

Permit 3119110

ENTERED

STATE OF NEW MEXICO  
BEFORE THE SECRETARY OF ENVIRONMENT

IN THE MATTER OF:

APPLICATION OF THE UNITED STATES )  
DEPARTMENT OF ENERGY AND )  
LOS ALAMOS NATIONAL SECURITY, LLC )  
FOR A HAZARDOUS WASTE FACILITY )  
PERMIT FOR LOS ALAMOS NATIONAL )  
LABORATORY )

No. HWB 09-37(P)  
HWB 10-04(P)

APPLICANTS' PRE-HEARING MEMORANDUM

The Applicants, Los Alamos National Security, LLC and the United States Department of Energy, by and through undersigned counsel of record, hereby file their Pre-hearing Memorandum.

I. INTRODUCTION

Los Alamos National Laboratory (LANL) is located in Los Alamos County, New Mexico and occupies approximately 40 square miles. The Facility is divided into smaller geographical units known as Technical Areas or TAs. LANL is a Federally Funded Research and Development Center owned and operated by the United States Department of Energy (DOE). Los Alamos National Security, LLC (LANS) is the site management and operations contractor. In the current proceedings, DOE and LANS are referred to as the Permittees and as the Applicants. The primary responsibility of the LANL facility is ensuring the safety, security and reliability of the nation's nuclear deterrent. In addition to its nuclear weapons work, LANL also engages in a broad range of research and development activities, including chemical, biological and physics research. LANL also undertakes important counter-terrorism and national security missions that include improvised explosive device (IED) countermeasures, explosives detection, and methods to defeat buried mines or other explosives.

The research and development activities conducted at LANL use various types of chemicals and other materials. Once these materials are no longer useful for laboratory activities, they may be classified as waste materials. In addition, waste materials are also generated by general operations, environmental restoration activities and decontamination and decommissioning projects. Some of the waste materials are defined as hazardous waste under the New Mexico Hazardous Waste Act (HWA), NMSA §74-4-1 *et seq.*, and the federal Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§6921 to 6931. Most of the hazardous waste consists of small amounts generated by the research laboratories and is similar to waste streams generated at other research facilities. Some of the waste generated at LANL contains a radioactive component in addition to the hazardous component and is referred to as "mixed waste." The mixed waste is categorized either as low-level mixed waste or transuranic (TRU) mixed waste. TRU mixed waste is defined as "waste contaminated with alpha-emitting radionuclides of atomic number greater than 92 (that is, heavier than uranium; hence the term transuranic) and half-lives greater than 20 years in concentrations greater than 100 nanocuries per gram." (NMED July 6, 2009 Fact Sheet at 4). Low level waste (LLW) is defined as radioactive waste that is not spent nuclear fuel, high level waste or transuranic waste.

In addition to the waste that is generated by current, on-going activities, LANL stores legacy TRU mixed waste at Technical Area (TA) 54. The TRU mixed waste will eventually be shipped off-site for disposal at the Waste Isolation Pilot Plant (WIPP) located just outside Carlsbad, New Mexico.

The majority of the hazardous waste generated at LANL is accumulated under the hazardous waste generator standards, 40 Code of Federal Regulations (CFR) Part 262, before being sent to an off-site disposal facility. The Proposed Permit only applies to hazardous waste

and mixed waste at LANL that needs to be stored for longer than 90 days, to larger quantities of waste, and to certain waste treatment operations.

## **II. HAZARDOUS WASTE REGULATORY OVERVIEW**

The Solid Waste Disposal Act (SWDA) regulates solid wastes, which are defined in the statute. (42 U.S.C. §6903(27)). The RCRA amendments to the Solid Waste Disposal Act, passed in 1976, govern the generation, management, treatment, storage and disposal of hazardous waste. (42 U.S.C. §§6921 to 6931). RCRA, and the regulations implementing RCRA, apply only to the hazardous waste component of mixed waste. The definition of solid waste does not include "source, special nuclear or byproduct material as defined by the Atomic Energy Act (AEA) of 1954, as amended (68 Stat. 923 [42 U.S.C. §2011 et seq.])." States, such as New Mexico, which are authorized to implement the RCRA program in lieu of United States Environmental Protection Agency (EPA), may only "apply the RCRA regulations to the hazardous component of mixed waste, regardless of the classification of the radioactive component as low-level, high-level, transuranic, or other." (EPA State Authorization Manual, Vol. II, Appendix N, U.S. EPA OSWER Directive 9540.00-9A-1, October, 1980).

Any person or entity owning or operating a facility that treats, stores or disposes of hazardous waste must obtain a hazardous waste facility permit. As explained by EPA, Subtitle C of RCRA

creates a "cradle-to-grave" management system designed to ensure that hazardous waste is identified and properly transported, stored, treated and disposed. Subtitle C requires EPA to identify hazardous waste and promulgate standards for generators and transporters of such waste. Under Section 3004 of RCRA [42 U.S.C. §6924], owners and operators of treatment, storage, and disposal facilities are required to comply with standards "necessary to protect human health and the environment." These standards are generally implemented through...permits issued under authorized State programs or by EPA.

(53 Fed.Reg. 37912 (Sept 28, 1988)). Section 3005(a) of RCRA [42 U.S.C. 6925] "prohibits all treatment, storage and disposal of hazardous waste except in accordance with a permit issued under an authorized State program or by EPA." (*Id.*) Pursuant to RCRA, EPA has adopted standards governing the treatment, storage and disposal of hazardous wastes. (40 CFR Part 264 *et seq.*). EPA has also developed guidance documents interpreting the RCRA regulations.

EPA authorized the State of New Mexico to implement its hazardous waste program in lieu of the federal RCRA program. (NMED July 6, 2009 Fact Sheet at 9). The HWA and the implementing regulations establish the requirements for the State of New Mexico's hazardous waste program. The State of New Mexico has adopted, with exceptions as noted in the regulations, EPA's hazardous waste regulations. (New Mexico Hazardous Waste Management Regulations, 20.4.1 New Mexico Administrative Code (NMAC)). As part of the State hazardous waste program, the Secretary of the New Mexico Environment Department has the authority to issue, renew, enforce and modify hazardous waste facility permits within the State pursuant to criteria and standards established under RCRA.

Owners or operators of hazardous waste management facilities seeking a permit are required to submit a detailed permit application addressing all aspects of the design, operation, maintenance and closure of the units to be permitted. The permit requirements are found at 40 CFR Part 264. The regulations include permit requirements for waste analysis, the storage of waste in containers and tanks, inspections, personnel training, preparedness and prevention, contingency plan and emergency procedures, and recordkeeping and reporting. The regulations also include requirements for corrective action for spills or releases of hazardous waste and the closure and post-closure care of the permitted units.

## **II. LANL HAZARDOUS WASTE FACILITY PERMIT ADMINISTRATIVE HISTORY**

The LANL Hazardous Waste Facility Permit was issued on November 8, 1989 for a period of ten years for the storage and treatment of hazardous waste. In 1999 the current Permit was administratively extended by NMED after the Permittees timely submitted a renewal application in August, 1996. The current Permit, as modified, remains in effect until a permit renewal is granted. The permit renewal application has been revised several times since 1996 to update, change or reflect improvements in ongoing waste management operations. The Applicants are seeking to renew their permit for storage and treatment units.

On August 27, 2007, NMED issued a draft permit for public comment. During the public comment period, NMED received extensive comments from DOE and LANS as the Applicants, from EPA, and from twelve other interested parties, including Santa Clara and San Ildefonso Pueblos, environmental organizations and individuals. Based on requests from several commenters, the public comment period was extended through February 1, 2008. Many of the commenters, including the Applicants, requested a public hearing on the draft permit.

NMED regulations require NMED, along with the applicant, to respond to requests for hearing in an attempt to resolve the issues giving rise to the opposition. (20.4.1.901.A.4 NMAC). If the issues are resolved, the opponent may withdraw the request for hearing. *Id.* Beginning in July, 2008 and concluding in June, 2009, NMED held numerous meetings with the Applicants and other participants in an effort to resolve the numerous issues that were raised by the comments on the August 27, 2007 draft permit. As a result of the negotiations, NMED developed a revised draft permit for review by the participants. The participants entered into a first Stipulation on Permit Language, dated June 26, 2009, which states that the Applicants and the signatory Interested Parties agree to the terms of the stipulated sections of the revised draft

permit, agree that they will not request a public hearing on the stipulated sections of the revised draft permit, and agree not to appeal the stipulated sections of the revised draft permit, if approved and issued in substantially the same form. Various parties, including the Applicants, identified specific portions of the revised draft permit to which they did not agree. For those portions of the revised draft permit that a party excepted, the excepting party may request a hearing, contest or challenge the excepted provisions and seek judicial review.

On July 6, 2009, NMED issued the revised draft permit for public comment and issued a Fact Sheet stating that NMED intended to issue a hazardous waste facility permit for LANL. The public comment period ended September 4, 2009. Extensive comments on the revised draft permit were submitted by the Applicants and other interested persons and entities. Based on the comments and additional meetings and discussions, on January 20, 2010, NMED issued a second revised draft permit, referred to as the "Proposed Permit." NMED, the Applicants and other participants signed a Second Stipulation on Permit Language, on the same terms as the earlier stipulation. The Applicants signed the Second Stipulation subject to specific exceptions to certain portions of the Proposed Permit. On February 2, 2010, NMED provided public notice that the hearing on the Proposed Permit will begin on April 5, 2010. Also on February 2, 2010, NMED issued a Notice of Intent to Deny the Permit for the Open Burn Units at TA-16 and provided notice that the hearing on the Notice of Intent to Deny will also begin on April 5, 2010.

### **III. LANL SUPPORTS THE ISSUANCE OF THE PROPOSED PERMIT, WITH SPECIFIC EXCEPTIONS.**

Except for those issues identified in the exceptions to the Second Stipulation, the Applicants support the issuance of the Proposed Permit. The portions of the Proposed Permit that the Applicants oppose can be divided into two categories. The first category includes provisions in Permit Parts 1 through 11 and the Attachments that the Applicants believe can be

revised in order to make them consistent with the RCRA regulatory requirements and current operations at LANL. As part of the Applicants' direct testimony on the Permit Parts and the Attachments, these provisions will be identified and language changes will be proposed.

The second category includes two provisions that the Applicants are requesting be removed from the Proposed Permit and one provision that the Applicants are requesting to have reinstated into the Proposed Permit. As discussed more fully below, the Applicants are requesting that the permit condition applicable to the Radioactive Liquid Waste Treatment Facility (RLWTF), found at Permit Section 4.6, be removed. The Applicants are also requesting that the financial assurance requirements, found at Permit Sections 2.13 through 2.16 be removed. The Applicants will present direct testimony in support of removing these provisions and will demonstrate that these provisions do not conform to regulatory criteria, and that the permit, without the contested conditions, will meet all statutory and regulatory requirements. The Applicants will also present specific reasons why the contested permit provisions are unacceptable and unworkable. The Applicants are requesting that the permit provisions allowing the treatment of high explosive waste at two open burn units located at TA-16 be reinstated into the permit. As part of the hearing on this matter, the Applicants will present testimony and evidence demonstrating that the open burn units meet RCRA regulatory requirements and can be operated in a manner that is protective of human health and the environment.

The Proposed Permit will authorize hazardous waste management at twenty-two container storage units located at TAs 3, 50, 54 and 55, one tank storage unit located at TA-55, and one treatment unit where waste may be stabilized using cement located at TA-55. The Proposed Permit includes eight Permit Parts and fifteen Attachments. The Permit Parts set forth the administrative and technical requirements for the storage and treatment of hazardous waste,

as required by 20.4.1.500 NMAC (incorporating 40 CFR 264, Subparts A to G). The Attachments set forth the specifications for the implementation of the conditions set forth in the Permit Parts. Permit Parts 1 through 4 and Attachments C through F include operating requirements for the facility. Parts 9 to 11 and Attachment G set forth requirements for facility closure, post-closure care and corrective action. Parts 5 to 8 are reserved for future use.

The Applicants will present direct testimony that demonstrates that the provisions of the Proposed Permit with which they agree meet the applicable RCRA regulatory requirements. Permit Part 1 includes permit conditions that apply to all of the hazardous waste storage and treatment units at LANL that NMED intends to permit. The provisions include requirements that enhance and encourage public participation, including an electronic information repository that will contain key documents relating to the Permit (Permit Part 1.10), a community relations plan (Permit Part 1.12), and public notification by e-mail for the filing of specific documents that may be of interest to the public (Permit Part 1.13).

Permit Part 2 sets forth general facility conditions that are based primarily on 40 CFR 264, Subparts B through E. The general facility conditions include requirements for waste analysis, security, inspection, personnel training, waste minimization, preparedness and prevention, contingency planning, and recordkeeping and reporting. The specific details for the implementation of these provisions are found in Permit Attachments C through F. Parts 3 and 4 set forth the requirements for storage of hazardous waste in containers and in tanks at TA-55.

Permit Part 9 sets forth conditions the Permittees must follow for the closure of hazardous waste management units that are subject to the permit. Attachment G includes specific closure plans for each of the hazardous waste management units. Permit Part 10 contains conditions that must be followed for post-closure care of hazardous waste management

units if it is not possible to “clean close” the units through the removal of all waste, hazardous constituents and waste residues.

Part 11 sets forth corrective action requirements for hazardous waste management units that are subject to the permit. Corrective action requirements set forth the measures that must be taken by the Permittees in the event of a release of hazardous waste and hazardous constituents from the permitted hazardous waste management units to the environment. As explicitly stated in Permit Part 11.1, the corrective action requirements in the Proposed Permit do not apply to the corrective action that is subject to the March 1, 2005 Compliance Order on Consent (Consent Order).

LANL is currently undertaking corrective action at solid waste management units (SWMUS) and Areas of Concern (AOCs) pursuant to the Consent Order. The Consent Order specifically states that the corrective action being undertaken pursuant to the Consent Order shall not be included in “any current or future” Permit. Section III.W.1 of the Consent Order states:

“The Department has determined that all corrective action for releases of hazardous waste or hazardous constituents at the Facility [LANL], required by section 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 any current or future Hazardous Waste Facility Permit (“Permit”), with the exception of the following four items which will be addressed in the Permit and not in the Consent Order: (1) new releases of hazardous waste or hazardous constituents from operating units at the Facility; (2) the closure and 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; (3) implementation of the controls, including long-term monitoring, for any SWMU on the Permit’s Corrective Action Complete with Controls list, which is described in Section III.W.3.b; and (4) any releases of hazardous waste or hazardous constituents that occur after the date on which this Consent Order terminates pursuant to Section III.E.2. The Department has determined that setting forth corrective action requirements in this Consent Order in lieu of the Permit fully complies with the requirements of section 3004 of RCRA, 42 U.S.C. §6924, and section 74-4-4.2(B) of the HWA.”

The Consent Order is the only “enforceable instrument for corrective action relating to the Facility, except as provided in Section III.W.1” and compliance with the terms of the Consent Order constitutes compliance with the corrective action requirements under RCRA and the HWA. (Consent Order, Section III.W.2). Section III.W.4 states that the renewed RCRA Permit “will not include any corrective action requirements, nor any other requirement that is duplicative of this Consent Order. The Permit or any renewed Permit can include the four excepted items and the list of SWMUs requiring corrective action described in Section III.W.1.”

Permit Section 11.1 specifically states that NMED and the Permittees have agreed that the Consent Order fulfills the corrective action requirements of 40 CFR §264.101 and that nothing in Permit Part 11 “shall be construed to constitute a change in the Consent Order.” The Applicants agree with Permit Section 11.1. However, as will be shown by the Applicants’ direct testimony, there are two instances where language in the Proposed Permit is in conflict with the Consent Order. (See Testimony of Gian Bacigalupa at Section 9.3, Section 11.2, Section 11.2.1). Permit Section 11.2 refers to the four exceptions identified in Section III.W.1 but does not contain the exact language from the Consent Order. In order to be fully consistent with the Consent Order and to avoid any possible confusion, numbers 1 through 4 of Section 11.2 should be revised to include the exact wording from the Consent Order.

The second area of potential conflict and confusion arises in the Proposed Permit’s identification of Material Disposal Areas (MDA) G, H and L as “regulated units” under the Proposed Permit. (Permit Attachment J, Table J-1). G, H and L are all located at TA-54. As will be shown in the Applicants’ direct testimony, the Consent Order applies to numerous MDAs at LANL, including MDAs G, H and L. The regulated units at G, H and L are specific below ground pits and shafts and some surface impoundments at L. By identifying all of MDAs G, H

and L as “regulated units,” NMED is subjecting these MDAs to permit requirements, which is directly contrary to the express language of the Consent Order.

Additionally, the identification of MDAs G, H, and L as “regulated units” is inconsistent with the history of the facility, as described more fully in the Applicants’ direct testimony. (*See* Testimony of Gian Bacigalupa at Section 11.2.1). Further, in certain situations, regulated units that are co-located with SWMUs and AOCs can be closed pursuant to what is called “alternative closure.” 40 CFR §264.100 (c). Under alternative closure, the closure requirements of Subpart G may be replaced with alternative requirements that are contained in an enforceable document if the regulated units are co-located with SWMUs and AOCs. The Consent Order is the enforceable document for SWMUs and AOCs at LANL. MDAs G, H, and L, which are subject to the Consent Order, include SWMUs and AOCs. The pits, shafts and surface impoundments identified by the Applicants as the regulated units are co-located with the SWMUs and AOCs and therefore can be closed pursuant to alternative closure. NMED has recognized that the regulated units at G, H and L will be closed under the Consent Order. (Proposed Permit at §9.3; July 6, 2009 Fact Sheet at 4, 94). In order to allow for the use of alternative closure, the regulated units must be properly identified in the permit.

In order to be fully consistent with the Consent Order, to ensure that the Consent Order is the only enforceable document for MDAs G, H and L, and to allow for the use of alternative closure, the references to TA-54 G, H and L in Table J-1 should be revised to identify the specific pits, shafts and surface impoundments that constitute the regulated units. The proposed language change is included in the Applicants’ direct testimony.

#### **IV. THE PERMIT PROVISION FOR THE RADIOACTIVE LIQUID WASTE TREATMENT FACILITY SHOULD BE REMOVED FROM THE PROPOSED PERMIT**

As will be shown in the Applicants' direct testimony, Permit Section 4.6 sets forth a permit condition related to the Radioactive Liquid Waste Treatment Facility (RLWTF) at TA-50. The RLWTF treats wastewater and discharges effluent through an outfall at Mortandad Canyon. The RLWTF is operated pursuant to a National Pollutant Discharge Elimination System (NPDES) permit issued by EPA under the Federal Clean Water Act (CWA). LANL is not required to have a RCRA permit because wastewater treatment units (WWTU) that store and treat wastewater in tanks or tank systems under an NPDES permit are exempt from RCRA permit requirements. (40 CFR §264.1(g)(6)). The purpose of the WWTU exemption is to avoid the imposition of duplicative permitting requirements under the CWA and RCRA. NMED has acknowledged that the WWTU exemption applies to the RLWTF and that the RLWTF is permitted by EPA pursuant to Section 402 of the CWA. (Permit Section 4.6; NMED July 26, 2009 Fact Sheet at 82).

As set forth in the direct testimony of Tony Grieggs, there is no basis in RCRA for including Permit Section 4.6 in the Proposed Permit and the provision should be removed. The provision should be removed because the RCRA permit does not and cannot regulate compliance with Section 402 of the federal CWA NPDES permit issued by EPA pursuant to the CWA. The Applicants did not submit a RCRA permit application for any unit at the RLWTF. The RLWTF does not need a RCRA permit because of the WWTU exemption, as recognized by NMED. NMED does not have the authority to determine if LANL is in compliance with the CWA NPDES permit. The inclusion of Permit Section 4.6 subjects LANL to duplicative permitting requirements and the potential for inconsistent regulatory interpretations and enforcement by

NMED and EPA, all of which undermine the purpose of the WWTU exemption. As will be demonstrated by the Applicants' direct testimony, the permit condition is not supported by RCRA.

**V. THE PERMIT PROVISIONS IMPOSING FINANCIAL ASSURANCE ON LANS SHOULD BE REMOVED FROM THE PROPOSED PERMIT**

**A. LANL is a federal facility and is therefore exempt from financial assurance requirements pursuant to 40 CFR §264.140(c).**

The Proposed Permit at Sections 2.13 to 2.16 impose requirements on LANS to provide financial assurance for closure and post-closure care. 40 CFR 264, Subpart H requires owners or operators of hazardous waste facilities to demonstrate that they will have sufficient funds to properly close a facility and to provide closure and post-closure care. Hazardous waste facilities owned by a state or the federal government are exempt from the financial assurance requirements of Subpart H. 40 CFR §264.140(c) states that "States and the Federal government are exempt from the requirements of this subpart."

NMED has acknowledged that DOE, as a Federal entity, is not required to provide financial assurance. However, NMED is seeking to impose financial assurance requirements on LANS based on its status as a non-governmental entity. (July 6, 2009 Fact Sheet at 28). LANL is a federal facility, has a federal mission, is located on federal property, is a Federally Funded Research and Development Center, and is operated pursuant to a federal contract. NMED also cites a supposed failure on DOE's part to show a "continuing commitment" to its cleanup obligations at LANL. This rationale ignores the fact that all the funds LANS uses to conduct operations at LANL, including cleanup, come from the Federal Government.

The imposition of financial assurance on LANS solely because it is the management and operating (M&O) contractor at LANL is not consistent with the purpose of financial assurance

requirements. In general, the purpose of imposing financial assurance requirements on an owner or operator of a hazardous waste facility is to ensure that the owner or operator has sufficient funds available to properly close the facility so that public money will not have to be used in the event the owner or operator is insolvent at the time of closure or is unable or unwilling to cover closure and post closure costs. However, because the funds LANS uses to conduct operations at LANL are federal funds, the imposition of financial assurance requirements on LANS will result in an additional burden on the taxpayer - first to supply the funds that will be used for cleanup, then to provide additional funds to pay for financial assurance.

According to EPA, the intent of the RCRA financial responsibility requirement is, in part, to reduce the number of treatment, storage and disposal facilities that are insolvent or abandoned by their owners and operators, leaving the costs of corrective action to be borne by the public. Absent financial assurance, protection of human health and the environment would depend on available government resources. In the preamble to Subpart H, EPA explained that, in the case of the state and federal governments, such an assurance is not needed because "State and Federally-owned facilities will always have adequate resources to conduct closure and post-closure care activities properly." (45 FR 33198 (May 19, 1980)(emphasis added)). As explained by EPA, "government institutions are permanent and stable, and have as their reason for being the health and welfare of their people. Therefore...publicly-owned facilities would be more likely and more able financially to carry out their closure and post-closure responsibilities." *Id.*

When the hazardous waste regulations were originally proposed, the regulations read "owner/operator" when referring to two or more parties. In 1980, EPA changed the wording to "owner OR operator" to indicate when EPA would be satisfied with compliance with a requirement by *either* party (either the owner or the operator). In a January 5, 1983, letter from

John Skinner, 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 requirements." In 1991, the State of Washington, in interpreting the application of the exemption to DOE's Hanford facility, determined that financial assurance requirements do not apply to contractors at a Federally-owned facility. (State of Washington Department of Ecology, letter dated January 18, 1991). Washington relied on the preamble language and on EPA's clarification that financial responsibility need only be fulfilled by either the owner or the operator, not by both.

In determining that the financial assurance requirements do not apply to private contractors at Federal facilities, the State of Washington also relied on the term "owner or operator" as part of the justification for its decision. Throughout Subpart H, the responsibility for financial assurance is imposed on either the owner or the operator. In the preamble to 40 CFR 264, EPA explained that it uses the term "owner or operator" to indicate that compliance may be by either party but also to indicate that the regulations may enforced against either or both. (45 FR 33169, May 18, 1980). The State of Washington determined that, because Subpart H specifies "owner or operator," the financial assurance requirements may be filled by either the owner or the operator. At LANL, DOE is the owner and also a co-operator and fulfills the financial assurance requirements.

EPA and other states focus not on whether there is a "non-governmental entity" that is a permittee, but rather on the fact that at a federal facility the Federal Government, as the owner and a co-permittee, provides the compliance with Subpart H. In a 2005 EPA Inspector General Report, the concept that the focus should be on ownership of the facility, rather than the status of one permittee as a "non-governmental entity," was reiterated. The IG stated that "Financial

assurance requirements do not apply to hazardous waste generators and State or Federally owned and operated facilities." (Continued EPA Leadership Will Support State Needs for Information and Guidance on RCRA Financial Assurance Report No. 2005-P-00026 September 26, 2005).

In permitting other federal facilities in New Mexico, NMED has also explicitly recognized that Federal facilities or installations are exempt pursuant to 40 CFR §265.140(c). NMED issued a draft hazardous waste renewal permit to Sandia National Laboratories on August 20, 2007, and a draft renewal permit to LANL only seven days later, on August 27, 2007. Like LANL, SNL is managed and operated by a private contractor. NMED stated several times in SNL's permit that, because SNL is a "federal facility," SNL is exempt pursuant to 40 CFR 265.140(c). (*See Testimony of Gene Turner*).

NMED also recognizes in the Department of the Army's RCRA permit for White Sands that the Army is exempt from financial assurance requirements because White Sands is a "Federal Government owned installation."

NMED has attempted to impose financial assurance requirements on private contractors at two other DOE owned facilities in New Mexico. After the imposition of financial assurance requirements on the private contractor at the Waste Isolation Pilot Plant (WIPP), Congress passed a statute that specifically exempted the federal government and its contractor at WIPP from the RCRA financial assurance requirements. (114 Stat. 536 (Public Law 106-246)). Congress passed a similar provision for Sandia National Laboratories, which also exempted the Federal government and its contractors from financial assurance requirements. (118 Stat. 440 (Public Law 108-199)).

**B. Any financial assurance requirements imposed on LANS will be paid for by federal funds.**

As will be shown by the Applicants' direct testimony, LANL is a federal facility with a federal mission, located on federal property and is managed and operated pursuant to a federal contract. DOE owns all of the land and all of the facilities that make up LANL, including the portions of the Laboratory that comprise the hazardous waste management facility subject to the Proposed Permit. In conjunction with its federal mission, DOE has chosen to hire an M&O contractor, currently LANS, to manage and operate the Laboratory on behalf of the Federal Government. DOE routinely uses M&O contractors at its facilities. All of the funding expended by the M&O contractor, both at LANL and at other DOE facilities, comes from the Federal Government. The M&O contractor does not and cannot contribute any funds to the operation and management of the DOE facility. Thus, if financial assurance is required as a condition of the RCRA permit, the only appropriate source of funding for that mechanism would be the Federal Government and, ultimately, federal taxpayers.

Given the fact that LANL is a federally owned facility and that any funding for financial assurance on the part of LANS would ultimately have to come from the Federal Government, there is no rational basis for imposing the financial assurance requirements on LANS. The reason that the federal facilities are exempt from financial assurance requirements is the long-term stability of the Federal Government and commitment to complying with applicable state and federal environmental laws. Any financial assurance requirement imposed on LANS would be duplicative of the Federal Government's commitment to properly manage and close the RCRA hazardous waste management units at LANL and ignores or undermines the rationale for the exemption in 40 CFR §264.140(c). The Federal Government fully intends to comply with its environmental responsibilities at LANL, including appropriate closure and post-closure care. As will be shown by the Applicants' direct testimony, DOE is complying with the corrective action

requirements of the Consent Order and is spending substantial funds on that effort. DOE has recently authorized the use of over \$200 million in American Recovery and Reinvestment Act (ARRA) funds to be used on environmental remediation at LANL.

Finally, although LANL will always remain a federally owned facility, LANS may not always be the M&O contractor. As is true for any federal contract, LANS' contract to manage and operate LANL is subject to termination at any time for the convenience of the Federal Government. In such a case, the day-to-day management and operation of LANL could be taken over by another M&O contractor or by DOE itself. There is no regulatory or practical basis supporting the imposition of financial assurance requirements on a contractor who may not be managing the facility at the time of closure or post-closure care.

**C. Congress has exempted the Federal Government and its contractors at facilities that manage transuranic waste from RCRA financial assurance requirements.**

In November, 1999, Congress passed a statute exempting the Federal Government and its contractors at facilities designed to manage transuranic waste from financial assurance requirements under RCRA. The specific language is as follows:

“Sec. 220. 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.”

(Section 220, 113 Stat. 1501A (Public Law 106- 113 – Appendix E)(November 29, 1999)).

In order for this provision to apply, a facility has to show that it operates a 1) waste management facility designed to manage TRU waste material that is 2) owned or operated by a department agency or instrumentality of the executive branch of the Federal Government, and 3) subject to regulation under the Solid Waste Disposal Act or an authorized State program. LANL

meets the first requirement because a large portion of the LANL hazardous waste management facility is designed to manage TRU waste. The statutory language does not limit the exemption to facilities that only manage TRU waste nor does it exclude facilities that manage waste other than TRU waste. The second requirement is met because LANL is owned and co-operated by DOE, which is a department in the executive branch of the Federal Government. The third criteria is met because LANL is subject to regulation by NMED pursuant to the New Mexico's hazardous waste management program, which is a state program authorized by the Solid Waste Disposal Act. The language of the statute is consistent with the exemption in 264.140(c), with the specific statutes passed for WIPP and Sandia Laboratories, and demonstrates that Congress intended the financial assurance exemption to apply to contractors of the Federal Government at specific types of waste management facilities.

**D. The imposition of financial assurance requirements is inconsistent with the Consent Order.**

Finally, imposing financial assurance requirements on LANS is inconsistent with the Consent Order. As discussed above, corrective action at LANL for SWMUs and AOCs is being conducted pursuant to the Consent Order. The Consent Order includes corrective action requirements for MDAs G, H and L in TA 54. (Section IV.C).

In Permit Section 2.13.1, the Proposed Permit clearly ties closure costs for MDAs G, H, and L, which are identified as regulated units, to the provisions of the Consent Order. The Proposed Permit requires cost estimates and, therefore, financial assurance, for all of MDAs G, H, and L, even though they are specifically covered by the Consent Order. The Proposed Permit specifically states that the cost estimate for MDAs G, H, and L, shall be based on the remedy selected in the Corrective Measures Implementation (CMI) Plan, which is clearly a requirement of the Consent Order. The Proposed Permit does not state that there will be closure requirements

beyond the remedy selected in the CMI. Therefore, the Proposed Permit is imposing conditions that apply to corrective action under the Consent Order, which is specifically prohibited by the Consent Order.

As discussed above, by the specific terms of the Consent Order, all corrective action at LANL, except for the four exceptions identified in Section III.W.1, is to be conducted pursuant to the Consent Order rather than the Permit. The Consent Order is the only enforceable instrument and sole mechanism for corrective action at LANL, other than for the four exceptions. (Consent Order Section III.W.2). Compliance with the terms of the Consent Order “constitutes compliance with the requirements for corrective action under RCRA and the HWA and their implementing regulations,” including the specific corrective action requirements under 40 CFR Subpart F. (*Id.*). Section III.W.4 prohibits the renewed Permit from including any corrective action requirements or any requirements that are duplicative of the Consent Order.

The Proposed Permit cannot include requirements for closure cost estimates and financial assurance for the MDAs because such provisions violate the Consent Order by creating duplicative requirements and establishing a second enforceable document for corrective action. The Consent Order includes the three MDAs in all of the Consent Order processes, including the investigation, CME and CMI requirements. The Consent Order specifically states that compliance with the Consent Order constitutes compliance with Subpart F. Therefore, by including closure cost estimates and financial assurance for the MDAs in the Proposed 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.

NMED is trying to impose financial assurance requirements for activities that are covered by the Consent Order by tying the permit requirements to the CMI and CME. Thus, the Proposed Permit would become a second enforceable document for activities already covered under the Consent Order, which directly contradicts the specific language of the Consent Order.

Based on the foregoing, the Applicants are requesting that all financial assurance requirements be deleted from the Proposed Permit.

**VI. THE PERMIT PROVISIONS ALLOWING TREATMENT BY OPEN BURNING AT THE TA-16 OPEN BURN UNITS SHOULD BE INCLUDED IN THE FINAL PERMIT.**

The Applicants are requesting that the provisions allowing the treatment of high explosive wastes at TA-16 by open burning be reinstated in the permit. Except for the Proposed Permit, both previous drafts of the permit (August 2007 and July 2009) included provisions allowing treatment at the TA-16 open burn units. The July 6, 2009 Fact Sheet stated that NMED intended to grant a permit allowing the use of the open burn (OB) treatment units. However, on February 2, 2010, NMED issued a notice that it intends to deny the application for TA-16 OB treatment units. The Applicants will present direct testimony demonstrating that the TA-16 OB treatment units comply with the applicable RCRA regulatory requirements and can be operated in a manner that is protective of human health and the environment. The Applicants will also present testimony demonstrating the importance of the open burn units to specific missions at LANL, including vital work on counter-terrorism and national security.

The operational and permitting procedural history of the OB treatment units is set forth in the Applicants' direct testimony. The OB treatment units at TA-16 have been operated in various configurations since 1951. They have been operated as RCRA interim status units since November, 1980. LANL first submitted a permit application for the OB treatment units in 1995.

Between 1995 and the issuance of the draft Permit in August, 2007, LANL submitted permit revisions and requested information to NMED. During that time period, four of the six existing OB treatment units were closed and upgrades were made to operations. As part of the Proposed Permit, the Applicants are seeking to permit the TA-16 388 flash pad and the TA-399 burn tray.

LANL has undertaken efforts to minimize the waste streams that are treated at the OB units. However, some high explosive waste is still generated as part of LANL's research activities and as a result of the decommissioning of existing explosive processing, manufacturing and research buildings. Because of the nature of the high explosive wastes, these waste streams cannot be shipped off-site without treatment to remove the high explosive component. LANL is making provisions for those waste streams that can be shipped off-site without treatment. However, not all high explosive waste streams can be shipped off-site and the prohibition of treatment by open burning will have significant impacts for LANL. Denial of the permit for the OB units will leave LANL without a safe mechanism to handle ductwork and piping from decommissioned buildings that have explosive residues. The only current technology for safe treatment of deposited high explosives on equipment is through open burning.

The denial of the OB treatment unit application would also have a significant impact on research operations at LANL, including a substantial impact on the global war on terror. The Global Security (GS) directorate at LANL is engaged in work crucial to national security that requires LANL to have the ability to treat high explosive waste by open burning. Much of the work that the GS directorate carries out requires the use of non-standard energetic materials. The work is conducted to investigate and counter the use of improvised explosive devices (IEDs) by terrorists. In many cases, the global security work requires the duplication of the IEDs with homemade explosives in order to identify ways in which to neutralize or eliminate the threat

posed by the IEDs. The rapid response group within the GS directorate requires that capability to duplicate the IEDs within very short time frames, which may require the machining of the homemade explosives and the OB treatment of excess material. The long-term properties of these homemade explosives are unknown and the only safe way to treat the waste is by open burning. The use of the TA-16 OB units is essential for the GS directorate missions, and, if the OB treatment units are not permitted, it will have a significant impact on LANL's contribution to national security.

The OB units treat certain waste streams that contain a high explosive component. The purpose of treatment is to destroy the explosive component of the waste, which is considered hazardous. LANL is prohibited by the Department of Transportation from shipping the waste off-site due to the potential for the waste to ignite or react. RCRA and the HWA allow for treatment by open burning pursuant to a RCRA hazardous waste facility permit. RCRA does not set forth specific requirements for the operation of OB units. Instead, these units are considered "miscellaneous units," and are regulated by 40 CFR 264, Subpart X (40 CFR §§264.600-603). The requirements for miscellaneous units are based on performance standards that require the units to have provisions preventing releases of waste that may have adverse effects on human health and the environment. The performance standards may include monitoring, testing, analytical data, inspections, response and reporting, as necessary to protect human health and the environment.

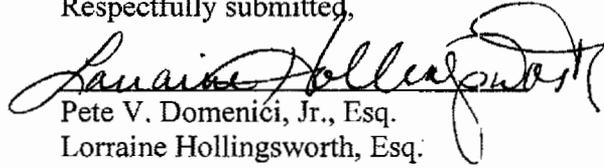
As part of their direct testimony, the Applicants will provide proposed permit provisions that will allow the OB treatment units to be operated in a manner that is protective of human health and the environment. The Applicants' proposed provisions are based on the Part 6 that was included in prior drafts of the permit (August 2007; July 2009). The major change is the

removal of the prohibition on the treatment of wastes capable of generating dioxins and furans. The direct testimony of the Applicants will demonstrate that, based on the human health and ecological screening risk assessment, the conservative nature of the ecological screening levels, previous field studies at LANL, and other factors at TA-16, there are no potential unacceptable risks to human health or the environment. There is no evidence of off-site impacts due to the operation of the OB treatment units. The Applicants' proposed provisions contain conditions that assure that the operations will be protective of human health and the environment, including waste characterization requirements, prohibitions on certain types of waste, and annual and batch limits on the amount of waste that may be treated. Open burning may not be conducted during electrical storms or high winds. The Applicants' proposed permit conditions include detailed operating procedures, specific time limits and several operational safety precautions. The proposed permit conditions also contain requirements for soil monitoring and surface water monitoring to determine the impact, if any, of the open burning and require the submission of a study of alternatives to open burning.

The Applicants and NMED have spent considerable time and resources over many years in an effort to permit the OB units. At the very end of a very long process, NMED decided that it would not agree to permit the OB units based on an ecological screening risk assessment that identifies a low potential for risk to ecological receptors at LANL. However, the risk assessment demonstrates that there are no unacceptable risks to either human health or ecological receptors at the TA-16 OB units. Based on the importance of the OB treatment units to national security missions at LANL and the evidence that the OB units can be operated in a manner that is protective of human health and the environment, there is no basis to deny the permit for the OB

treatment units. Based on the evidence presented in the Applicants' direct testimony, the Applicants' revised Part 6 should be reinstated in the Proposed Permit.

Respectfully submitted,

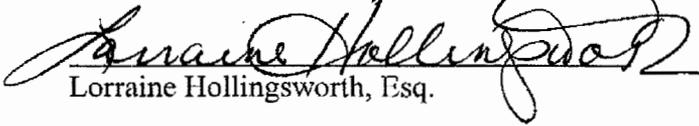


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I hereby certify that the foregoing was served on all parties of record via email on the 19<sup>th</sup> day of March, 2010.



Lorraine Hollingsworth, Esq.



## EXHIBIT LIST

### Applicants

#### Exhibit 1

Proposed LANL Hazardous Waste Facility Permit (Proposed Permit), dated January 20, 2010 (copy not attached).

#### Exhibit 2

Compliance Order on Consent (Consent Order), dated March 1, 2005 (copy attached).

The Applicants will have a presentation on how to access the Virtual Information Repository.

The listed exhibits are enclosed with each witnesses direct testimony.

### Applicants - G. Turner

#### Exhibit 1

45 Federal Register 98 (19 May 1980), p. 33198-33199. Excerpt, Subpart H-Financial Assurance (§264.140(c) and 265.140(c)).

#### Exhibit 2

Public Law 108-199, January 23, 2004. Excerpt, Section 127.

#### Exhibit 3

Public Law 106-246, July 13, 2000. Excerpt, Section 201.

#### Exhibit 4

Public Law 106-113, November 29, 1999. Excerpt, Section 220.

#### Exhibit 5

183-H Basins (Federal Facility) Closure/Postclosure Cost Estimates. Department of Ecology letter, dated January 18, 1991.

#### Exhibit 6

Subpart H Financial Responsibility Requirements, Office of Solid Waste letter, January 5, 1983. April 20, 1983, Memorandum on Financial Requirements. EPA reply letter, dated May 11, 1983.

#### Exhibit 7

RCRA Permit for the Hazardous Waste Storage Facility (White Sands), December 2009. Excerpt, Part 6.3 Schedule for Closure.

Exhibit 8

Sandia National Laboratories, Draft Hazardous Waste Facility Permit No. NM5890110518, August 20, 2007. Excerpt, Permit Part 7, Page 136 of 468. Excerpt, Permit Attachment 15, Page 371 of 468. Excerpt, Permit Part 7, Page 136 of 468. Excerpt, Permit Attachment 16, Page 409 of 468.

**Applicants - A. Grieggs**

Exhibit 1

NPDES Permit No. NM0028355, Authorization to Discharge Under the National Pollutant Discharge Elimination System (RLWTF).

**Applicants - G. Bacigalupa**

Note\*\*Mr. Bacigalupa's Testimony includes a list of references that he relied on in support of his testimony. Those references are included in the Administrative Record and copies are not provided. Copies of the following exhibits are attached to his testimony.

Exhibit 1

NMED v. DOE and LANS, LLC, HWB 07-10-(CO). Settlement Agreement and Stipulated Final Order. (Sigma Mesa Settlement Agreement)

Exhibit 2

EPA Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes, A Guidance Manual. Excerpt, p. 1-10 through 1-18.

**Applicants - E. Schultz-Fellenz**

NOTE\*\* These exhibits are in the Administrative Record as AR#31722, with in some cases, small differences explained in the text of the Direct Testimony E. Schultz-Fellenz.

Exhibit 1

Evaluation of potential seismic hazards from Holocene-age surface-rupturing faults at Building 185, Technical Area 55, Los Alamos National Laboratory. Includes Figures 1, 2, and 3, and Plates 1 and 2.

Exhibit 2

Evaluation of potential seismic hazards from Holocene-age surface-rupturing faults at Dome 375, Technical Area 54, Los Alamos National Laboratory. Includes Figures 1, 2, 3, 4, and 5 and Plates 1 and 2.

Exhibit 3

Evaluation of potential seismic hazards from Holocene-age surface-rupturing faults at Building 39, Technical Area 54, Los Alamos National Laboratory. Includes Figures 1, 2, 3, and 4 and Plates 1 and 2.

**Applicants - D. Katzman**

Exhibit 1

Figure 1. Simplified Diagram showing groundwater occurrences at Los Alamos National Laboratory.

Exhibit 2

Figure 2. Simplified monitoring well diagram showing typical two-screen construction.

Exhibit 3

Figure 3. Illustration shows TA-54, MDAs H, L, and G.

Exhibit 4

Figure 4. Map of TA-54 area showing updated water table contours following installation of seven new monitoring wells between December 2008 and June 2009.

Exhibit 5

TA-54 Cross-Section

**Applicants - D. McInroy**

Exhibit 1

Underground Units at G

Exhibit 2

Underground Units at L

Exhibit 3

Annual Funding for Consent Order Implementation

**Applicants - R. Mirenda**

Exhibit 1

Transmittal of Human Health and Ecological Screening Assessment for the Technical Area 16 Burn Ground, Revision 1, dated January 8, 2010. Enclosure Human-Health and Ecological Screening Assessment for the TA-16 Burn Ground. LA-UR 10-00086. AR#

Exhibit 2

Regulatory Toxicology and Pharmacology 3, 224-238 (1983). Excerpt, Regulatory History and Experimental Support of Uncertainty (Safety) Factors<sup>1</sup>, p. 225-238.

**Applicants – L. Vigil-Holterman**

Note\*\*Ms. Vigil-Holterman's testimony includes a list of references that she relied on in support of his testimony. Those references are included in the Administrative Record and copies are not provided. Copies of the following exhibits are attached to his testimony.

Exhibit 1

Permit Sections to be included within the LANL Hazardous Waste Facility Permit.

Exhibit 2

Excerpts from the September 3, 2009 comments to the July 2009 Revised Draft Permit.

Exhibit 3

Photograph of Technical Area 16, 388 Flash Pad.

Exhibit 4

Photograph of Technical Area 16, 399 Burn Tray.

Exhibit 5

Aerial Photograph of TA-16 Currently and Photos of Open Burning Units in 1998.

Exhibit 6

Clip of open burning treatment activity at TA-16-388.

Exhibit 7

Thermal Data Collection Report From Propane Burners at TA-16-388.

Exhibit 8

Soil sampling locations for 2009 at the TA-16 Burn Ground.

**Applicants – J. Tegtmeier**

Exhibit 1

National Nuclear Security Administration Overview Appropriation Summary, FY 2011 Congressional Budget. Excerpt, p. 5-8.