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CERTIFIED MAIL – RETURN RECEIPT REQUESTED

December 19, 2005

Rachel Conn
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George Rice
Concerned Citizens for Nuclear Safety
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Joni Arends
Concerned Citizens for Nuclear Safety
107 Cienega
Santa Fe, NM 87501



RE: Los Alamos National Laboratory (LANL) - Sanitary Waste Water System (SWWS) Facility, DP-857

Dear Ms. Conn, Mr. Rice, and Ms. Arends:

The New Mexico Environment Department (NMED) received your public comments and questions about the draft Discharge Permit, DP-857, in a letter received on August 24, 2005. NMED has not resolved all the questions raised in the August 24, 2005 letter. However, below you will find responses for those issues that can be addressed at this time. NMED is in the process of developing a new draft Discharge Permit, which takes your questions and comments into account. A new draft Discharge Permit will be provided to you once it has been completed.

1) Public Comment - Liability:

The discharge permit should specify joint and several liability among the permittees. The proposed discharge permit is addressed to the Department of Energy (DOE) and the University



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of California (UC), but it does not indicate which of those entities is responsible for what actions under the permit. The permit must be issued to the DOE and UC for operations at LANL. Please see the NMED Hazardous Waste Bureau's Compliance Order on Consent for LANL for an example of permitting LANL facilities. In order to make clear that each of the permittees is responsible for everything called for by the permit, it should specify that the permittees are jointly and severally liable for all of the actions to be performed under the permit.

NMED Response:

NMED will address this issue in the new draft Discharge Permit.

2) Public Comment - Protecting for Surface Water:

It is unclear from the language in the permit if this permit is meant to protect both surface and ground water. The permit identifies that it is supposed to protect both in the second paragraph, but then only refers to groundwater afterwards. If it is meant to protect surface water, which we would argue it should since it permits discharges to a surface water of the state, then the permit should not allow for discharges that exceed surface water standards. Since the receiving waters are dry or low flow most of the year and provide little to no dilution to the discharge they are considered "water quality limited" as per Clean Water Act regulations (40 CFR §130) and therefore the effluent limits should be based on what will protect the stream, not just technology based limits for secondary treatment. The effluent limits should also contain a margin of safety so that there is room for error and adequate protection of the stream.

NMED Response:

Discharge Permits issued pursuant to 20.6.2 NMAC are meant to be protective of groundwater and segments of surface waters which are hydrologically gaining due to groundwater inflow as described in 20.6.2.3101 (A). Surface water protection permits are issued by the United States Environmental Protection Agency (USEPA) under the National Pollutant Discharge Elimination Systems (NPDES) permitting program and certified by the NMED Surface Water Quality Bureau. Surface water protection concerns for the outfalls are regulated under NPDES permit # NM0028355.

3) Public Comment - Nitrogen and Fecal Coliform Limits:

The total nitrogen limit of 10 mg/L would appear to be based on the drinking water and groundwater standard of 10 mg/L, thus there is no margin of safety or consideration of existing water quality. The same concerns hold true for the fecal coliform limit. The total nitrogen and the fecal coliform should be reduced to take these factors into account. The nitrogen limit is not protective of surface water.

NMED Response:

The 10 mg/L total nitrogen limit is based upon the 20.6.2.3103 NMAC standard for nitrate, measured as nitrogen (NO₃-N), of 10 mg/L in groundwater. NMED has no regulatory authority to require a more stringent effluent limit than the existing standard

for nitrate. The fecal coliform limit is an element of NMED's "Policy for the Above Ground Use of Reclaimed Domestic Wastewater" dated August 7, 2003. Due to the use of reclaimed domestic wastewater in the cooling tower operation, NMED has requested that LANL voluntarily perform above ground reuse of domestic wastewater according to this policy in the interest of protection of public health. LANL has suggested in its comments that the enforceable NPDES limits for fecal coliform, BOD and TSS closely match the intent of NMED's policy with respect to protection of public health and therefore that this aim is effectively achieved. NMED is inclined to agree and is therefore considering dropping the request that LANL voluntarily comply with NMED's "Policy for the Above Ground Use of Reclaimed Domestic Wastewater" dated August 7, 2003.

4) Public Comment - BOD and TSS Limits:

The permit needs to specify if the limits for BOD are based on a 5-day CBOD or on some other method. The permit limits for BOD and TSS appear to be straight technology based secondary limits. Again, since the streams are small and/or dry most of the time, these levels are much too high to protect for dissolved oxygen and solids. Limits should be lowered to account for the size and quality of receiving waters.

NMED Response:

BOD limits in the Discharge Permit refer to BOD₅. BOD and TSS limits are not based upon the protection of surface water; rather they are an element of NMED's "Policy for the Above Ground Use of Reclaimed Domestic Wastewater" dated August 7, 2003. Due to the use of reclaimed domestic wastewater in the cooling tower operation, NMED has requested that LANL voluntarily perform above ground reuse of domestic wastewater according to this policy. NMED has no regulatory authority to require carbonaceous BOD or lower BOD/TSS limits under DP-857.

5) Public Comment - Ammonia and Phosphate Limits:

The permit does not include limits for ammonia and phosphates, both of which are associated with treated sewage and cooling water. Limits for both of these constituents should be added to the permit, taking into account a margin of safety and water quality of receiving waters.

NMED Response:

The draft Discharge Permit limits the quantity of ammonia in the waste stream through the 10 mg/L total nitrogen limit, which includes ammonia. 20.6.2.3103 NMAC does not contain a standard for phosphate, therefore, NMED has no regulatory authority to limit this constituent under DP-857.

6) Public Comment - PCBs and Radiologicals:

The permit does not seem to require testing for constituents besides bio-chemical oxygen demand, total suspended solids, fecal coliform, and nitrogen. The permit should include a requirement for testing for PCBs and radiologicals on a quarterly basis at all of the outfall points. If there are any detections of these constituents, the permit should require the permittee to report analytical results to the state within 48 hours. If these constituents are detected the permit should be revised to include specific effluent limits for the detected parameters. PCBs are especially a concern as there were elevated PCBs in a sample from the treatment plant in 1997.

NMED Response:

NMED is currently evaluating the historical nature of the waste stream and will address any findings in the new draft Discharge Permit.

7) Public Comment - Chlorine Limit:

The permit should include a limit for chlorine that is protective of the receiving surface water and groundwater. There were limits in the NPDES permit. It should be noted that the NPDES permit expired in January 2005 and unlike many NPDES permits which continue limits past the expiration date of the permit if there is a new timely application, this NPDES permit states that the permit limits expire on the expiration date of the permit. So, it may be that there is no limit for chlorine in place for the treated effluent that is being discharged at multiple locations. The state permit must provide coverage by stating a chlorine limit.

NMED Response:

Chlorine is not regulated under 20.6.2.3103 NMAC. However, the draft Discharge Permit proposes that total residual chlorine (TRC) be monitored in accordance with NMED's "Policy for the Above Ground Use of Reclaimed Domestic Wastewater" dated August 7, 2003. Chloride is a regulated constituent under 20.6.2.31013 NMAC and is also being monitored under this draft Discharge Permit.

8) Public Comment - Additional Permit Limits:

Most of the parameters in the permit appear to be associated with surface water, not groundwater. There are many constituents that are included in the state's groundwater standards, but none are included in this permit. If there are any possible contaminants that may be discharged, then the permit should include limits that protect groundwater standards with a margin of safety. Perhaps the constituents that are causing increased conductivity at outfall 03A027 (see comment below) have groundwater standards or water quality standards associated with them. If so, a specific effluent limit for these constituents should be included in the permit. Previous versions of this permit have required sampling for metals, including silver, arsenic, barium, cadmium, cyanide, chromium, fluoride, mercury, lead, selenium, copper, iron, manganese, sulphate, zinc and volatile and semivolatile organic compounds. The Ground Water

Quality Bureau must explain why these monitoring requirements were dropped from the new draft of the permit.

NMED Response:

NMED is currently evaluating the historical nature of the waste stream and will address any findings in the new draft Discharge Permit.

9) Public Comment - Canada del Buey:

The discharge plan does not mention a discharge location at Canada del Buey. Discharge from the treatment plant into Canada del Buey is covered by the federal NPDES permit where it is listed as outfall 13S. If any discharges are planned from outfall 13S, they must be covered by DP-857 as well as the NPDES permit. If no discharges are planned at this outfall location, then it should be removed from the NPDES permit and discharge conveyances should be removed.

NMED Response:

NMED agrees with your concern and will update the new draft Discharge Permit to reflect the discharge location at Canada del Buey to be via outfall 13S.

10) Public Comment - Differentiation Between Discharge Points Needed:

The DP Renewal does not differentiate between the three (possibly four) discharge points. The permit identifies three, and possibly four if discharges are planned at Canada del Buey, discharge locations, including water used for irrigation at the wastewater treatment facility, and discharges at outfalls 001 and 03A027. A differentiation between these multiple sites with respect to location, depth to groundwater, or quality of receiving waters should be included in the permit.

NMED Response:

NMED will update the new draft Discharge Permit to better differentiate the 5 potential discharge locations: Canada del Buey (Outfall 13S); Power Plant Outfall 001; Outfall 03A027; irrigation at the SWWS plant; and the Sigma-Mesa evaporation ponds.

11) Public Comment - Effluent Limits and Sampling at Points of Discharge:

The permit must require effluent limits and sampling at each point of discharge, that is, at the point the effluent is actually discharged to the environment. It is unclear from the permit what effluent limits, if any, apply to the water discharged at the outfall locations. It appears that the effluent limits apply only to the water that is discharged into the lagoons. The permit must require effluent limits and sampling at all points that the discharge is actually released to the environment. These locations would include outfall 001 (not before it goes to the storage tank, but when it actually is discharged from the storage tank and into the environment), outfall 03A027, and the irrigation system. If there is going to be a discharge at Canada del Buey, then effluent limits and sampling should be required at that point of discharge as well. All stairways

and paths to the sampling points must be improved to prevent injury to the samplers, including for outfalls 03A027 and TA3-285.

NMED Response:

NMED originally believed that the characteristics of discharges made to the effluent storage lagoon and from the effluent storage tank to the environment to be identical. Further investigation suggests that additional waste streams are added between the discharge from the storage tank and the environment. NMED will address this issue in the new draft Discharge Permit.

While NMED supports the need to provide and maintain safety for samplers and all workers at LANL, this issue is beyond the scope of the discharge permit and beyond NMED's regulatory authority.

12) Public Comment - Best Management Practices:

The permit must require periodic inspection of the best management practices (BMPs) surrounding the facilities, tanks, ponds and discharge points. Our tour of the facilities subject to this permit on July 28, 2005, indicates that LANL needs to be more proactive in this area, especially at TA-3.

NMED Response:

NMED will address this issue, to the extent possible under existing regulatory authority, in the new draft Discharge Permit.

13) Public Comment - Protocol for Proper Waste Disposal:

Protocol for ensuring toxic waste does not reach the wastewater treatment plant should be included in the permit. The discharge permit must include the references for the various waste acceptance criteria (WAC) required by the various plants and facilities using the system. Because of the risk of toxic materials being washed down the drains of multiple laboratory buildings from numerous technical areas on the LANL site and into the wastewater treatment plant, the permit should require documentation indicating what protocols are in place to ensure proper waste disposal is being practiced at LANL. This could include a requirement of signage on *all* sinks, drains, and toilets that feed into the wastewater treatment facility indicating that only non-toxic waste is allowed to be disposed of through these signed conveyances.

The discharge permit also should require that documentation of notification to each lab and or scientist as to what they may and may not dispose of in conveyances that lead to the wastewater treatment plant should be kept at the wastewater treatment facility offices. There have been a number of reports of the bacteria in the treatment plant being killed off all at once in response to improper dumping of contaminants down the drain and into the treatment facility. Does the state have any historical documentation of these events? The permit must require the permittee to immediately report to the state if a die off of treatment bacteria is observed. In such a case, the

permit must require immediate testing for constituents to identify the source of contamination and hopefully stop the process and remove the contaminants before they are discharged into the canyons.

NMED Response:

NMED does have historical documentation that suggests that toxic shock has impaired the treatment process at the SWWS facility, although no violation of DP-857 has been conclusively documented to have been caused by toxins. NMED agrees that the threat of toxic shock is significant and that this could result in releases of pollutants that could cause exceedances in ground water of constituents regulated under 20.6.2 NMAC. Therefore, NMED will address this issue in the new draft Discharge Permit in a condition that specifically requires sampling following indication of a toxic shock at the treatment facility, based upon process control testing. NMED will also investigate LANL's WAC and management of toxic materials. Where applicable, reference to the WAC will be made in the new draft Discharge Permit.

14) Public Comment - Evaporation:

Why are the linings and black plastic balls at the wastewater lagoons black? While we applaud the ingenuity of using floating plastic balls to decrease evaporation, we wonder why they are black? Having dark colored balls would seem to have the effect of increasing water temperature and evaporation. Perhaps there is a reason for the color of the balls of which we are not aware?

NMED Response:

The color black is a standard industry color and often the least expensive color of material to purchase. NMED does not regulate the choice of colors of lagoon liner or cover material selected by permittees.

15) Public Comment - Disposal of Solids:

Disposal of solids, including the sludge from the treatment plant, the reverse osmosis reject concentrate, and the bagged byproduct from the Sanitary Effluent Reclamation Facility (SERF) plant, should be explicitly covered by the DP 857. Locations, depth to groundwater, and quality of receiving groundwater should be identified as with liquids associated with the proposed DP. Disposal locations for these solid wastes should be provided in the permit, even if the location is off-site.

NMED Response:

NMED will address this issue in the new draft Discharge Permit.

16) Public Comment - Reporting of surface water run-on and run-off:

The requirement listed in paragraph 8 of the Operational Plan of inspecting the berms at the evaporative and storage lagoons should be reflected in the reporting requirements outlined in

paragraph 13 of the Operational Plan. The quarterly monitoring reports must include a requirement for written confirmation that these berm inspections have been completed “regularly and after any major rainfall event” and should require reporting of any observations of berm failure and a plan for subsequent, timely corrective action.

NMED Response:

Condition 13 of the draft Discharge Permit will be updated to reflect quarterly inspections of the berms.

17) Public Comment - Volume of treated wastewater:

It is unclear what the draft permit refers to in paragraph 14 of the Operational Plan when it states “permittees shall measure the monthly volume of treated wastewater discharged to the treatment plant”. To which point in the process is this requirement referring? Presumably it is *untreated* wastewater that is discharged into the treatment plant. The draft permit must specify if the requirement is referring to this untreated wastewater entering the plant or to the treated wastewater that is discharged from the treatment plant to the storage lagoons at TA-46 or to the 500,000-gallon holding tank. We request clarification of this point.

NMED Response:

Paragraph 14 of the Operational Plan will be updated to refer to *untreated* wastewater entering the treatment plant.

18) Public Comment - Dust and Air Quality Concerns:

The evaporation rate at the two double synthetically lined evaporative lagoons is close to, and in some circumstances higher than, the inflow rate of the reverse osmosis reject concentrate from the SERF plant. This could lead to the drying of solids and the creation of airborne particles or dust. The permit should require that this dust is contained and that an air quality monitoring station be installed if the lagoons consistently dry up. We suggest that such a requirement be included if the lagoons dry out completely more than twice in a quarter of the year, including during the summer.

NMED Response:

This issue will be discussed with the NMED Air Quality Bureau.

19) Public Comment - 500,000-Gallon Storage Tank and Drying Beds:

The permit must require regular inspections of the integrity of the 500,000-gallon storage tank and the synthetically lined sludge drying beds. The permit requires inspections of the evaporative lagoons and should require inspections for these two locations as well. The way that the permit is now written there could be an intentional or unintentional inflow or leak into the storage tank and there would be no mechanism for detecting it. It appears that sampling only occurs before the water flows to the tank and then after it has gone through the reverse osmosis

treatment process. Protocol to inspect for leaks in the tanks and requirements for sampling at the actual outfall 001 location should be added to the permit.

NMED Response:

NMED is currently evaluating this comment and will address any findings in the new draft Discharge Permit.

20) Public Comment - Outfall 03A027:

Despite additional requests for information about the increased conductivity in the cooling tower water, we have a number of outstanding questions. What constituents contribute to the increased conductivity of the water after it has left the cooling towers? The permit must require a conductivity effluent limit for outfall 03A027.

Does the state know if biocides are added to the water when it is cycled through the cooling towers? If they are, what is the concentration of the biocide when it is discharged into the canyon? Toxicity and conductivity effluent limits may be needed to detect concentrations of biocides.

If the water is treated through the SERF plant's reverse osmosis system, then why is the water only able to be cycled through the cooling towers a couple of times before the conductivity increases too much and the permittees have to discharge the water? The reverse osmosis process should almost completely reduce the presence of constituents in the water. Thus, even when exposed to conditions that cause a high rate of evaporation, the water should not have a substantial amount of constituent concentration. Clarification about this point is needed before the DP is reissued.

NMED Response:

NMED is aware of the following additives that are mixed into the waste stream prior to usage in the cooling towers:

- Formula 60 (defoamer) MSDS # 0513010;
- Formula 315 (biocide) MSDS # 0918615;
- Formula 312 (biocide) MSDS # 0918110;
- G-C Formula 310 (biocide) MSDS # 0918318;
- Formula 2011 (antiscalant) MSDS # 0827717;
- Formula 159 (antioxidant) MSDS # 0804518;
- Formula 316 (biocide) MSDS # 0921825; and
- Formula 314-T (biocide) MSDS # 0918417.

NMED is currently evaluating how to best regulate the waste stream discharged via Outfall 03A027. The reverse osmosis effluent from the SERF plant is blended with SWWS plant effluent prior to use in the cooling towers. This process will reduce, but not eliminate, the dissolved solids, measured as conductivity, in the cooling tower water. Evaporation in the cooling towers causes a concentration of water constituents. This

alone could account for the increase in conductivity noted at outfall 03A027, however, NMED is investigating all possible sources of constituents. This issue will be addressed in the new draft Discharge Permit.

21) Public Comment - Groundwater Wells:

In addition to wells being required if there is contamination from outfall 03A027 in Sandia Canyon, the permit must also require the installation of groundwater monitoring wells if contamination of ground or surface water is created from the evaporative lagoons, the sludge drying beds, the 500,000-gallon storage tank, outfall 0001 and areas that are used for irrigation. The Bureau must explain what happened to the requirement included in the October 1, 2002 discharge permit that in the event of "two consecutive quarterly analyses from outfall 03A027 exceed a section 20.6.3.3103 NMAC standard, LANL shall install a groundwater monitoring well in Sandia Canyon at a location approved by NMED." We strongly suggest that this requirement be reinserted into the permit.

NMED Response:

Conditions 18 and 24 of the draft Discharge Permit give NMED greater discretion in determining the need for and timing of the installation of a groundwater monitoring well in Sandia Canyon. NMED maintains discretion regarding the need for investigation, source control and abatement of ground water contamination resulting from any activities associated with the discharges through conditions 18,19 and 20.

22) Public Comment - Closure Plan:

The closure plan should require the permittee to remove piping rather than perforate it to ensure that the systems are not inappropriately or inadvertently used. Sampling of decommissioned equipment, storage beds and tanks should be required in the closure plan to show they are clean and appropriate for disposal or reuse.

The permit must also include a closure plan for the old sludge ponds at TA-3 directly east of the SERF. If the sludge ponds are part of the NMED Hazardous Waste Bureau Compliance Order on Consent, then a reference to the appropriate section should be cross-referenced in the DP.

NMED Response:

NMED is currently evaluating this comment and will address any findings in the new draft Discharge Permit.

23) Public Comment - Pharmaceuticals and other Organic Wastewater Contaminants:

There is increasing worldwide concern about evidence that pharmaceuticals and other organic wastewater contaminants are now being found in many drinking water supplies. In a 2000 study by the USGS, pharmaceuticals, hormones and other organic wastewater contaminants were found in 80% of the 139 streams sampled in the study. The detection of multiple contaminants

was common.¹ The individual and synergistic toxicity of these contaminants could be devastating our waterways and drinking water supplies. We are aware that there are presently no groundwater or surface water standards in place in New Mexico for pharmaceuticals and many organic wastewater contaminants. Yet, this does not mean that these contaminants are not a serious threat to our state's waters. In an attempt to quantify the amount of these contaminants that enter our environment from wastewater streams, we suggest adding a monitoring requirement for several of the more prevalent pharmaceutical contaminants to the other quarterly monitoring requirements identified in the draft discharge permit. Some of the more common pharmaceuticals, hormones and other organic wastewater contaminants are identified in the attached study.

LANL is an ideal place to begin to understand how to sample for hormones and pharmaceuticals, as well as how to start thinking about how to reduce concentrations in our treated effluent. Adding pharmaceuticals to the quarterly monitoring and reporting requirements in the permit would be a good first step toward understanding and controlling this widespread threat. If the regulatory handle is not available to require monitoring and reporting of pharmaceuticals, then we request that LANL do so on a voluntary basis as a public service to help protect New Mexico's public health and water resources.

NMED Response:

NMED is aware of the growing concern regarding these unregulated constituents and is aware of the USGS study. NMED endorses the suggestion that LANL could voluntarily lend resources to investigate the occurrence of these chemical compounds. However, the waste stream discharged from LANL is not representative of typical domestic wastewater (in many ways). In particular, the concentrations of personal care products and pharmaceutical compounds are most likely lower than for municipal discharges. NMED suggests that if an effort is undertaken by LANL to characterize the unregulated contaminants it be performed on a more traditional waste stream, such as the domestic discharge from the community of Los Alamos itself.

24) Public Comment:

The permit does not describe the fate of the wastewater discharged to Sandia Canyon from outfalls 001 and 03A027. How far down the canyon does it flow as surface water? Does it enter a perched alluvial or intermediate aquifer? This information is needed to design an effective monitoring system and should be included in the permit.

NMED Response:

NMED believes this issue is addressed through the corrective actions required of LANL under the draft Discharge Permit Conditions 18 and 24.

¹ "Pharmaceuticals, Hormones, and Other Organic Wastewater Contaminants in U.S. Streams, 1999-2000: A National Reconnaissance," March 15, 2002, Environmental Science and Technology, V. 36, No. 6. (Copy attached for inclusion in the DP-857 administrative record.)

25) Public Comment:

The permit does not require monitoring of the discharge from outfall 001. The discharge from outfall 001 is likely to contain a wide variety of contaminants, including PCBs, pesticides, and other organics². In some cases, these contaminants have approached or exceeded limits established by the State or the US EPA³ (e.g., trihalomethanes, total phenols)⁴. Is this discharge monitored under a different permit? If so, this fact should be mentioned in this permit. If not, this permit should contain monitoring requirements for outfall 001.

NMED Response:

NMED is currently evaluating data from a variety of sources in order to identify additional regulated constituents that need to be included in the new draft Discharge Permit. This includes constituents such as Trihalomethanes and total phenols. If NMED identifies justification for monitoring these and/or any other regulated constituents, monitoring for the additional constituents will be included for all appropriate outfalls. Changes will be reflected in the new draft Discharge Permit.

26) Public Comment:

The permit requires monitoring of discharge from outfall 03A027 only for TKN, NO₃-N, TDS, and Cl⁵. However, the discharge from outfall 03A027 is likely to contain a wide variety of contaminants, including metals, organics, and radionuclides⁶. In some cases, these contaminants have approached or exceeded limits established by the State or the US EPA⁷ (e.g., arsenic, total phenols, radium)⁸. The permit should be modified to require monitoring of all contaminants likely to be discharged from outfall 03A027.

NMED Response:

Please see previous response by NMED, as the question and response are similar.

27) Public Comment:

The permit does not require monitoring of sediment downstream of outfalls. The permit should be modified to require monitoring of sediments for contaminants expected to be contained in the discharges.

NMED Response:

NMED does not typically monitor sediment downstream of outfalls for domestic waste permits. This approach will be considered in light of the other controls included in the draft Discharge Permit.

² LANL 2004a, section regarding outfall 001.

³ NMWQCC, 2002, section 20.6.2.3103; and EPA 2004.

⁴ LANL 2004a, section regarding outfall 03A027.

⁵ NMED 2005a, section III, item 16.

⁶ LANL 2004a, section regarding outfall 03A027.

⁷ NMWQCC, 2002, section 20.6.2.3103; and EPA 2004.

⁸ LANL 2004a, section regarding outfall 03A027.

28) Public Comment:

Under certain conditions the permit requires LANL to stop discharging treated domestic wastewater to the irrigation area and the cooling tower⁹. The permit should state what LANL is required to do with the wastewater if it cannot be applied to the irrigation area or used for cooling.

NMED Response:

The first draft Discharge Permit required LANL to stop discharging to above ground reuse sites if the water quality set forth in NMED's "Policy for the Above Ground Use of Reclaimed Domestic Wastewater" dated August 7, 2003 could not be met. NMED is considering accepting LANL's suggestion that protection of public health is achieved through compliance with current NPDES permit standards. If this approach is taken in the new draft Discharge Permit, NMED will require that above ground re-use of the treated effluent cease at times when NPDES permit compliance cannot be achieved. This will require LANL to discharge to the NPDES permitted outfall(s), potentially in violation of NPDES permit requirements. LANL could then be subject to enforcement action from the USEPA. NMED believes that protection of public health from acute direct exposure to substandard wastewater necessitates this measure. The new draft Discharge Permit will clarify that when discharge to above ground sites is prohibited, discharge to the NPDES outfalls or no-discharge are the options open to LANL.

29) Public Comment:

If contaminant concentrations in the discharge from outfall 03A027 exceed State groundwater standards, LANL will be required to install a monitoring well¹⁰. The permit does not specify whether the well is to be completed in a perched aquifer or the regional aquifer. Nor does the permit explain why a single well will be sufficient. The permit should be modified to require the installation of a sufficient number of wells to determine the extent of groundwater contamination caused by the discharge from outfall 03A027.

NMED Response:

The installation of one monitoring well is for an initial investigation into the existence of ground water contamination. The draft Discharge Permit allows for subsequent investigation of the extent of ground water contamination, once identified (conditions 18 and 20). The location and number of monitoring wells used to identify the extent of ground water contamination will be addressed under a corrective action plan, if the need arises.

⁹ NMED 2005a, section III, items 22 and 23.

¹⁰ NMED 2005a, section III, item 24.

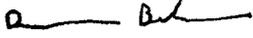
Ms. Conn, Mr. Rice, Ms. Arends, **DP-857**

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If you have any comments, questions, or concerns, please contact me at (505) 827-2900 or Christopher Vick at (505) 827-0078. Thank you for your cooperation during the review process.

Sincerely,



For

William C. Olson
Bureau Chief
Ground Water Pollution Prevention Section

WO:cv

cc: James Bearzi, Bureau Chief, NMED Hazardous Waste Bureau, P.O. Box 26110,
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