

#### **Communities For Clean Water**

April 29, 2015

By email to: steve.huddleson@state.nm.us

Steve Huddleson, Environmental Scientist Ground Water Quality Bureau New Mexico Environment Department P. O. Box 5469 Santa Fe, NM 87502-5469

## Re: CCW Response to April 15, 2015 Discussions about draft DP-1793 for Los Alamos National Laboratory Remediation Project

Dear Mr. Huddleson:

The Communities for Clean Water ("CCW") submit the following in response to the three hour April 15, 2015 meeting between CCW, the New Mexico Environment Department ("NMED") and representatives of the Department of Energy ("DOE"), National Nuclear Security Administration ("NNSA"), Los Alamos National Security, LLC ("LANS") (together, "the Applicants") to discuss the draft groundwater discharge permit DP-1793 for the Los Alamos National Laboratory ("LANL") Remediation Project.

CCW provides these comments in good faith. We question the bases for the permit under the New Mexico Ground Water Quality Act and its implementing regulations. NMSA 1978, Section 74-6-1 *et seq.* CCW believes the Resource Conservation and Recovery Act ("RCRA") may apply to the proposed activities. We, therefore, reserve our right to raise issues under RCRA.

#### **CCW Request for Public Hearing**

CCW restates our request for a public hearing about the draft permit. There is significant public interest in this permit because the proposed permit does not require recycling and/or reuse of the water, does not address the increasing seismic risk in New Mexico, and does not require the posting of all deliverables/documents

exchanged between NMED and the Applicants under the permit to LANL's Electronic Public Reading Room ("EPRR"), among other issues.

#### March 2, 2015 CCW Comments

CCW incorporates our March 2, 2015 public comments to NMED about the draft permit by reference. We begin by providing our March 2, 2015 comments below, state our understanding of the resolution of the issues during the April 15<sup>th</sup> meeting *in italics*, and in some cases provide additional information. If our understandings are not correct, we request a written response from NMED before the permit is finalized.

#### Specific Comments

1. <u>Timely postings to LANL's Electronic Public Reading Room ("EPRR")</u>. As required in the Individual Stormwater Permit, the Hazardous Waste Permit, etc., the permit should require the Permittees to post the following documents in the EPRR:

- a. Condition 3 written notification (workplan) to NMED
- b. NMED's response to the written notification (workplan), along with the NMED response to public comments
- c. Condition 8 discharge report to NMED
- d. NMED's response to the discharge report
- e. Condition 9 semi-annual monitoring reports due August 1 and February 1
- f. NMED's response to the semi-annual monitoring reports
- g. Condition 12 groundwater exceedance notification
- h. Condition 12 submittal of corrective action plan (CAP) to NMED for approval
- i. NMED's response and/or approval, including correspondence requesting additional information
- j. Permittees' responses to NMED requests
- k. Condition 13 soil sampling exceedance workplan for "comprehensive investigation of the nature and extent of impact and a corrective action/remedial plan to address exceedances" to NMED
- 1. NMED's response and/or approval, including correspondence requesting additional information
- m. Permittees' response to NMED requests
- n. Condition 14 defective groundwater well construction notification to NMED
- o. NMED's response and/or approval, including correspondence requesting additional information
- p. Permittees' responses to NMED requests
- q. Condition 15 groundwater well not hydrologically downgradient of the discharge location(s) it is intended to monitor notification to NMED

- r. NMED's response and/or approval, including correspondence requesting additional information
- s. Permittees' responses to NMED requests
- t. Condition 16 release (commonly known as a "spill") notification, corrective action report/plan and any abatement proposal
- u. NMED's response and/or approval, including correspondence requesting additional information
- v. Permittees' responses to NMED requests
- w. Condition 17 failures of discharge plan
- x. NMED's response and/or approval, including correspondence requesting additional information
- y. Permittees' responses to NMED requests
- z. Condition 18 closure and post-closure activities all documents exchanged between NMED and the Permittees under this Condition
- aa. Condition 22 modifications and/or amendments all documents exchanged between NMED and the Permittees under this condition
- bb. Condition 23 plans and specifications all documents exchanged between NMED and the Permittees under this condition
- cc. Condition 27 right to appeal all documents exchanged between the Permittees and the Water Quality Control Commission
- dd.Condition 28 transfer of discharge permit all documents exchanged between NMED and the Permittees under this condition

*On April* 15<sup>th</sup>, NMED asked that we provide a list of mandatory and voluntary postings. The Applicants said that they would not post the NMED responses.

The Applicants have responsibilities to keep the public informed about activities that have the potential to impact/harm. The purpose of 20.6.2.3000 through 20.6.2.3114 NMAC "Permitting and Ground Water Standards," is

to protect all ground water of the state of New Mexico which has an existing concentration of 10,000 mg/l or less TDS, for present and potential future use as domestic and agricultural water supply, and to protect those segments of surface waters which are gaining because of ground water inflow, for uses designated in New Mexico Water Quality Standards. 20.6.2.3101.A NMAC

During our discussions, the Applicants provided a map of approved and prohibited land application areas in Sandia and Mortandad Canyons. "Enclosure 3," ENV-DO-15-0040, LA-UR-15-20756. It appears that the proposed approved land application areas are near Los Alamos County drinking water wells, a domestic water supply. Further, Sandia and Mortandad Canyons flow to the Rio Grande. At the mouth of the canyons, there are springs at the river that discharge groundwater into the gaining Rio Grande. In addition, the City of Santa Fe and the Santa Fe County draws water from the Rio Grande for their domestic water supply at the Buckman Direct Diversion Project directly east of Sandia and Mortandad Canyons. The City also has 13 deep wells for its domestic water supply, located directly east of the canyons.

The permit allows land application of remediation waters into the canyons that flow to the Rio Grande and drinking water supplies. CCW finds that the permit does not protect all ground water of the state of New Mexico as required by 20.6.2.3101 NMAC. Our requested posting of key permit deliverables/documents to the EPRR would help protect all ground water of the state of New Mexico because LANL would be required to be transparent with its activities. The public would have an opportunity to monitor the deliverables/documents. The permit must require the Applicants to post the requested documents.

As Sister Marlene so poignantly described: Our self-interest is our communities. LANL's self-interest is LANL. Sometimes our self-interest is the same. In this case, our interests are the same – to protect all ground water. In order to do that, NMED should require the Applicants to post all the requested Applicant and NMED deliverables/documents to LANL's EPRR in a timely manner.

Nothing in the Ground Water regulations prevents NMED from requiring the Applicants to post the deliverables/documents to the EPRR.

2. <u>Opportunity for Review and Comment about Permittee's Workplans</u>. The draft permit provides a framework for the actual work to be done. The details are not provided; those are provided in the individual workplans. For that reason, the workplans should be required to be posted for public review and comment. A public comment period should be provided. We suggest at least thirty (30) days.

The LANL site is complicated with multiple levels of permitting. These permitted activities will impact both surface and groundwater. Allowing for review and a public comment period of the workplans will ensure that ground and surface water will be protected "for present and potential future use as domestic and agricultural water supply and other uses to protect public health." Draft Permit, Para. 2, p. 1. Water is precious and every effort should be made to ensure its protection and use. Review of the workplans by the public will ensure that water is protected.

NMED, the Applicants and CCW agreed that a public review and comment period would be required in the permit. The draft work plan would be posted to the EPRR. The Applicants suggested a 15-day public comment period and a 15-day period for NMED to review the work plan, the public comments and either approve, deny or approve the work plan with modifications. The applicable regulations require more time for the NMED and public processes.

*Under* 20.6.2.3108 NMAC "Public Notice and Participation," the proposed work plans constitute a modification to the permit. As stated on April 15<sup>th</sup>, the details will be provided in

the work plans. Examples of the details include where the discharge will take place, the possibility of discharging off the LANL site (in Los Alamos County, on U.S. Forest Service lands, etc.), whether tracers will be used, whether there would be seeding with native seeds following land application, and options for configuring pump-treat-discharge systems (Applicants' February 25, 2014 Comment No. 2), etc.

The Applicants should have planned ahead to incorporate the regulatory time frames into their work preparations. The original application was submitted to NMED in December 2011 and withdrawn and re-submitted on January 8, 2014 – what happened in the meantime?

*The regulations are clear about the time required for NMED to process the applications/work plans and the requirements for public notice and participation. For example,* 

*"Within 15 days of receipt of an application for a discharge permit, modification or renewal, the department shall review the application for administrative completeness."* 20.6.2.3108.A NMAC.

"Within 30 days of the department deeming an application for discharge permit or discharge permit modification administratively complete, the applicant shall provide notice, in accordance with the requirements of Subsection F of 20.6.2.3108 NMAC, to the general public in the locale of the proposed discharge in a form provided by the department...." 20.6.2.3108.B NMAC.

"Within 15 days of completion of the public notice requirements in Subsection B or C of 20.6.2.3108 NMAC, the applicant shall submit to the department proof of notice, including an affidavit of mailing(s) and the list of property owner(s), proof of publication, and an affidavit of posting, as appropriate." 20.6.2.3108.D NMAC.

"Within 60 days after the department makes its administrative completeness determination and all required technical information is available, the department shall make available a proposed approval or disapproval of the application for a discharge permit, modification or renewal, including conditions for approval proposed by the department or the reasons for disapproval." 20.6.2.3108.H NMAC.

"In the event that the proposed approval or disapproval of an applications for a discharge permit, modification or renewal is available for review within 30 days of deeming the application administratively complete, the department may combine the public notice procedures of Subsections E and H of 20.6.2.3108 NMAC." 20.6.2.3108.J NMAC.

"Following the public notice of the proposed approval or disapproval of an application for discharge permit, modification or renewal, and prior to the final decision by the secretary, there shall be a period of at least 30 days during which written comments may be submitted to the department and/or a public hearing may be requested in writing. The 30-day comment period shall begin on the date of publication of notice in the newspaper." 20.6.2.3108.K NMAC.

Section 20.6.2.3109 "Secretary Approval, Disapproval, Modification or Termination of Discharge Permits, and Requirement for Abatement Plans" provides for additional time requirements for a public hearing. The draft permit states that the permit would be issued under Subsection C of 20.6.2.3109 NMAC. Draft Permit, p. 1.

*The regulations are clear. If the Applicants want a permit to land apply remediation waters, they should have planned ahead.* 

3. <u>Calculations for 350,000 gallons per day (gpd) discharge</u>. It is unclear how the Permittees and the Department arrived at the 350,000 gpd discharge limit. It is unclear whether this volume is exclusively for land application. A daily discharge volume of 250 gallons per minute (gpm) for 10 hours per day is given. Please provide the calculations used. We did not find calculations in the Permittees' application.

On April 28, 2015 Danny Katzman provided the following to NMED in an email:

The 350,000 gpd represents a maximum allowable daily application rate. 350,000 gpd may reflect the amount of total daily pumping and treatment at any given time ( which equates to a total of approximately 250 gpm) or it may be the amount of water that would be land applied after storing treated groundwater pumped from two or more wells at a cumulative rate less than 250 gpm. Stored water will be held in tanks and impoundments and processed for land application in batches not to exceed the 350,000 gpd limit.

*The final permit should incorporate this language, perhaps in paragraph 4 on page 1.* 

4. <u>Reference to NMED Risk Assessment Guidance</u>. It is unclear whether this is for site screening or tap water. Will NMED require the most recent version of the guidance for compliance? <u>Id.</u>, Para. 4, p. 1.

For all references to the Risk Assessment guidances, the permit should require the most recent version of the guidances be used.

It was agreed that the final permit would specify whether the NMED Risk Assessment Guidance was for soil screening or tap water. It was agreed that the final permit would require most recent version of the guidances.

5. <u>No Justification for Allowing the Discharge to Contain Water Contaminants</u> Which May Be Elevated above 20.6.2.3103 NMAC and/or Subsection WW of 20.6.2.7 <u>NMAC</u>. We find no justification either in the draft permit or the Permittees' application for allowing the Permittees to discharge containing water contaminants above the Water Quality Control Commission (WQCC) standards. In fact, the permit requires, "[p]rior to discharge, all groundwater will be treated to achieve standards equal to < [less than] 90% of the numeric standards of 20.6.2.3103 NMAC or < [less than] 90% of the numeric standards established in Table A-1, NMED Risk Assessment Guidance SSLs [Site Screening Levels] for tap water for constituents not listed in 20.6.2.3103 NMAC." <u>Id.</u>, Para. 5, p. 1. The water is required to be treated to less than 90% of the applicable standards. If the water is not below standards, the permit should not allow it to be discharged. If it is above standards, then the permit should require operations to cease and a corrective action plan is submitted by Permittees. See also, Enclosure 2 of the NMED Discharge Permit Application Part B General, Jan. 7, 2014, ENV-DO-13-0343, LAUR-13-29467, Sec. B-11 (b), p. 4.

*We understand that the first sentence in Para. 5, p. 1 of draft permit is boilerplate permit language. Nevertheless, it is disconcerting. This paragraph should include language that the Applicants will batch water before application.* 

For clarity, we suggest the final permit include "[less than]" following the use of the ">" symbol in this paragraph.

Again, we ask what is the technical basis for the Applicants to treat the water to less than 90% of the applicable standards? We did not find any justification in the Applicants' applications. Why not teat the water to less than 50% of the applicable standards?

#### 6. <u>Permit Term</u>. What is the permit term? 5 years? 10 years?

*The permit term is five years. The final permit should so state.* 

7. <u>Land Application</u>. We find it inappropriate to allow the entire site to be available for discharge and land application of the treated water. Details of land application techniques, calculation of application rates and calculation of 'water balance' for the site should be presented in the workplan. The water balance, when properly prepared, can be used to minimize or eliminate runoff and erosion from applied water from the site as it takes into account seasonality of precipitation, evapotranspiration, measured infiltration rates, conservative Ksat safety factors, etc. to ensure that reasonable infiltration occurs. The water balance can also be used to inform operational plans to balance storage, inflows and outflows.

Additionally, land application strategies/technologies and identification of sites using topographic maps that show slopes, drainages, land features and other wells should be included in the workplan and made available for public review and comment.

The monitoring plans (as required by Section B of the discharge permit) should include not only total volumes of water land-applied but also area covered to ensure that point-loading, runoff, and erosion is minimized and that conditions of the Permittees' *Land Application of Groundwater* standard operating procedures are met.

Applicants stated that land application would protect cultural and historical places, would not occur on any lands with a slope greater than five percent (5%), and the discharge would not occur on permeable surfaces. The final permit should so state these limitations.

Please see our comments in No. 9 below, "Condition 3. Workplan."

8. <u>Section III. Authorization to Discharge</u>. Does the draft permit allow one discharge per the 55 "separate surface locations identified in tabular format as Attachment 1" at a time? This language may need to be clarified.

The final permit should be clear that the entire LANL site is available for discharge and there may be discharges on lands outside of LANL. We understand that there are criteria in the Applicants' "internal" standard operating procedure, ENV-RCRA-OP-010.3, "Land Application of Groundwater," which is not available to NMED or the public. How do we ensure all the criteria are met?

This section should include the hours of discharge. The Applicants stated they would land apply for up to 10 hours per day.

9. <u>Condition 3. Workplan</u>. The workplan should provide a listing of all applicable water permits and the covered sites in the work area, as well as those downstream to the Rio Grande river.

Besides the list in the draft permit, the work plans should also include:

- a. The requirements listed in 20.6.2.3106.C NMAC;
- *b. A description of possible re-use of the water and proposed demonstrations of water re-use;*
- *c.* A description of possible opportunities for water conservation and proposed demonstrations of water conservation;
- d. how the discharge will meet the requirements of 20.6.2.3109.C.3.c NMAC:
  "(i) the monitoring system proposed in the discharge plan includes adequate provision for sampling of effluent and adequate flow monitoring so that the amount being discharged onto or below the surface of the ground can be determined;
  "(ii) the monitoring data is reported to the secretary at a frequency determined by the secretary."
- *e. the monitoring plans should include not only total volumes of water land-applied, but also the area covered to ensure that point-loading, runoff, and erosion is minimized;*
- *f.* soil sampling to determine the background concentrations of pollutants **before** land application begins;
- *g.* soil sampling *after* land application to determine if the pollutant concentrations have increased;
- *h.* calculations of application rates;

- *i.* calculations of 'water balance' for the site. The water balance, when properly prepared, can be used to minimize or eliminate runoff and erosion from applied water from the site as it takes into account seasonality of precipitation, evapotranspiration, measured infiltration rates, conservative Ksat safety factors, etc. to ensure reasonable infiltration occurs. The water balance can also be used to inform operational plans to balance storage, inflows and outflows;
- *j. the required map(s) should include topographic features, such as slopes, drainages, land features and other wells;*
- *k.* the type of flow meters that will be used; their efficiency; and how they will be calibrated;
- *l.* potential impacts to nearby drinking water supply wells, characterization/monitoring wells, wetlands, surface impoundments, etc.;
- *m.* document the surrounding Site Monitoring Areas ("SMAs") covered by the Individual Stormwater Sites, National Pollution Discharge Elimination System ("NPDES") sites, sites covered by NMED groundwater discharge permits, SMAs and Areas of Concern ("AOCs") covered by the NMED 2005 Order on Consent for LANL, sites covered by the NMED Hazardous Waste Permit for LANL, surface impoundments and surface drainage features;
- *n. ensure there will be no run on or run off from SMAs, AOCs, and surface impoundments;*
- o. groundwater flow direction;
- *p. closure plan and post-closure plan, if applicable. See Section D "Closure Plan" in draft permit. Also 20.6.2.3107.A.11 NMAC; and*
- *q.* whether tracers will be used, the specific radionuclide and its half-life.

10. <u>Condition 4. Land Application</u>. We could not find the LANS/DOE Standard Operating Procedure, ENV-RCRA-OP-010.3, *Land Application of Groundwater* in the LANL Electronic Public Reading Room. We have requested an electronic copy from DOE/LANS and reserve the right to provide additional comments after we receive it.

This section should include criteria to prevent run-on.

Applicants stated that the Land Application of Groundwater SOP is an internal document and not available to NMED nor the public. Applicants said that they would provide the criteria found in the SOP for inclusion in the permit. We have not seen the criteria.

The permit needs to define "watercourse," which is found in the first two listed items. Can a watercourse be ephemeral?

Does "cannot result in runoff to watercourse" mean there will be no surface runoff? We suggest language such as "no signs of soil erosion as a result of the land application" may be inserted in the second listed item. 11. <u>Condition 10.</u> Use of the Interim Facility-Wide Groundwater Monitoring Plan. The condition should include a requirement that the Permittees use the most recently NMED approved version of the plan. We have serious concerns about the quality of data provided by the Permittees to support the Interim Facility-Wide Groundwater Monitoring Plan. We excerpt the following from the Appendix A (pp. A-11 and A-12), by Independent Registered Geologist Robert H. Gilkeson, to the December 12, 2013 CCW comments to the Department regarding the proposed permit DP-1132 for the Radioactive Liquid Waste Treatment Facility:

The National Academy of Sciences issued a report entitled, Plans and Practices of Groundwater Protection at Los Alamos National Laboratory, in 2007 that described the requirement to replace many, and possibly all, of the LANL characterization wells. See <a href="http://dels.nas.edu/Report/Plans-Practices-Groundwater-Protection/11883">http://dels.nas.edu/Report/Plans-Practices-Groundwater-Protection/11883</a>

The NAS report states in pertinent part:

Many if not all of the wells drilled into the regional aquifer under the LANL Hydrogeologic Workplan appear to be compromised in their ability to produce water samples that are representative of ambient groundwater for the purpose of monitoring. <u>Id.</u>, p. 49.

In November 2010, the NMED Hazardous Waste Bureau (HWB) issued General Responses to Comment on the LANL Renewal RCRA Permit. See <u>http://www.nmenv.state.nm.us/HWB/Permit.htm</u> On the NMED webpage under the heading "Renewal Permit," click on the topic "General Response to Comments."

In the document, the NMED HWB agreed with the conclusions in the NAS 2007 Report about the greater than 40 LANL characterization wells installed for the LANL Hydrogeologic Workplan. The NMED described the LANL characterization wells as not meeting the requirement to be monitoring wells for the NMED 2005 Order on Consent or the NMED 2010 Renewal of the Federal Resource Conservation and Recovery Act (RCRA) Permit for LANL.

For example, in the NMED 2010 General Response to Comment, the Department stated:

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.

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). These [characterization] 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. [Emphasis supplied.]

Reliance on the Interim Facility-Wide Groundwater Monitoring Plan to provide information about water contamination is inappropriate given the on-going concerns about the use of characterization wells for monitoring purposes.

Even though NMED wrote that the characterization wells "have limited relevance to groundwater protection goals set forth by the March 1, 2005 Consent Order," we agreed to disagree.

12. <u>Condition 11. Soil Sampling</u>. The condition should require the use of the most recent Table A-1 *Risk Assessment Guidance for Site Investigations and Remediation,* as NMED does update the requirements from time to time.

Agreed.

13. <u>Condition 13. Soil Sampling</u>. Does NMED approve the corrective action/remediation plan? If so, the permit should so state.

*The final permit should state, "The plan shall be enacted as approved by NMED," as provided in Condition 12.* 

14. <u>Condition 18. Closure and Post-Closure Measures</u>. The permit should properly cite the Consent Agreement as the "2005 NMED Order on Consent for LANL." This condition needs to be clarified that it includes both closure and post-closure activities.

There were questions about what would happen to the water used to clean the tanks, lagoons, liners and treatment systems. See 3-13-12 Application, §B-18. The final permit should address this.

When all post-closure requirements have been met, we requested a 30-day comment period prior to NMED terminating the discharge permit.

15. <u>Condition 19. Record Keeping</u>. The Permittees should be required to keep all records under this permit until at least the time the 2005 NMED Order on Consent for LANL is completed.

16. <u>Permittees' Application - Tracer Studies</u>. We are concerned that the Permittees may use radioactive tritium, or other radioactive materials in the tracer studies. See Enclosure 2 of the *NMED Discharge Permit Application Part B General*, ENV-DO-13-0343, LAUR-13-2967, p. 1. If tritium were used, what standard for tritium discharge would be used? What standard will be used for other radioactive materials that may be used?

The January 30, 2015 PN2 states that the potential contaminants include radionuclides. The workplans should state what radiologic contaminants are present in the water to make sure that contaminant is not used as a tracer.

17. <u>Operational Plan</u>. We are concerned that responsibility for work to be done falls on subcontractors. The Permittees have not properly managed and overseen their subcontractors, e.g., waste characterization issues. We are concerned about placing this level of responsibility on the subcontractors, without specific oversight responsibilities for the Permitees:

At the conclusion of treatment activities, management of treatment system solids will be the responsibility of the treatment system subcontractor; management will be conducted in accordance with all applicable local, state, and federal regulations. <u>Id.</u>, Part 3, p. 3.

Management of spent treatment system resins and media will be the responsibility of the subcontractor and will be conducted in accordance with all applicable local, state, and federal regulations. <u>Id.</u>, p. 6.

NMED stated that the Applicants are responsible for all work.

### **Applicants' Comments**

1. We support the following Applicants' February 25, 2014 (2015?) Comments (Enclosure 2), ENV-DO-15-0054, LA-UR-15-21000:

- \* Comment 1,
- \* Comment 2,

\* Comment 3 – the final permit should reference the internal working agreement/decision tree between NMED and Applicants that allows discharge without a permit, with the discharge reported in an annual report. The name of the annual report should be included in the final permit.

\* Comment 4 - with modification, *see* comments above for Introduction, paragraph 5,

\* Comment 5 - we note Applicants' statement that the water will not be used for snowmaking,

- \* Comment 6,
- \* Comment 7,
- \* Comment 9,
- \* Comment 15
- \* Comment 18,
- \* Comment 19,
- \* Comment 20,

\* Comment 21 – with the addition of "clean" to Condition 18(b), *also see* our comments above in No. 14,

\* Comment 23, and

\* Comment 25.

2. We do not support the following Applicants' Comments, <u>Id.</u>:

\* Comment 8 – we support NMED's position to leave in reference to the Chromium Project.

\* Comment 10 – we support NMED's position to require "soil sampling methodology following application." *Also see* our comments above at No. 9, for Condition 3.

\* Comment 11 – we support "land application must be supervised at all times" because mistakes can be made. Protection of the watershed is the priority and supervision will help to accomplish that goal.

\* Comment 12 – we support the use of independent environmental laboratories certified by the National Environmental Laboratory Accreditation Program (NELAP). LANL is a high impact facility subject to public scrutiny. Independent laboratory analysis is essential to transparency.

\* Comment 13 – we support and the regulations require water quality and soil sampling. 20.6.2.3107.8 NMAC. We support soil sampling before and after application to determine the cumulative levels of pollutants. *Also see* our comments above.

\* Comment 14 – we support semi-annual reporting. This level of reporting will provide transparency about the sampling results of the land application.

\* Comment 16 – we support sampling for metals or other inorganic constituents. The pollutants do not break down and therefore can accumulate. We need to know if the metals accumulate in soils to levels that exceed standards. Those soils will need to be cleaned up so that the pollutants will not be re-mobilized in storm water.

\* Comment 17 – we need more information in order to comment.

\* Comment 22 – we do not support the removal of the requirement that the facility record drawings "bear the seal and signature of a licensed New Mexico professional engineer." The NMED Hazardous Waste Permit for LANL requires the signature and stamp of a registered professional engineer. Below are two examples:

#### a. **10.2.3 Completion of Post-Closure Requirements**

The certification must be signed by the Permittees and an independent, New Mexico registered professional engineer. Documentation supporting the independent, registered professional engineer's certification must be furnished to the Department in conjunction with the certification. (see 40 CFR §§ 264.120 and 270.32(b)(2)).

# b. 11.8.8.1 Remedy Completion Report (2) a statement, signed by a registered professional engineer, that the remedy has been completed in accordance with the Department approved work plan for the remedy; (3) as-built drawings and specifications signed and stamped by a registered professional engineer;

https://cloud.env.nm.gov/waste/?c=185&k=14aade0874 see Parts 1 through 11.

\* Comment 24 – we support semi-annual reporting for the reasons described above.

#### **Additional Comments**

1. The permit should limit land application to March 16<sup>th</sup> to December 15<sup>th</sup> of each year. See Applicants' February 25, 2014 (or 2015?) Comments No. 14.

2. Condition 6(e) should read "Resource Conservation and Recovery Act."

Thank you for your careful consideration of our comments. Please contact us with any questions, comments or concerns. We look forward to next steps.

Sincerely,

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