chief of the Los Alamos Fire Department (LAFD) with information that would ensure that emergency response personnel are at all times familiar with the potential hazards in performing their duties associated with the hazardous wastes at LANL’s permitted hazardous waste management units. This information shall be specific to each permitted unit and at a minimum include:

- (1) Waste types, e.g., ignitable, reactive, corrosive;
- (2) Waste names that identify principle hazardous chemical constituents;
- (3) Approximate quantities of each waste type; and
- (4) General location of waste types.

The Permittees’ Primary Emergency Manager identified in Attachment D (*Contingency Plan*) shall annually sign a certification stating that the LAFD has been provided with this information

to the satisfaction of the Chief of the LAFD. These certification statements shall be maintained in the Facility Operating Record.

6. Seismic Hazard

Public Comment

Numerous commenters suggest the Department should not allow further hazardous waste operations without requiring a reliable network of seismometers to accurately monitor the seismic hazard. Commenters cite the 2007 report as the basis for their suggestion, referring to the report's reference to an estimated 50% increase to the previously estimated seismic hazard at LANL, the lack of a reliable network of seismic instruments (seismometers) to accurately monitor the seismic hazard from ground motions, and the fact that the current network consists of only seismometers at three locations that are not kept in calibration.

Department Response

The Permittees have demonstrated compliance with all specific 40 CFR Part 264 Subpart C requirements for seismic location standards for new hazardous waste management units and therefore the Department cannot deny the permit for commenter's claims associated with the 2007 Report.

NMED has reviewed the Permittees' seismic studies associated with the permitted units, specifically studies of past faulting on the Pajarito Plateau and the 2007 Probabilistic Seismic Hazard Assessment. Commenters state that the 2007 report identified areas of investigation concerning seismic hazards, and the investigations are not being conducted. It is true that the report recommends further studies, stating that the "results of such studies will aid in refining specific seismic source and site parameters ... and reduce their associated uncertainties." This is only to say that new data will lead to better projections of the probability of seismic activity. Such projections are not used in applying 40 CFR § 264.18(a).

Regarding commenter statements that the 2007 report noted DOE's failure to install and operate a network of seismometers to monitor ground motion and that the three current seismometers are not kept in calibration; there is a network, the Los Alamos Seismic Network, with seven operating stations.

EPA has acknowledged that 40 CFR § 264.18(a) addresses only part of the risk of seismic activity, *i.e.*, site impacts due to surface displacement, but not ground motion. EPA stated that "few data exist that relate ground motion dynamics to adequacy of engineering design for various types of hazardous waste facilities." Thus, EPA could not support a criterion based on potential ground motion.

Several provisions of the Proposed Permit were written in the interest of safety in event of seismic activity. Stacking of containers is limited to a height of three containers. Containers that are stacked must be placed on pallets and the layers secured with banding to make a rigid unit, resistant to toppling. Containers may not be stored closer than five feet from a wall or building to reduce the chance of damage in case a wall fell. Furthermore, the Department is aware that the Permittees consider seismic hazards in internal requirements for mixed waste, as specified in multiple Document(s) of Safety Analysis that require reinforcement of structures and limits on quantities of mixed waste that may be stored in a particular location.

Changed Permit provisions

None

7. Open Detonation Units

Public Comment

One commenter recommends that after the draft permit is final/effective that the open detonation units be added expeditiously to the permit.

Department Response

The Department concurs with the comment, has drafted the Renewal Permit compliance schedule considering the need to expeditiously address the interim status open detonation units, and anticipates submitting draft closure plans or operating conditions through a permit modification for public comment in an expedited manner.

Changed Permit provisions

None

8. Regulated Units/Alternative Requirements

Public Comment

The Department has received numerous comments regarding the Renewal Permit's use of the terms "*regulated unit*" and "*alternative requirements*." The Permittees and other commenters have different, often conflicting concerns regarding the use of the term *regulated unit* in the Renewal Permit. The Permittees oppose the designation of the entirety of MDAs G, H, and L as regulated units. The Permittees instead argue that the regulated units at Areas G, H and L are a few discreet disposal pits, impoundments, and shafts. Other commenters suggest the designation of MDAs G, H, and L as regulated units and the Department's associated use of alternative requirements through the Consent Order for groundwater monitoring and closure is inappropriate. Some commenters object to the Renewal Permit's reliance on "alternative requirements" for groundwater protection and propose that the Permittees should strictly comply with the groundwater requirements of 40 CFR Part 264, Sections 90 through 101. Many of the same commenters suggest the Department has been generally unlawful in its management of LANL's regulated units by not requiring immediate closure of regulated units that in the past lost interim status and by proposing to regulate the closure of the units through the Consent Order instead of under the more strict Part B permit requirements. Some commenters suggest the Renewal Permit inappropriately does not identify and address all regulated units at LANL.

The Permittees oppose the designation of the entirety of "material disposal areas G, H, L" as regulated units because it is inconsistent with the applicable regulatory requirements and is inconsistent with the history of the facility and the CO. They attempt to justify their position by explaining that each material disposal area is made up of all the associated SWMUs and AOCs in that area, providing MDA G as an example stating that the MDA consists of all the subsurface SWMUs and AOCs at Area G.

“Based on the definition in 40 CFR § 264.90, the only regulated units at TA-54 are Shaft 124 and Pit 29 at Area G, Shaft 9 at Area H, and a number of shafts and surface impoundments at Area L because these are the only discrete units that accepted

hazardous waste after July 26, 1982. Pursuant to regulatory requirements and the intent to close those units under RCRA, LANL has consistently submitted closure plans that have identified the pits and shafts as discrete hazardous waste units. All of the other units at TA-54, including MDAs G, H, and L, have been identified as SWMUs by both LANL and NMED. The LANL SWMU report, required by EPA, and Module VIII to the current RCRA Permit, identified the units that had received hazardous waste before 1982 and mixed waste before 1990 as solid waste management units subject to corrective action. The Consent Order removed all the corrective action requirements for the SWMUs and AOCs from the current Permit to place them in a separate enforceable document (the Consent Order). Corrective action for the SWMUs is to be completed under the Consent Order.

Areas G, H and L contain SWMUs, AOCs and regulated units. 40 CFR § 264.110(c) allows alternative closure for regulated units "situated among" SWMUs and AOCs as long as the alternative requirements are set out in a permit or in an enforceable document. The regulated units (as identified above) in Areas G, H and L are co-located or situated among SWMUs and AOCs and the Consent Order is an enforceable document. NMED has agreed that alternative closure is applicable to the regulated units.

Section 9.3 states that the closure of the regulated units will be done under the Consent Order using alternative closure requirements in accordance with 40 CFR 264.110(c). In order to be consistent with the Consent Order and the administrative record, the regulated units should be specifically identified as Shaft 124 and Pit 29 at Area G, Shaft 9 at Area H and Shafts 1, 13-17, 19-34 and Impoundments B and D at Area L. The specifically identified regulated units are situated among SWMUs and AOCs at Areas G, H, and L and are thus eligible for alternative closure."

Some commenters express a general objection to the Renewal Permit's reliance on "alternative requirements" for groundwater protection. They reference reports from Environmental Protection Agency (EPA), the DOE Inspector General, and the National Academy of Sciences (NAS) they claim describe major problems in the LANL groundwater protection practices and lack of compliance with the regulations. These commenters claim that the 2007 NAS *Final Report on LANL Groundwater Protection Practices* identifies nine MDAs as having significant potential for groundwater contamination with radionuclides. These commenters claim that this Report suggests there is also potential for groundwater contamination by hazardous contaminants regulated by the Department. These commenters propose that "to protect our precious drinking water, the Department must require the Permittees to strictly comply with the groundwater requirements of 40 CFR Part 264, Sections 90 through 101."

As an example of how "alternative requirements" have not worked, commenters refer to the "dangerous and fast-moving hexavalent chromium ... discovered in the regional aquifer over 5 years ago in wells directly west of the Buckman wells."

Many commenters request that the Department require the Permittees to implement a new system of wells for sampling and measuring the ground water contaminants that will be effective in overcoming the many current problems perceived by the technical testimony presented at the permit hearing by a witness.

Some commenters express a general objection to the Renewal Permit's reliance on alternative requirements in the Consent Order for closure of the regulated units in lieu of closure plans.

These commenters explain that because the regulated units G, H and L lost interim status and did not comply with the Part B permitting requirement to have closure plans, they should have been closed immediately under 40 CFR Part 264 Subpart G and are operating illegally. These commenters point to Draft Permit, Table J-1, *Active Portion of the Facility*, listing TA-54 Areas G, H, and L as active landfills (code 080) and as regulated units, but stating "Unit[s] not permitted to receive hazardous waste." "This indicates that [MDAs G, H, and L] are illegally carrying on operations without having met Part B requirements to be permitted, without submitting a closure plan and post closure permit application and [have] disposed of hazardous waste at the unit[s] without a RCRA permit for [their] active life."

These commenters object to the Department's reliance on alternative requirements in the Consent Order for closure of the regulated units in part because of a perceived inability for the public to comment on the closure processes. Furthermore, when the Department released the Consent Order for public comment the Department did not announce that those requirements would be used in place of the closure and groundwater monitoring requirements of the permit.

Few commenters suggest that the Renewal Permit does not contain all regulated units that operated at LANL. Specifically mentioned are MDAs A, B, C, P, T, U, V, and SWMU 16-021(c).

Department Response

The Department identifies particular units in the Renewal Permit as *regulated units* principally to ensure that the applicable units are properly closed under 40 CFR Part 264 Subpart G and, if necessary, undergo post-closure care. MDAs G, H and L are landfills as defined at 40 CFR § 260.10, and because they are landfills they are subject to the closure and postclosure standards at 40 CFR § 264.110(b)(1). Because MDAs G, H, and L are landfills that received hazardous waste after July 26, 1982 they are regulated units. Establishing that MDAs G, H, and L are regulated units is crucial for the application of "alternative requirements."

The Department disagrees with the Permittees' assertion that the regulated units are specific pits, shafts or trenches at Areas G, H and L. The basis of this assertion is that all other trenches, pits and shafts did not receive hazardous waste after July 26, 1982. The permitting history shows that G, H and L are, in their entirety, single units, and that the three units are, in fact, regulated units. In their original November 1980 permit application to obtain interim status and for several years thereafter, the Permittees referred to MDAs G, H, and L each as individual waste management units. In its correspondence with the Permittees, the Department has consistently taken the position that MDAs G, H, and L are each regulated units, subject to closure in their entirety.

The November 19, 1980 Part A permit application includes maps that covered MDAs G and L and the location of MDA H. The Permittees stated in their cover letter,

"It is our interpretation of RCRA regulations that disposal may occur anywhere at TA-54 and still be part of an existing disposal facility."

Thus, the Permittees sought to obtain interim status for all of TA-54. The initial Part A showed 100 acre-feet of disposal (D80) capacity. The Permittees' maps showed the existing and future pits and shafts: pits 1 through 38, trenches A through H, and outlines of shaft fields.

The Department advised the Permittees that they are required to have a closure plan that identifies the steps to completely or partially close the facility in a June 22, 1984 Notice of Violation. This letter noted that:

“LANL’s intent has consistently been to obtain interim status for 100 acres of TA-54, including all of Areas G and L . . .”

In a letter dated September 7, 1984, the Department also noted:

“Therefore, LANL’s closure plan for Area G must address both the area set aside primarily for non-radioactive waste and the larger area set aside primarily for radioactive waste but which also contains regulated hazardous chemical waste as well.”

In April 1985 the Permittees submitted a revised Part A permit application, stating:

“The Permit request is being dropped for the following facilities:

TA-54, Area G – No longer used for non-radioactive waste disposal

TA-54, Area L – Surface impoundment not used in lieu of treatment tanks”

Thus, the Permittees withdrew their application for disposal at MDAs G and L. No disposal processes were shown on the revised Part A. The Department inquired specifically what 100 acre disposal area was covered by the previous Part A and asked for a closure plan for MDA G in a letter dated April 10, 1985. In a letter dated June 7, 1985, the Permittees responded that Area G is 63 acres and would be closed out for RCRA wastes under interim status. The map accompanying the letter shows that the remaining 37 acres, said to have interim status, include MDA H.

On September 13, 1985, the Department advised the Permittees that the closure plans for TA-54 should describe partial closure for each landfill cell as well as groundwater monitoring, indicating again that the Department regarded the MDAs themselves as disposal units. On September 27, 1985 the Permittees submitted a new closure plan for MDAs G and L. The Permittees accepted the obligation to close the entirety of MDA G:

“Burial facilities include pits and shafts, all of varying dimensions. Certain radioactive mixed and nonradioactive hazardous chemical wastes have been buried along with the radioactive wastes at Area G. Area G is a waste disposal facility operated under a Resource Conservation and Recovery act (RCRA) Part A permit. A Part B permit is not being sought for this facility and Area G will be closed under interim authority.

The active portion of the site comprises a total area of 63 acres. Burial facilities within the area include pits, shafts, trenches, and pads, all of varying dimensions. The facility has only been used for pit and shaft disposal of regulated wastes.”

The permitting history shows that MDAs G, H and L are in their entirety single units and that the three units are, in fact, regulated units that must be closed in accordance with the regulations.

That the entirety of Areas G, H and L are regulated units is supported by a U.S. EPA interpretation that suggests that numerous unlined trenches within a landfill constitute a single unit. A July 26th, 1982 Federal Register states,

"[a] waste management unit is a contiguous area of land on which waste is placed. A waste management unit is the largest area in which is there a significant likelihood of

mixing of waste constituents in the same area. Today's regulations establish specific requirements for surface impoundments, waste piles, land treatment units and landfills. Generally, each of these four terms is synonymous with the concept of a waste management unit. Landfills may, however, present an exception to this general rule. Some landfills are designed as a series of adjacent trenches that are separately lined. In this situation, the term 'landfill' can refer to an entire set of trenches, yet each individual trench is a separate waste management unit under today's regulation."

Furthermore, using the regulatory definition of a *regulated unit* which references landfills receiving hazardous wastes after July 26, 1982, the regulatory definition of *hazardous waste management unit* which refers to the largest area in which there is significant likelihood of mixing hazardous waste constituents, and the fact that MDAs G, H, and L received hazardous waste after July 26, 1982, the MDAs are in their entirety regulated units.

The Permittees' comment that certain solid waste management units and areas of concern at TA-54 (which includes MDAs G, H, and L) have been identified and they argue that, therefore, each MDA cannot be a regulated unit. The identification of solid waste management units or areas of concern for purpose of corrective action does not bear upon the status of MDAs as regulated units. Likewise, the fact that the Consent Order states that corrective action under the Order will meet Subpart F requirements for corrective action takes nothing from the "regulated unit" definition.

Finally, the Permittees argue that they have submitted closure plans that identify this single pit and these two shafts as "discrete hazardous waste units" and others as solid waste management units, but, again, this does not mean that the MDAs are not "regulated units" under 40 CFR § 264.90(a)(2).

The Department's view is supported by the regulations and EPA's interpretation of those regulations, is consistent with various documents that the Permittees prepared and submitted to the Department in support of their initial permit application, and is the only practical approach to the closure of these units. Therefore, the Department considers the units in their entirety regulated units.

The Department agrees that the groundwater monitoring system at TA-54 is inadequate. However the Department is directing the Permittees to correct the deficiencies in the system, including the installation of several new monitoring wells. (See the Department's response to comments regarding groundwater protection below.) The Department disagrees that alternative requirements as allowed at 40 CFR § 264.90(f) do not protect groundwater. The Department is using the March 1, 2005 Compliance Order on Consent (Compliance Order or CO) as an alternative to the Renewal Permit to ensure that all current and potential releases from regulated units that do, or could, affect groundwater are fully investigated and monitored.

The Renewal Permit requires coordination of any corrective action with that conducted under the Consent Order. To accomplish this, a release from a hazardous waste management unit regulated by the Renewal Permit that combines or commingles with a release covered by the Consent Order is to be cleaned up under the requirements of the Consent Order.

Since MDAs G, H, and L are "regulated units" under 40 CFR § 264.90 they must satisfy the 40 CFR Part 264, Subpart F monitoring and response requirements. A landfill such as MDA G, which has adjacent unlined pits and trenches, constitutes a single unit. In such case, the

groundwater monitoring requirements of Subpart F apply to the entire landfill. Such a groundwater monitoring program includes means to detect, characterize, and respond to releases from the unit that threaten groundwater. Specifically, Subpart F states that the program must: (1) call for compliance monitoring whenever hazardous constituents are detected as shown by statistically significant evidence of contamination, (2) call for corrective action when the groundwater protection standard is exceeded as shown by statistically significant evidence of increased contamination, and (3) require a detection monitoring program. Monitoring must meet the standards of 40 CFR § 264.97, which calls for a system of wells that yield representative samples of background and affected water and detect migration from the regulated unit. Statistical methods to evaluate monitoring data are required. Further, if statistically significant evidence of contamination is present, Subpart F states that the owner/operator must notify the regulator, sample all monitoring wells, resample where contamination was detected, apply for a permit modification to establish a compliance monitoring program, and submit a feasibility plan for a corrective action program. Subpart F states that, if sampling indicates that concentration limits are exceeded, the owner/operator must notify the regulator, apply for a permit modification to establish a corrective action program, and submit a plan for groundwater monitoring (which may be based on compliance monitoring) that will demonstrate the effectiveness of the corrective action. The objective of corrective action is to bring regulated units into compliance with the groundwater protection standards specified in the Renewal Permit. Corrective action is carried out by removing the hazardous constituents or treating them in place.

In response to these Subpart F regulations, Permit Section 11.3.1 directs the Permittees to “conduct groundwater monitoring for each regulated unit” to enable early detection of contaminants and to notify the Department of “any new detections.” Prompt notice is to be given of:

1. detection of a hazardous constituent that is an organic compound in a spring or screened interval where it has not previously been detected,
2. detection of a hazardous constituent that is an inorganic compound at a concentration above background if such exceedance has not previously been detected,
3. detection of a hazardous constituent in a spring or screened interval that exceeds one-half the cleanup level, if that concentration has not previously been detected,
4. detection of perchlorate in a spring or screened interval at a concentration of 2µg/l if such concentration has not previously been detected,
5. detection of a hazardous constituent that is an inorganic compound in a spring or screened interval at a concentration more than two times background for the third consecutive sampling, and
6. detection of a hazardous constituent in a spring or screened interval at a concentration more than one-half the cleanup level, where the level has increased in three consecutive samples.

Furthermore, under Permit Section 11.3.1.2, detection of a concentration exceeding the cleanup levels in Section 11.4.1 requires the Permittees to give notice to the Department and to take “all steps necessary to contain or otherwise mitigate the release.”

The Department has concluded, particularly in light of its familiarity with the geology and hydrology of the Facility, that responses to monitoring data here may be specified as (a) reporting of detection of hazardous constituents not previously found, or not found in such concentrations, and (b) corrective action when a hazardous constituent is detected in excess of the cleanup level. Thus, the Renewal Permit skips the intermediate stage of compliance monitoring and calls for corrective action in response to any exceedance. This permit structure moves more quickly to corrective action for regulated units than the Subpart F regulations might require and, therefore, is similar in concept to the system required by Subpart F but clearly more protective.

Regarding the NAS report, the contents of report have little applicability to the current groundwater monitoring network at TA-54. NAS's evaluation of LANL's groundwater protection program was conducted during the time at which LANL was primarily characterizing the groundwater system beneath the facility, not designing or implementing a groundwater monitoring network as directed by the Consent Order. At the time of NAS's evaluation, groundwater characterization efforts were directed through LANL's Hydrogeologic Work Plan (HW Plan). Wells installed at or near TA-54 during implementation of the HW Plan were not drilled nor constructed per RCRA groundwater monitoring. Furthermore, NAS's evaluation was conducted at the time when only five regional aquifer characterization wells were installed at or near TA-54. Since the publication of the NAS Report, three of the five wells have undergone rehabilitation and/or redevelopment with the intent to transition the wells into viable groundwater monitoring points. Additionally, LANL has installed 13 new regional aquifer wells at TA-54 since the NAS Report was published. These new wells, including the previously mentioned five older wells, are currently being evaluated with respect to their ability to produce representative groundwater samples and associated analytical water-quality data. The question as to which wells will be incorporated into the TA-54 groundwater monitoring network has not been answered yet.

Additionally, other evaluations of LANL's groundwater protection program have been conducted. EPA submitted two memoranda specific to groundwater practices at LANL. The first memorandum addressed several issues specific to the viability of characterization wells to be used as monitoring wells. The second memorandum addressed LANL's Well Screen Analysis Report and Groundwater Background Investigation Report. The focus of the second memorandum was to review and comment on the referenced documents. As with the NAS document, these memoranda were composed at time when only characterization wells were installed at TA-54, not monitoring wells.

The Department considers Dr. Barcelona's testimony to be generally accurate; however, it was based on both incomplete and outdated information. The Department has required a significant amount of additional groundwater investigation at LANL since the data Dr. Barcelona relied upon was generated. This work is ongoing and therefore no final conclusions have been reached by the Department with regard to the adequacy of the groundwater monitoring network; however, the ongoing groundwater investigation and installation of additional groundwater monitoring wells will result in an adequate groundwater monitoring network

The Department disagrees that alternative closure requirements as set forth in the Consent Order are inappropriate. Because MDAs G, H and L are landfills they are subject to the closure and post-closure standards at 40 CFR Part 264 Subpart G, including ensuring protection of human health and the environment by controlling, minimizing, or eliminating the escape of the waste.

Closure must also minimize the need for further maintenance of controls. It does not matter whether or not MDAs G, H and L are regulated units with respect to whether or not closure and postclosure care standards apply; they are landfills, they must undergo closure, and if they are not clean closed they must undergo post-closure care as well. Furthermore, MDAs G, H, and L are situated among solid waste management units, a release of hazardous waste or hazardous constituents has occurred, and both the regulated units and one or more solid waste management units are likely to have contributed to the release. The Consent Order has been established to be an enforceable document and the alternative requirements specified in the Consent Order will protect human health and the environment and meet the closure performance standards. Because 40 CFR § 264.110(c) allows closure and post-closure provisions to be set out in an enforceable document, the Department has opted to use the Consent Order as the regulatory mechanism to achieve closure.

The regulatory requirements associated with the closure of a landfill require there be provisions to achieve the closure performance standards of the regulations. These include provisions for investigating the nature and extent of any release from the landfill and provisions to either remove or dispose in place the associated wastes. Under the Consent Order, the Department has determined that the Permittees have substantially fulfilled the requirements to investigate the nature and extent of any release to soils from MDAs G, H, and L. Though wastes placed in MDAs G, H, and L were originally not intended to be removed, the Permittees are required by the Consent Order to draft a Corrective Measures Evaluation (CME) report for each MDA that will be submitted for the Department's approval that includes an option to remove the wastes and minimize the need for long-term controls and post-closure care. When the Department determines that the groundwater associated with the units has been sufficiently investigated and there exists a sufficient groundwater monitoring network, the Permittees will be required to finalize the CME, the Department will choose one of the options with opportunity for public involvement, and then the Permittees will be required to produce a plan to execute that chosen option (Corrective Measures Implementation Work Plan) as required by the Consent Order. This Plan will be equivalent to a closure plan under the implementing regulations and Part 9 of the Renewal Permit. This CMI Work Plan will also be subject to public review and comment. One reason the Department opted to use the Consent Order to address the closure of the MDAs is because it does not make sense to break up the investigation and remedy selection for the MDAs and associated solid waste management units, and to conduct the cleanup work under two separate frameworks.

Renewal Permit Section 9.2.1(1) addresses the "clean" closure performance standards. The goal during a RCRA closure is to remove all wastes and all waste residues, or attain "clean" closure. Permit Section 9.2.2 contemplates that if clean closure isn't met LANL can do something else that may result in leaving waste in place. The Permittees would have to make a demonstration to the Department's satisfaction that they are not able to achieve clean closure. Further, the Permittees would have to demonstrate to the Department that they have the ability to control hazardous waste residues in any in any environmental media or on any surface so that an excess cancer incident that otherwise would not have happened is not exceeded for one in one-hundred thousand persons. The Permittees would also have to minimize the need for further maintenance and control and minimize the post-closure escape of any hazardous waste or waste residue. This is referred to as "post-closure care." These permit sections apply to the regulated units, *i.e.*, TA-54 Areas G, H, and L.

If the final corrective measure at the MDAs includes leaving wastes in place, the Corrective Measure Implementation Work Plan required by the Consent Order will address long-term maintenance and monitoring controls equivalent to those required in a post-closure plan under the implementing regulations and Part 10 of the Renewal Permit. Under this circumstance, upon completion of the closure requirements the Permittees are required to submit a Class 3 permit modification request to terminate closure and begin post-closure care. This too will be subject to public review and comment.

The public will have an opportunity to comment on the closure and groundwater monitoring requirements for each regulated unit at the following times; 1) when the Department proposes to approve the Corrective Measures Evaluation (CME) Report for a unit and selects a particular corrective measure, 2) when the Department proposes to approve the Corrective Measures Implementation ("CMI") Plan for a unit, and 3) should a unit progress to the point where it no longer requires regulatory oversight, the permit modification to designate the unit as corrective action completed.

When the Department released the Consent Order for public comment the Department did not announce that those requirements would be used in place of the closure and groundwater monitoring requirements of the permit. The laws and regulations do not require the Department to announce, at the time of issuance, that it intends to use the provisions of an enforceable cleanup document, such as the Consent Order, as alternative requirements. At the time the Department issued the Consent Order in March 2005 it had not yet determined that the Consent Order would serve that purpose. The Department recognized the appropriateness and the advantages of using alternative requirements only as it began drafting the Permit. Nevertheless, the public was given two opportunities to comment on the requirements in the Consent Order. First, on May 2, 2002, the Department released the draft imminent hazard order for public comment. Second, on September 1, 2004, before it signed the Consent Order, the Department released a draft of the document for public comment.

Parties to the hearing have not been deprived of due process of law. The public has been given multiple notices that the Department proposes to use the alternative requirements of the Consent Order in place of the groundwater monitoring and closure requirements in Subparts F and G, and an extensive opportunity to comment on that proposal. Alternative requirements were referenced the August 2007 draft permit, the July 2009 revised draft permit, and the February 2010 draft Permit. The Department invited the public to comment on each of these documents.

The Department disagrees that it has unlawfully managed closure of the MDAs G, H, and L. The Permittees have lawfully submitted numerous closure plans in TA-54 permit applications for limited pits, shafts, and trenches at Areas G, H, and L. This interpretation of the boundaries of the landfills and the scope of the submitted closure plans conflicts with the Department's interpretation of the units' boundaries and is one reason these units have not been permitted, apart from the Permittees' cessation of disposal activities at these areas.

Other MDAs that commenters suggest should be addressed as regulated units in the Renewal Permit either have been appropriately clean closed or never managed hazardous waste and are not subject to RCRA permitting. The "other regulated units" are referenced in the Revised Draft Permit for informational purposes only but are not regulated by the Permit. For example, TA-16 MDA P is referenced at Attachment J (*Hazardous Waste Management Units*), Table J-3 (*Closed Portion of the Facility not in Post-Closure Care*). MDA P was deemed clean-closed under

interim status by NMED on November 10, 2005 and is therefore appropriately referenced in the Permit.

Changed Permit provisions

None

9. Financial Assurance

Public Comment

Commenters both support and oppose NMED's imposition of financial assurance on the Permittee LANS.

Numerous commenters support NMED requiring LANS meet all financial assurance requirements for each of the 26 hazardous waste management units. "They (LANS) say they will have funding available in order to cleanup the contaminated facilities at LANL when they are done using them but we do not trust that they will do the cleanup without [financial assurance]." Commenters state "Permittee Los Alamos National Security, LLC (LANS), co-operator of LANL, meets the applicability requirements for financial assurance of 40 CFR § 264.140. As a matter of law, the permit must require financial assurance and Permittee LANS must meet those requirements."

The Permittees object to the financial assurance requirements. "NMED is improperly focusing on the status of the Permittees as either a Federal entity or a private entity rather than on the fact that LANL is a Federally-owned facility." The Permittees object to the financial assurance requirements on numerous grounds, including conflicts with EPA guidance, inconsistencies with Public Law 106-113, Section 220, and conflict with the 2005 Compliance Order. The Permittees further argue that the Department is incorrect in its assumption that closure of the TA-54 MDAs G, H, and L may be frustrated by funding shortfalls.

The Permittees point out that the EPA has consistently stated that the exemption for financial assurance applies to publicly-owned facilities, with the emphasis being on the ownership of the facility. "The Preamble to Subpart H states that publicly-owned facilities, meaning State and Federally-owned facilities are exempt from the financial assurance requirements." They emphasize that the EPA has stated that a private sector co-operator at a publicly owned facility is also exempt from the financial assurance requirements and that exempting private co-operators of publicly-owned facilities is consistent with the purpose of financial assurance and with the rationale for the exemption. "Because the State or Federal government is liable for closure and post-closure costs as an owner or operator of a publicly-owned facility, and because the rationale for the exemption is that the governments will have the necessary means to complete closure and post-closure care, there is no reason to require a private owner or operator to provide financial assurance."

The Permittees assert that the Renewal Permit is inconsistent with Public Law 106-113, Section 220, which states "[n]o form of financial responsibility requirement shall be imposed on the Federal Government or its contractors as to the operation of any waste management facility which is designed to manage transuranic waste material and is owned or operated by a department, agency, or instrumentality of the executive branch of the Federal Government ..."

The Permittees explain that portions of the LANL Facility that are governed by the RCRA

regulations are waste management facilities designed to manage TRU waste and therefore the exemption under Section 220 applies to those portions of the Facility and both DOE and LANS.

The Permittees assert that the Renewal Permit's financial assurance requirements conflict with the Consent Order because that Order specifically states that it is the sole mechanism and only enforceable document for establishing and enforcing corrective action requirements for SWMUs and AOCs at the Facility. "The provisions of Sections 2.13, 2.14, 2.15 and 2.16 of the revised draft Permit are inconsistent with the Consent Order because they create duplicative requirements and establish a second enforceable document for corrective action."

The Permittees' argument that the Department is incorrect in its assumption that closure of the TA-54 MDAs G, H, and L may be frustrated by funding shortfalls is based on the Consent Order having numerous mechanisms, "which NMED has shown that it is willing to use," to ensure that the requirements of the Consent Order are met. They point out that the Consent Order includes provisions for stipulated penalties and the Department has the authority to undertake enforcement action if it believes that DOE is not complying with the Consent Order.

Other commenters express concern that the closure cost estimates in the Renewal Permit are insufficient to cover the costs at closure.

Department Response

The Hearing Officer's Report regarding the Permittees' application for a hazardous waste facility permit for LANL dated October 7, 2010, determined that the Department has not met its burden of proof for imposing financial assurance requirements on LANS.

The Department concurs.

Changed Permit provisions

All references to financial assurance and associated cost estimates are removed from the Renewal Permit.

10. Groundwater Protection

Public Comment

Numerous commenters suggest that the Department ensure that groundwater, in addition to other environmental media, be fully and appropriately protected. These commenters point to the hydraulic connection between the groundwater below LANL and the Espanola Basin, the Rio Grande, and the water supply wells in Los Alamos County. These commenters reference contamination in the groundwater below LANL, including radionuclides and chromium, and the burial of large volumes of waste at LANL as circumstances highlighting the vulnerability of the resource and examples of why more characterization needs to be done. Commenters suggest the Department "judge the scientific basis and scope of LANL's current (interim) groundwater monitoring program and, in particular, if it is adequate to provide early warning and response to potential groundwater contamination from LANL operations." Commenters reference a report that states "it is technically feasible to monitor the groundwater [but] the efficacy of the monitoring system will have to be determined based on the analysis of the future data that will be obtained as the system is developed."

Numerous commenters express concern that contaminant transport pathways between the surface and groundwater at LANL are not sufficiently understood and that the groundwater monitoring system should be augmented to answer this question. Commenters reference a report that states “the pathways for transport of contaminants from their sources include four different hydrologic regimes:

- (1) surface streams and run-off;
- (2) near-surface groundwater in the canyon alluvium;
- (3) intermediate-perched groundwater in the unsaturated zone; and
- (4) a deep, regional aquifer.

Each of these regimes adds considerable uncertainty to the understanding of the overall system. Even with the best efforts to understand contaminant sources and pathways, the uncertainty will always be great.” “LANL should demonstrate better use of its current understanding of contaminant transport pathways in the design of its groundwater monitoring program.” Many commenters suggest that inter-watershed pathways are especially in need of study.

Some commenters suggest there should be a better understanding of LANL’s major source of groundwater contamination and whether these sources have been controlled. “Radioactive or chemically hazardous wastes disposed of on site at LANL are sources from which contaminants enter the soils, rocks, and groundwater.” One commenter refers to a report that explains that “liquid waste discharges, which LANL considers to be the source of the contamination currently detected in groundwater, are generally eliminated or controlled [but that] solid wastes in contaminants deemed by LANL to have less near-term potential to impact groundwater ... are not well inventoried or controlled.” These commenters suggest that selected sites should be characterized by field analysis when historical information is insufficient to determine quantities of major contaminants disposed, and that LANL should develop mass balance estimates of the quantities of disposed chemicals and radionuclides remaining in the surface soil and/or residing in the shallow alluvium, the vadose zone, and the regional aquifer.

Numerous commenters express concern about LANL’s groundwater monitoring wells, particularly the drilling fluids used and the need to rehabilitate “inappropriately constructed wells.” “Studies are necessary to authoritatively address concerns and uncertainties about how drilling and well completion processes might alter the native conditions around well screens and to ensure reliable monitoring activities in the future.”

Some commenters suggest that future characterization drilling and monitoring well drilling be done as separate tasks, that geophysical logs during drilling would increase confidence that well screens are installed to intercept a contaminant pathway, and that more large-scale pumping tests are needed to characterize the regional aquifer.

Numerous commenters suggest that monitoring wells at LANL are defective because of the use of inappropriate drilling agents. Commenters claim that drilling agents such as organic foam and bentonite clay contaminate the upper aquifer by creating a new chemistry that absorbs contaminants thereby preventing detection of wastes. Commenters suggest that the Department require LANL to install wells drilled only with air and shall not use organic foam drilling additives for any part of the borehole unless temporary or permanent casing is installed. “The use of organic foam or polymer drilling additives shall be only in borehole intervals where drilling only with air is not possible.” Other commenters suggest that drilling additives, for

example foaming agents, may be used in the drilling interval above the expected groundwater table. “In the last 100 to 150 feet above the water table and below the water table only municipal water may be used as a drilling additive.” One commenter suggests that LANL should be required to plan and carry out geochemical research on the interactive behavior of contaminants, materials introduced in drilling and well completion, and the geologic media. Commenters recognize that drilling with water and drilling with foam may prevent the detection of perched zones of saturation.

Commenters express concern about the inability to purge Westbay wells and suggest wells be constructed with one screened interval that targets a single saturated zone.

Commenters suggest that the results of analyzing groundwater samples often do not carry the proper qualifiers according to good quality control practices. “This especially applies to analytical results near or below the limits of practical quantitation and detection, near the natural background, or both.” Commenters reference a report that states “LANL is using good practices in terms of having the proper quality assurance and quality control plans and documentation in place, but falls short of consistently carrying out all the procedures cited in the plans.”

Department Response

The Department has required a significant amount of groundwater investigation at LANL, particularly in the vicinity of TA-54. This work is ongoing and therefore no final conclusions have been reached by the Department with regard to the adequacy of the groundwater monitoring network at the Facility: however, the ongoing groundwater investigation and installation of new monitoring wells will result in an adequate groundwater monitoring network. LANL is a large and complex facility where over 1,400 SWMUs and AOCs remain to be investigated and cleaned up, as necessary. As stated above, the investigation and cleanup are being conducted under the March 2005 Consent Order. The extent of groundwater contamination has not yet been defined in portions of the Facility and, therefore, a Facility-wide groundwater monitoring network is not yet complete.

The Interim Facility-wide Groundwater Monitoring Plan (IFGMP) is required under the Consent Order. The IFGMP is an interim monitoring plan which will remain in effect until an adequate long-term monitoring plan is approved by the Department for each watershed identified in the Consent Order. The watershed-specific long-term monitoring plans will include groundwater monitoring related to both corrective action and permitted activities. At this time the IFGMP includes wells that are currently available for use even as deficiencies are identified with individual well screens. Because the well network is still in the process of being established, even wells and well screens that are deficient are being utilized until suitable alternatives are put in place. The Department takes such deficiencies into consideration when evaluating groundwater data submitted by the Permittees.

The groundwater monitoring network at the LANL Facility is continually being modified as new information is obtained, as the quality of groundwater data is re-evaluated in light of new information, and as the characteristics and spatial extent of subsurface rock strata are better defined by additional subsurface investigations. The groundwater monitoring network at TA-54, where the regulated units are located, is still in the investigation stage, and the locations for additional detection monitoring wells are subject to change. The changes are related to new and sometimes unexpected subsurface conditions being encountered during investigation activities.

The Department has concluded, based on its familiarity with the geology and hydrology of the LANL Facility, that the permit will be fully protective if it requires: 1) monitoring pursuant to plans developed and applied under the Consent Order; 2) prompt reporting of detection of hazardous constituents not previously found, or not found in such concentrations; and 3) corrective action to contain or mitigate the release when a hazardous constituent is detected in excess of the cleanup level.

The Department agrees with many of the conclusions in the referenced National Academy of Sciences (NAS) Report; however the report is based on conditions at the time that the NAS conducted the evaluation. Since that time, the Permittees have installed, replaced and rehabilitated numerous wells completed in the intermediate perched aquifers and the regional aquifer at the Facility. The NAS report does not account for the additional groundwater characterization and actions taken to address deficient wells. For example, in February 2010 the Department directed LANL to conduct a reliability assessment of multi-screened wells that are still using Westbay system. Many of these wells require rehabilitation or conversion to a different sampling system.

Because of the complex hydrogeologic conditions at LANL, the Department has required the Permittees to characterize groundwater beneath the LANL Facility using an approach that is most likely to detect contaminants released by facility operations. Part of this approach includes installing wells at distances from regulated units that are greater than those specified in the regulations because of the possibility that contaminants may not migrate in a direct vertical path from the source to the regional aquifer. This approach is based on evidence from groundwater investigations conducted at other portions of the laboratory. An example of this characteristic of subsurface conditions is the presence of chromium in perched aquifer well SCI-2, while chromium is not detected in regional aquifer well R-43, installed adjacent to well SCI-2.

The Department has required the Permittees to install, replace or rehabilitate numerous wells completed in the intermediate perched aquifers and the regional aquifer at the Facility. Much of this work has been completed in the time period since the draft Permit was issued in 2007; however, groundwater characterization in the vicinity of TA-54 is not yet complete.

The NAS report references wells that were installed as part of LANL's groundwater characterization efforts that were conducted in accordance with their Hydrogeologic Work Plan (1998). As part of these efforts, a total of five regional aquifer characterization wells were installed at or near TA-54. These wells were not installed for contaminant detection or groundwater monitoring. Therefore, these wells have limited relevance to groundwater protection goals set forth by the March 1, 2005 Consent Order.

The wide assortment of drilling methods listed in the Renewal Permit allows flexibility to accommodate the highly variable subsurface conditions encountered beneath the Pajarito Plateau. Some of these methods, like hollow-stem auger or resonant sonic, do not require any drilling fluids, while others require air, water, or mud to remove drill cuttings from a borehole. Although any use of drilling fluids creates a potential for altering the natural properties of the subsurface formations, only the methods that use drilling fluids, like air or water, are suitable for installation of deep monitoring wells at LANL, because they can reach depths of 1000 feet or more below the ground surface and can accommodate the complex subsurface conditions at LANL.

The drilling method currently most often used for deep drilling at LANL, and which has been approved by the Department under the terms of the Consent Order, is fluid assisted air rotary, either with casing advance or open borehole, depending on the subsurface formations encountered during drilling. This drilling method strikes a good balance between maintaining borehole stability and providing an opportunity to detect perched intermediate groundwater zones. With that method, certain drilling additives, for example foaming agents, may be used in the drilling interval above the expected groundwater table. In the last 100 to 150 feet above the water table, and below the water table, only municipal water may be used as a drilling additive. Only under exceptional circumstances does the Department allow use of additional drilling additives or another drilling method that uses drilling fluids other than air. As stated above, Permit Section 11.11.2 establishes the general requirements for design and construction of groundwater monitoring wells and includes a requirement that monitoring wells must produce representative groundwater samples.

The wide assortment of drilling methods specified in the Proposed Permit also allows the Permittees to cope with even the most difficult drilling conditions without having to modify the Permit to include a suitable drilling method. The listing of a particular drilling method in the Renewal Permit does not mean that the Department recommends or endorses that particular method. On the contrary, the Renewal Permit specifically discourages the mud rotary method in Permit Section 11.11.2.3, despite its being listed as a drilling method available to the Permittees. The Department may also require additional sampling and testing to ensure that the collected data are not affected by residual drilling fluids under Permit Section 11.11.2.3.

Subsurface conditions beneath the Facility are varied and complex and create difficult drilling environment. The Department requires the Permittees to advance borings using hollow-stem auger and air rotary drilling methods to the extent possible. Where subsurface conditions preclude the use of these methods, the use of other drilling fluids, *e.g.*, potable water, foam, is allowed based on the circumstances. The Permittees are not allowed to use drilling fluids other than air at depths within less than 100 feet above the regional aquifer. This policy does not apply for groundwater perched in zones above the regional aquifer because the Permittees cannot anticipate where perched groundwater will be present. The Department requires the Permittees to evaluate the conditions where perched groundwater has been encountered and, if the zone has been irreparably effected by drilling fluids, to drill an additional well designed to intersect the perched groundwater using the same approach regarding the use of drilling fluids as that applied for regional aquifer wells.

NMED discourages the use of drilling fluids unless their use is unavoidable to complete drilling of a borehole. Permit Section 11.11.2.3 requires that “[i]f drilling fluids are used as part of well installation, the Permittees must demonstrate that all data acquired from the well is representative of existing subsurface conditions using methods approved by the Department. The Department may require additional sampling and testing periodically to ensure that the data collected is not affected by residual drilling fluids. The Permittees have installed wells where drilling fluids or well construction materials have entered screened intervals. Rehabilitation for some of these screened intervals is either ongoing or scheduled. In other cases, it has been determined that irreparable damage has occurred and the screens have been, or are scheduled to be abandoned. Examples where abandonment of well screens has been determined to be necessary include wells R-12, R-20, R-25 and R-32.

As stated above, Permit Section 11.11.1 allows two types of groundwater monitoring wells: single screened wells (containing one screened interval) and, with Department approval, double-screened wells (containing two screened intervals). Permit Section 11.11.3.2 provides details of construction for single-cased and double-cased wells. The Department allows double-screened wells because they provide twice as much contaminant transport information as single-screened wells installed in the same boreholes. Double-screened wells also allow measurement of vertical components of groundwater flow, thus providing information on the potential of migration of contaminants deeper into the aquifer.

The Renewal Permit's general requirements for design and construction of groundwater monitoring wells state that the selection of the drilling method is based on the site-specific geologic conditions and on the following factors:

- (1) drilling should be performed in a manner that minimizes impacts to the subsurface formations and avoids contamination and cross contamination (*i.e.*, among aquifers) of groundwater;
- (2) the drilling method should allow the collection of representative samples of subsurface formations and groundwater;
- (3) the drilling method should allow the proper location of screened interval(s) and the proper placement of a filter pack and annular sealants;
- (4) drilling fluids (which include air) should have minimal impact upon the subsurface formations and groundwater.

Regional monitoring wells at LANL are designed to monitor a productive zone closest to the water table. Under some circumstances, if the most productive geologic formation is substantially below the water table, a less-productive formation that is closer to the water table will be selected for screen placement. In double-screened wells, the second screen will be usually placed in the deeper, most productive formation.

The Renewal Permit's limitations on monitoring well construction materials establish that the preferred well construction material should be chemically inert, which means that it will not leach foreign constituents into groundwater or remove contaminants of interest from it. Other factors to consider include the structural strength of the material, length of time the monitoring well will be in service, and resistance of the material to chemical and microbiological corrosion. Generally, if the monitoring program requires the analysis of trace concentrations of organic constituents, stainless steel should be used. However, if the monitoring program requires only analyses of inorganic constituents, polyvinyl chloride (PVC) materials may be used. PVC should not be used for monitoring wells where trace concentrations of organic constituents will be analyzed due to its potential for sorption and leaching of organic contaminants. Permit Section 11.11.3.1 requires well construction materials be selected based on the type of contaminants of interest in groundwater and the geologic conditions at the site.

The Department allows for well screen and casing to be constructed of stainless steel. Due to structural strength requirements, stainless steel is the only viable option for deep monitoring wells at LANL. It is also the most suitable material for detection of trace concentrations of organic contaminants. Although stainless steel may corrode under certain geochemical and microbiological conditions and may absorb or leach some inorganic constituents, proper

sampling procedures can minimize the contact time between the water sample and the stainless steel screen and, therefore, can help to maintain representativeness of the samples.

The Renewal Permit's requirements regarding monitoring well development are incorporated to ensure the collection of representative groundwater samples. If the well contains drilling mud in the form of a mud cake, or formation soils that have not yet been removed, continuous flushing over a period of several days may be necessary to complete the well development. Permit Section 11.11.4 requires all monitoring wells be developed to create an effective filter pack around the well screen, correct damage to the formation caused by drilling, remove fine particles from the formation near the borehole, and assist in restoring the natural water quality of the aquifer in the vicinity of the well.

The Department agrees that exposure to radionuclides can present a threat to human health. The Renewal Permit does not address radionuclides except as it pertains to mixed hazardous waste.

Regarding quality control procedures, as stated above, Permit Section 11.10.3 through 11.10.3.5 require valid and accurate laboratory testing for determining whether concentrations of contaminants present in environmental media pose a threat to human health or the environment. Permit Section 11.10.3 requires that detection limits for each analytical method be less than applicable background, screening, and regulatory cleanup levels. Permit Section 11.10.3.1 requires the Permittees to meet minimum quality assurance and quality control (QA/QC) requirements for laboratories producing permit-related analytical data. Permit Section 11.10.3.4 requires the Permittees to implement procedures to ensure representativeness and comparability of analytical results following procedures specified in EPA and National Environmental Laboratory Accreditation Conference guidance. And Permit Section 11.10.3.5 requires the analytical laboratories to formally review and validate project analytical data. Finally, Permit Section 11.10.3.2 requires the Permittees to review project data to ensure compliance with applicable EPA and industry-accepted standards for preparing and evaluating QA/QC data.

Changed Permit provisions

None

11. Contractor Documents

Public Comment

Commenters request full access to parts of the administrative record that are currently unavailable, or were unavailable at one time. One commenter states:

“Because of the lack of availability of the full administrative record, the public is unable to adequately make *informed* comment on the LANL draft permit. Commenters requests that the NMED extend the public comment period for the LANL draft permit for at least 90 days after provision is made for furnishing the full administrative record for the LANL draft permit. Failure to furnish the full administrative record is not in accordance with due process requirements or public participation requirements of RCRA or NMAC.

Currently missing from the administrative record are “secret” technical documents held in the NMED HWB Library that are relevant to the LANL draft permit. One such document is a January 9, 2002 TechLaw Inc. report relevant to Material Disposal Area (MDA) G, TA-54 that discusses numerous other documents related to groundwater flow and radionuclide transport in the vadose zone beneath Area G. The report is

critical of the technical deficiency of a LANL computer code used for modeling of contaminant flow and transport through the complex geology associated with LANL. The code was apparently used by LANL but not subjected to a rigorous, independent review by the NMED.

Numerous and unknown other TechLaw, Inc. reports exist for LANL that have similarly been kept secret and that are not referenced or presented to the public for review within the administrative record. If a lawsuit were to be filed for the LANL draft permit, such secret documents, paid for by taxpayers funds, could be available under subpoena and discovery powers of the court and could result in great delay of the approval of the LANL draft permit if the permit were remanded for consideration of such secret reports.

Three significant technical reports issued by the Environmental Protection Agency (EPA) Kerr Laboratory regarding the reliability of the well monitoring network at LANL are not on the NMED website or included in the administrative record. Those reports should be considered within the permit as part of the administrative record just as were the National Academy of Science (NAS) reports. Those reports would also have bearing on the plans for monitoring wells that will be part of the post closure monitoring network and the use of alternative requirements.”

Department Response

The documents referred to and read into the record are not secret. The Department utilizes an internal deliberative process when responding to Permittee submittals; this process often uses outside technical experts, *e.g.*, contractors, on particular issues. In these deliberations, communications from contractors are evaluated by the Department and portions the Department considers pertinent and accurate are incorporated into responses to submittals. Other than one document considered attorney-client privileged and one document with confidential contractor cost information redacted from the document, the 123 documents referenced by the commenters are in fact subject to public inspection under the Inspection of Public Records Act. Interestingly, neither parties to the Hearing nor commenters argued that any of the 123 documents were relevant to the Permit or that the Renewal Permit should be altered based on those documents.

Regarding the EPA Kerr Laboratory reports pertaining to the reliability of the well monitoring network, if the reports were not submitted by the Permittees or other parties to the permit proceedings they would not necessarily be in the LANL administrative record. As a result of this comment the Department has placed the reports into the record.

Changed Permit provisions

None

12. RLWTF

Public Comment

The Permittees object to the inclusion of Renewal Permit Section 4.6 and propose that the Section be removed from the Permit. They suggest that the permit condition does not meet minimum legal criteria of permit regulations, is not supported by the record, and is an inappropriate condition to impose under RCRA permit regulations.

The Permittees state that “Section 270.32(b)(1) provides that the Department may impose permit conditions necessary to achieve compliance with RCRA regulations, including each of the applicable requirements specified in Parts 264 and 266 through 268,” and that the Department must cite an applicable regulatory requirement and must provide justification in the administrative record. They state that the Department provides no regulatory citation or support that the requirement is necessary to ensure compliance with a hazardous waste management requirement under parts 264, 266 or 268.

The Permittees further state that Section 260.10 does not distinguish between *intentional* and *non-intentional diversions* of treated wastewater and that these terms are undefined. They state that WWTU exemption does not limit how a facility may divert wastewater so long as it meets the requirements of § 260.10. “A facility can operate under the WWTU exemption so long as it uses tanks or tank systems to manage hazardous wastewater dedicated for use with an on-site wastewater treatment facility subject to an NPDES permit requirement.”

The Permittees claim that the Department’s position that the WWTU exemption would not be lost so long as EPA states unambiguously that the new configuration would be regulated by the EPA and meets the definition of a WWTU under § 260.10 goes far beyond the scope of EPA rules at § 260.10. They state that the applicability of the WWTU exemption does not require EPA to determine whether or not a unit meets the criteria of § 260.10.

The Permittees claim that the Permit Condition’s prohibition on the acceptance of listed hazardous wastes is an attempt to prescribe an operational requirement at the RLWTF, unrelated to ensuring compliance with part 264 standards. They explain that the RLWTF does not currently accept listed hazardous wastes due to its internal waste acceptance procedures and the fact that the treatment systems at the RLWTF are not configured to treat listed hazardous wastes. “The WWTU exemption allows treatment of listed hazardous wastes (§ 261.3) and does not prohibit a facility from treating listed hazardous waste.”

Finally the Permittees claim that the permit condition as written applies to “all treated wastewater,” which is broader than RCRA authority which applies by definition to *hazardous* wastewater (§ 260.10). “The WWTU exemption applies to hazardous wastes treated in tanks. Non-hazardous wastewaters are not regulated by RCRA.”

Department Response

The regulation exempting a wastewater treatment unit from regulation under RCRA requires that the exempted unit discharge treated wastewater exclusively through the regulated outfall and that diversion to other points of discharge voids the exemption. A consequence of the Permittees’ intentional failure to comply with this requirement, *e.g.*, the Permittees route wastewater to a location other than the outfall, is that the wastewater treatment unit exemption under 40 CFR § 264.1(g)(6) no longer applies to the RLWTF.

The Permittees have advised the Department that in the past they have diverted treated wastewater to other locations, namely, impoundments at TA-53. As a condition to maintaining the exemption, the Department has added the requirement that all discharges of treated wastewater must flow through the Clean Water Act outfall or otherwise as required or permitted by a Clean Water Act permit. The Permittees have advised that in the future they plan to direct treated wastewater to uses such as cooling of equipment and that they also plan to discharge such treated wastewater to certain evaporation tanks to reduce outfall discharges. The Department

would agree that the exemption would not be lost in such circumstances, so long as EPA, the issuer of the Clean Water Act permit, states unambiguously that the new configuration would be regulated by EPA as part of the Permittees' Clean Water Act compliance and meets the definition contained in 40 CFR §§ 264.1(g)(6) and 260.10. Further, the exemption would not be lost if another discharge point were used by inadvertence, such as when a leak developed, but the intentional diversion of treated wastewater voids the exemption.

The state and federal regulations create an exemption for the owner or operator of a wastewater treatment unit as defined in 40 CFR 260.10. That section defines a wastewater treatment unit as a device with three regulatory components. One, it has to be part of a wastewater treatment facility that is subject to regulation under either Section 402 or 307(b) of the Clean Water Act. Two, it has to receive and treat or store an influent wastewater that is a hazardous waste as defined in 40 CFR 261.3, or that generates and accumulates a wastewater treatment sludge that is also a hazardous waste, or it treats or stores a wastewater treatment sludge which is a waste as defined in 261.3. Third, it also needs to meet the definition of a tank or tank system in 260.10 of this chapter. The Radioactive Liquid Waste Treatment Facility at TA-50 meets these criteria.

To be a wastewater treatment unit it has to have a single discharge. The Clean Water Act permit does not so much regulate the wastewater treatment units or the treatment works, as it regulates the outfall. A CWA permit is really a performance-based permit that only regulates the quality of the effluent that comes out the outfall.

To be exempt from the Hazardous Waste Act the unit must be fully covered under the Clean Water Act, not intermittently so. As EPA stated "[t]he underlying assumption used in justifying the wastewater treatment unit exemption was that tanks used to handle hazardous wastewaters at these facilities would be provided with EPA oversight under the Clean Water Act, thereby ensuring no significant decrease in environmental control afforded at these facilities." So EPA construes the exemption to require that the wastewater treatment unit discharge treats wastewater exclusively through the Clean Water Act regulated outfall and that diversion to other points of discharge voids the exemption. This is because discharge to other points of discharge would have no regulation. The Department agrees with EPA's interpretation of the exemption.

The Permittees have advised the Department that in the past they've diverted treated wastewater to tanks at TA-53. TA-53 is approximately 1.7 miles across two canyons (Mortandad and Sandia Canyon) from TA-50. There is not a direct road. To drive to TA-53 one must drive up Pajarito Road, cross the mesa, and drive down East Jemez Road. Because the Permittees have diverted wastewater to other units where they further treat this hazardous waste, Permit Section 4.6 that requires that all discharges of treated wastewater flow through the Clean Water Act outfall.

Further, Permit Section 4.6 prohibits listed wastes from being treated at the Radioactive Liquid Waste Treatment Facility. There are numerous reasons for this. First, the prohibition simply corresponds to the present practice as described by the Permittees in their response at Exhibit 82. The Department is only describing the unit as it has been described to it. This is a reasonable limitation on the management of hazardous waste in a unit that has been allowed by broad exemption. Second, the Radioactive Liquid Waste Treatment Facility does not receive listed wastes because the treatment would not remove the listing of hazardous waste, and any subsequent management of the waste except through the designated outfall would be subject to RCRA. In the event that the laboratory was to divert listed wastes to the TA-53 evaporation tanks or anywhere else, they would be treating hazardous wastes.

Permit Section 4.6 is include in part so that the Permittees do not fall into a compliance trap where they are allowed to do something that would clearly set up an enforcement action. In a response to the Department calling in a permit for the RLWTF the Permittees responded that it is its opinion that the regulations do allow an exemption under the circumstances and a permit application is not required.

Permit Section 4.6 is a compromise position between the Department's call-in for a RCRA permit for the RLWTF and LANL's position that they should be able to proceed under business-as-usual, which is what was in their response. The restrictions on the RLWTF put the Permittees on notice that these past practices of diversion of wastewater to the TA-53 must end, and if they don't, they must submit a RCRA permit application for the RLWTF as required by the call-in letter. This compromised position is a way to ensure that the laboratory continues to use the RLWTF, they continue to enjoy the broad exemption under RCRA, and yet the Department is satisfied that there won't be any gap in regulations as occurred with the diversion to the TA-53 evaporation tanks.

Changed Permit provisions

None

13. Relationship between the Permit and the Consent Order

Public Comment

One commenter suggests that Permit Part 11, *Corrective Action*, should be removed from the permit and instead, the Department should rely on the corrective action procedures specified in the Consent Order.

“A great deal of time and effort has been expended on this issue [corrective action at TA-54 MDAs] and since no permit is being applied for or issued for these units, the issue should be left to corrective action under the Consent Order.

When the Consent Order expires then the future monitoring and any other activities tied to those units should be rolled into a post closure care permit that can be worked out at that time and amended to the current permit. With the corrective action yet undecided and the full investigation yet incomplete it is non productive to consider post closure care at this point. It would appear to be more productive for NMED to develop a technical guidance document that provides facilities an outline of how the regulator will apply corrective action to those sites where it is applicable.

If the Consent Order is a good example then it could be used as boiler plate for such an endeavor. The document could be tailored to meet specific sites with unique circumstances but it would go a long ways to making this process consistent. It would also have the benefit of making it possible to refer to sections in that document rather than putting in long sections in a permit. Since the permit can not change the Consent Order, there are no units in the permit that require corrective action, and the public is unable to alter the language that comes from the Consent Order (prohibits public input as required for permitting activities), I submit that this section should be removed from the permit and maintained in the Consent Order.”

Another commenter believes that the Permit would address the closure and post-closure of all RCRA regulated units and that the Compliance Order on Consent would address the SWMUs

and AOCs. “The permit indicates in this section [Section 9.3] that the consent order is where the closure and post-closure care requirements for the Material Disposal Areas will be addressed. However, in Section 9.5 the permit requires a closure certification report for all permitted units.”

Department Response

The Renewal Permit must have a section that outlines the requirements for corrective action for releases. The previous LANL Hazardous Waste Facility Permit had such requirements and so too must the Renewal Permit, be it for a limited number of release scenarios. The procedures for corrective action in the Renewal Permit are the same as those used for corrective action under the Consent Order and both documents substantially conform to the requirements at 40 CFR Part 264 Subpart F.

"Corrective action" is a term that is used to describe what a permittee must do in response to a release to an environmental media, regardless of when a release happened. For example, a permittee must conduct an investigation of the nature and extent of contamination and submit a report on that investigation. If that investigation reveals that corrective action is needed because there is known or possible future harm to human health or the environment, the corrective action process dictates that a corrective measures evaluation report that examines the range of remedial alternatives be submitted to the regulatory authority. The regulatory authority then determines the appropriate remedial alternative and the permittee must submit a corrective measures implementation plan that prescribes how to execute that remedy. The Renewal Permit and the Consent Order have similar procedures to accomplish this corrective action process.

The Consent Order is strictly concerned with corrective action. The Consent Order addresses existing releases, sometimes referred to as legacy sites, throughout LANL and not necessarily at hazardous waste management units. The Consent Order also addresses new releases at non-hazardous waste management units or at sites referred to as solid waste management units (SWMUs) or areas of concern (AOCs). To date LANL has completed corrective action under the Consent Order or under the previous Hazardous Waste Facility Permit at approximately 1400 sites (see the list of sites identified for informational purposes only at Renewal Permit Attachment K, Table K-1). LANL must complete corrective action under the Consent Order at approximately 750 sites (see the list of sites identified for informational purposes only at Table K-3).

Corrective action under the Renewal Permit, at Part 11, is forward-looking. That is, it is concerned with releases that may occur in the future. There are four circumstances that cause corrective action to occur under the Permit and not under the Consent Order. These circumstances are listed at Permit Section 11.2 and in the Consent Order at Section III.W.1. They are: 1) new releases of hazardous waste or hazardous constituents from hazardous waste management units at the facility; (2) the closure and postclosure care requirements, as they apply to hazardous waste management units at the facility; (3) implementation of controls, including long-term monitoring, for any SWMU on the Permit's Corrective Action Complete With Controls list; and (4) any releases of hazardous waste or hazardous constituents that occur after the date on which this consent order terminates. The Department expects that whatever corrective action the Permittees conduct under the Renewal Permit will be very limited.

The Renewal Permit and Consent Order language concerning corrective action is largely the same. Nevertheless, commenters point out that the Renewal Permit uses the term “hazardous waste management unit” where the Consent Order uses the term “operating unit.” The

Department incorporates the term *hazardous waste management unit* into the Renewal Permit because it is defined in the regulations at 40 CFR § 260.10 and is used throughout the Permit. In drafting the Consent Order the Department meant the term *operating unit* to have the same definition at § 260.10 so considers the Renewal Permit's use of the term *hazardous waste management unit* an improvement.

A major difference between the Consent Order and the Renewal Permit regarding corrective action concerns the enforcement procedure. The enforcement procedures in the Consent Order reflect the specific provisions under the Hazardous Waste Act for enforcement of orders. In addition, the Consent Order has stipulated penalties that cannot be incorporated through a permit. Stipulated penalties can only be through an agreed-upon document.

The relationship between the Renewal Permit and the Consent Order, specifically how the two documents address corrective action and closure at TA-54 MDAs G, H, and L, *i.e.*, the regulated units, is addressed above under the topic "regulated units/alternative requirements." As stated above, the Department is using the Consent Order as an alternative to the Renewal Permit to address corrective action and closure at the regulated units because, as allowed by the regulations, a release from a hazardous waste management unit regulated by the Renewal Permit that combines or commingles with a release covered by the Consent Order is most appropriately cleaned up under the requirements of the Consent Order.

It must be understood that when a release has occurred, the processes of investigating the nature and extent of that release and determining of how to remedy that release are the same in both the corrective action and closure procedures. It must also be understood that the Consent Order's cleanup levels and the Permit's closure performance standards are identical.

Though the Consent Order addresses remedy selection, that remedy may include long-term maintenance and monitoring, *i.e.* post-closure care. Post-closure care will require a permit and those permit requirements will be incorporated into the Renewal Permit.

Finally, Permit Section 11.1 states "[n]othing in this Permit Part shall be construed to constitute a change to the Consent Order." That is, the Renewal Permit cannot be used to alter or change the Consent Order, and the due process requirements in the Consent Order are preserved.

Changed Permit provisions

None