



Communities For Clean Water

March 2, 2015

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

Steve Huddleson, Environmental Scientist
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New Mexico Environment Department
P. O. Box 5469
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Re: Public Comments and Request for Public Hearing of the New Mexico Environment Department January 30, 2015 Public Notice 2 for the Los Alamos National Laboratory Remediation Project, draft DP-1793

Dear Mr. Huddleson:

The Communities for Clean Water ("CCW") submit the following environmental justice, general and specific public comments, and request for a public hearing in response to the January 30, 2015 Public Notice 2 (PN2) of the New Mexico Environment Department ("NMED") draft Ground Water Discharge Permit for the Los Alamos National Laboratory ("LANL") Remediation Project, DP-1793.

CCW is a network of organizations whose mission is to ensure that community waters impacted by LANL are kept safe for drinking, agriculture, sacred ceremonies, and a sustainable future. Our growing network includes Concerned Citizens for Nuclear Safety, Amigos Bravos, Honor Our Pueblo Existence, the New Mexico Acequia Association, the Partnership for Earth Spirituality, and Tewa Women United. CCW brings together the vast expertise and commitment of widely respected and well-tested advocacy groups from culturally diverse backgrounds. Collectively CCW represents the only community-based coalition in Northern New Mexico that has been monitoring and advocating for better public water policy to address the toxic threats from LANL. As the sacred homeland of the Pueblo Peoples, it is vitally important that clean water be protected on the Pajarito Plateau. CCW has been working as a coalition to address contaminated water from LANL and Los Alamos County since 2006.

Request for Public Hearing

CCW respectfully requests a public hearing about the draft permit. There is significant public interest in this permit because the draft permit is incomplete.

For example, the draft permit allows for discharge of 350,000 gallons per day (gpd) – more than an acre-foot of water a day -- at unspecified locations across the entire 36-square mile site.

There are no provisions for additional public review and comment for the treatment and discharge workplans that will be submitted by the Department of Energy (“DOE”) and Los Alamos National Security, LLC (“LANS”) (“the Permittees”).

There are no requirements that guide techniques or requirements for land application aside from reference to LANL’s standard operating procedures, a document that is not available on the Permittees’ Electronic Public Reading Room (“EPRR”).

There is no requirement for the Permittees to post pertinent documents in a timely manner to the EPRR in order to provide notice to the public that such activities are planned.

For those living downwind and downstream of LANL, the draft permit for “umbrella-coverage to a diversity of ground water activities at Los Alamos National Laboratory” appears to be an open invitation to discharge over an acre foot of water “anywhere within the 36 square mile Los Alamos National Laboratory site,” every day on the Sacred Pajarito Plateau.

General Comments

The draft permit is very broad. It allows the Permittees to discharge “anywhere within the 36-square mile LANL site.” Accordingly, DOE/LANS propose to include all 55 sections as possible discharge locations.” *Amended Discharge Permit Application DP-1793, ENV-DO-13-0343, LAUR-13-29467, Jan. 7, 2014, Part A, p. 3.*

The draft permit provides general requirements. It relies on the Permittees’ workplans to provide the specificity about the activities, location, timing, length of time, monitoring, location for land application, cleanup and closure, etc. There is no opportunity for public review and comment for the workplans.

There is no mention in the permit about taking care to ensure no run on or run off to or from the site monitoring areas (SMAs) in the Individual Stormwater Sites, National Pollution Discharge Elimination System (NPDES) permits, groundwater discharge

permits, well locations, drinking water wells, surface impoundments, and surface drainage features, etc.

Specific Comments

1. Timely postings to LANL's Electronic Public Reading Room (EPRR). 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
 - l. 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
- ee.

2. Opportunity for Review and Comment about Permittee's Workplans. 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.

3. Calculations for 350,000 gallons per day (gpd) discharge. 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.

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

5. No Justification for Allowing the Discharge to Contain Water Contaminants Which May Be Elevated above 20.6.2.3103 NMAC and/or Subsection WW of 20.6.2.7

NMAC. 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." Id., 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.

6. Permit Term. What is the permit term? 5 years? 10 years?

7. Land Application. 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.

8. Section III. Authorization to Discharge. 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.

9. Condition 3. Workplan. 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.

10. Condition 4. Land Application. 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.

11. Condition 10. 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 <http://dels.nas.edu/Report/Plans-Practices-Groundwater-Protection/11883>

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. *Id.*, p. 49.

In November 2010, the NMED Hazardous Waste Bureau (HWB) issued General Responses to Comment on the LANL Renewal RCRA Permit. See <http://www.nmenv.state.nm.us/HWB/Permit.htm> 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.

12. Condition 11. Soil Sampling. 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.

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

14. Condition 18. Closure and Post-Closure Measures. 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.

15. Condition 19. Record Keeping. 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. Permittees' Application - Tracer Studies. 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?

17. Operational Plan. 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 Permittees:

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. Id., 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. Id., p. 6.

Thank you for your careful consideration of our comments. We look forward to next steps.

Sincerely,

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