

STATE OF NEW MEXICO
BEFORE THE WATER QUALITY CONTROL COMMISSION

In the matter of a petition appealing)
The Secretary of the Environment's)
Denial of a Hearing on DP-1793)
)
Communities for Clean Water,)
Petitioner)

WQCC- 15-07(A)



COMMUNITIES FOR CLEAN WATER
APPEAL OF NEW MEXICO ENVIRONMENT DEPARTMENT SECRETARY'S
DENIAL OF PUBLIC HEARING AND APPROVAL OF DISCHARGE PERMIT
1793

Communities for Clean Water ("CCW"), pursuant to NMSA 1978, §74-6-5(O), hereby appeals the Secretary of the New Mexico Environment Department's ("Secretary's") denial of a public hearing, issued on July 24, 2015, in the matter of discharge permit 1793 (DP-1793) for the Los Alamos National Laboratory ("LANL"), and the final approval of DP-1793. In support whereof, Petitioner states the following:

1. NATURE OF PETITION AND FILING DEADLINE.

This is a written petition, pursuant to NMSA 1978, §74-6-5(O), filed within thirty (30) days of the actions at issue, appealing the Secretary's denial of a public hearing in the matter of DP-1793 and of the final approval of DP-1793. The Secretary's denial of a public hearing was issued on July 24, 2015, and final approval of DP-1793 was issued on July 27, 2015. *See* Petitioner CCW Exhibit 1, attached hereto, "Discharge Permit, DP-1793, Los Alamos National Laboratory" (July 27, 2015).

2. STATEMENT OF THE ISSUES AND RELIEF SOUGHT.

CCW is entitled to a public hearing in the matter of DP-1793 under the New Mexico Water Quality Act (“Act”) and its implementing regulations, for substantial public interest in DP-1793 is demonstrated through CCW’s three hearing requests, three sets of comments, and CCW’s active participation in the permitting process. The Secretary improperly exercised his discretion by denying CCW’s request for a public hearing on criterion not found within the Act or its regulations. Therefore, the Secretary’s final approval of DP-1793 is in violation of the Water Quality Act.

A. Statement of the Issues.

(1) Petitioner CCW is entitled to a public hearing under the New Mexico Water Quality Act.

NMSA 1978 § 74-6-5(G) of the New Mexico Water Quality Act states:

No ruling shall be made on any application for a permit *without opportunity for a public hearing* at which all interested persons shall be given a reasonable chance to submit evidence, data, views or arguments orally or in writing and to examine witnesses testifying at the hearing.

Id. (emphasis added).

“Opportunity for a public hearing” means that when an interested person affected by a proposed permit requests a public hearing, the NMED shall hold a public hearing. In this case, many interested persons affected by the draft DP-1793 requested a public hearing, through CCW, in the matter of DP-1793 on three separate occasions.

CCW is an association of organizations with a joint mission of ensuring that community waters which receive adverse impacts from LANL’s current operations, as well as its legacy waste, are kept safe for drinking, agriculture, sacred ceremonies, and a

sustainable future. CCW includes the following organizations: 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 has been working as a coalition to address contaminated water from LANL and Los Alamos County since 2006. *See* Petitioner CCW Exhibit 2, attached hereto, “CCW Public Comments and Request for Public Hearing on draft DP-1793” (March 2, 2015).

CCW requested a public hearing on DP-1793 on three separate occasions: on March 2, 2015 (*see Id.*); again on April 29, 2015 (Petitioner CCW Exhibit 3, attached hereto, “CCW Response to April 15, 2015 Discussions about draft DP-1793 and Request for Hearing”); and also on June 15, 2015 (Petitioner CCW Exhibit 4, attached hereto, “CCW Comments About May 28, 2015 draft DP-1793 and Request for Hearing”).

There can be no doubt that there is substantial public interest in DP-1793 based on the facts presented above. More importantly, this is not an issue of concerned citizens versus industry. This is an issue of insuring that the continuing controversy will always have a forum in which to sharpen and refine the issues. CCW clearly pointed out to NMED that there are several issues requiring a public hearing in order to achieve clarification and further information, and to refute contested points through the creation of a detailed record. *See generally*, Petitioner CCW Exhibits 2, 3, 4 and 6. By denying CCW a public hearing, CCW was deprived of a “reasonable chance to submit evidence, data, views or arguments orally or in writing and to examine witnesses testifying at the hearing.” NMSA 1978 § 74-6-5(G).

The fact that the Ground Water Quality Bureau of the NMED met with representatives of LANL, DOE, and CCW on April 15, 2015 in an attempt to reach a compromise on provisions within the draft DP-1793 does not deprive CCW of the right to a public hearing under the New Mexico Water Quality Act, NMSA 1978, § 74-6-5(G). Moreover, meeting in an attempt to resolve or narrow contested issues on the permit over which the hearing request was made does not in any way negate the showing of substantial public interest in the matter demonstrated by the three hearing requests, three sets of revised comments, and attendance at meetings attempting to resolve issues with the permit. *See e.g.*, Petitioner CCW Exhibit 7, attached hereto, "Email From Steven Huddleson, Manager of Pollution Prevention Section, Groundwater Quality Bureau, with Attached April 15, 2015 Meeting Attendance Sheet" (April 20, 2015).

The April 15, 2015 meeting and the subsequent May 28, 2015 draft DP-1793 failed to adequately address CCW's concerns. *See generally*, Petitioner CCW Exhibits 3, 4 and 6. Had CCW's concerns been adequately addressed, one could argue that the requisite substantial public interest would have been negated and that a public hearing would not be required. *See Southwest Research & Info. Ctr. v. N.M. Env't. Dept.*, 2014-NMCA-098, 78; 336 P. 3d 404, 423-24. However, nothing in the record of this matter undermines the continuing substantial public interest in DP-1793. This substantial public interest requires, under both the relevant portion of the Act and its implementing regulations cited above, that a public hearing be held.

(2) CCW is entitled to a public hearing under the Act's implementing regulations.

(a) CCW demonstrated substantial public interest through three hearing requests, three sets of comments, and CCW's active participation in the permitting process.

The absence of any public interest is the sole exception to the statutory requirement favoring public participation. *Compare*, NMSA 1978 § 74-6-5(G) and 20.6.2.3108.K NMAC. This sole exception is, at the same time, a limitation on the exercise of the Secretary's discretion, for the applicable regulation requires a hearing unless it be determined that substantial public interest in a hearing is lacking. In pertinent part, the regulation states:

Requests for a hearing shall be in writing and shall set forth the reasons why a hearing should be held. *A public hearing shall be held if the secretary determines there is substantial public interest.* The department shall notify the applicant and any person requesting a hearing of the decision whether to hold a hearing and the reasons therefore in writing.

Id. (emphasis added). This regulation is to be applied as narrowly as possible, as it must harmonize with the statutory requirement that an opportunity for a public hearing be provided before ruling on any application for a permit¹. NMSA 1978, § 74-6-5(G). Here, members of the community organizations comprising CCW demonstrated substantial public interest through three hearing requests, three sets of comments, and CCW's active participation in the permitting process.

¹ If 20.6.2.3108.K NMAC permits the Secretary to deny a hearing in this matter, under the facts stated in this Petition, the regulation violates the Act and needs to be revised.

(b) The Secretary of NMED improperly exercised his discretion in denying CCW's request for a public hearing.

The letter to CCW indicating that the Secretary denied the request for a public hearing was issued by Michelle Hunter, Acting Chief of the Ground Water Quality Bureau on July 24, 2015. Nowhere within the letter does Ms. Hunter address the sole criterion for denial of a public hearing: whether there is "substantial public interest." *Compare* Petitioner CCW Exhibit 5, attached hereto, "Denial Letter" (July 24, 2015), *and* Petitioner CCW Exhibit 6, "CCW Letter of Reply to Hunter Denial Letter Correcting Errors", *and* Petitioner CCW Exhibits 2, 3 and 4. The sole reason for denial of a public hearing provided was, "It is the opinion of the Department that NMED has drafted a Discharge Permit that provides transparency and opportunity for community involvement at an unprecedented level." *See* Petitioner CCW Exhibit 5 at 1, ¶ 3. This "finding" has nothing to do with the criterion under 20.6.2.3108.K NMAC. Plainly, the Secretary failed to apply the requirements of the statute and the regulation that a public hearing be held on DP-1793, thereby improperly exercising his discretion.

(c) NMED's approval of DP-1793 violates the Water Quality Act.

As demonstrated above, CCW is entitled to a public hearing under the Water Quality Act and its implementing regulations. The Water Quality Act provides, "No ruling shall be made on any application for a permit without an opportunity for a public hearing." NMSA 1978 § 74-6-5(G). Since the Secretary improperly exercised his discretion in denying CCW's request for a public hearing and approved DP-1793 without

providing the requisite opportunity for a public hearing, the final approval of DP-1793 violates the Water Quality Act.

B. Requested Relief.

Because the final approval of DP-1793 is in violation of NMSA 1978 § 74-6-5(G), and because the Secretary failed to make the required determination concerning public interest in compliance with required criterion under 20.6.2.3108.K NMAC, the decisions should be reversed and a hearing should be held.

Pursuant to 20.6.2.3112.A NMAC, the Commission should stay DP-1793 while this matter is pending for the reasons set forth in Petitioner's Motion for Stay, which is incorporated herein by reference. See Motion for Stay of Permit DP-1793 (August 21, 2015) (referenced herein above).

3. NOTIFICATION OF AFFECTED PERSONS.

There was no proceeding before the constituent agency (NMED). Service has been made upon the attorney of record at the Office of General Counsel of the NMED, and upon the attorney for the applicant, LANL.

4. RESERVATION OF RIGHTS.

The CCW reserves the right to address the Commission at a hearing on this matter and to file briefs and motions as needed to obtain relief under this petition.

Submitted:

NEW MEXICO ENVIRONMENTAL LAW CENTER

BY: Jaimie Park

Jaimie Park
Jonathan Block
Eric Jantz
Douglas Meiklejohn
New Mexico Environmental Law Center
1405 Luisa Street, Ste. 5
Santa Fe, NM 87505
(505) 989-9022, Ext. 23
jpark@nmelc.org

CERTIFICATE OF SERVICE

I, Jaimie Park, certify that on this 21st day of August, 2015, the below listed persons were served digitally via email and that the requisite original of this Petition and fifteen (15) copies were filed with the Administrator for the Water Quality Control Commission:

Jennifer Hower,
Deputy General Counsel
New Mexico Environment Department
121 Tijeras Ave NE, Suite 1000
Albuquerque, NM 87102-3400
Jennifer.Hower@state.nm.us

Timothy Dolan
Office of Laboratory Counsel
Los Alamos National Laboratory
P.O. Box 1663, MS A187
Los Alamos, NM 87545
tdolan@lanl.gov



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

Harold Runnels Building
1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, New Mexico 87502-5469
Phone (505) 827-2900 Fax (505) 827-2965
www.env.nm.gov

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

July 27, 2015

Allison Dorries, Division Leader
Environmental Protection Division
Los Alamos National Security, LLC (LANS)
3747 West Jemez Road
Los Alamos, New Mexico 87545

Gene E. Turner
Environmental Permitting Manager
Environmental Projects Office
Department of Energy
P.O. Box 1663, K490
Los Alamos, New Mexico 87545

RE: Discharge Permit, DP-1793, Los Alamos National Laboratory

Dear Ms. Dorries, Mr. Turner:

The New Mexico Environment Department (NMED) issues the enclosed Discharge Permit, DP-1793, to the United States Department of Energy/Los Alamos National Security (DOE/LANS) (permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Regulations, 20.6.2 NMAC.

The Discharge Permit contains terms and conditions that shall be complied with by the permittee and are enforceable by NMED pursuant to Section 20.6.2.3104 NMAC, WQA, NMSA 1978 §74-6-5 and §74-6-10. Please be aware that this Discharge Permit may contain conditions that require the permittee to implement operational, monitoring or closure actions by a specified

U.S. Postal Service CERTIFIED MAIL Domestic Mail Only	
For delivery information, visit OFFICE	
Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Ms. Allison Dorries Environmental Protection Division Los Alamos National Security, LLC (LANS) 3747 West Jemez Road Los Alamos, NM 87545	
U.S. Postal Service CERTIFIED MAIL Domestic Mail Only	
For delivery information, visit OFFICE	
Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Mr. Gene E. Turner Environmental Permitting Manager Environmental Projects Office Department of Energy P.O. Box 1663 - K490 Los Alamos, NM 87545	
PS Form 3800, July 2014	



Allison Dorries
Gene Turner
July 27, 2015
Page 2 of 2

deadline. Such conditions are listed at the beginning of the operational, monitoring and closure plans of this Discharge Permit.

Issuance of this Discharge Permit does not relieve the permittee of the responsibility to comply with the WQA, WQCC Regulations, and any other applicable federal, state and/or local laws and regulations, such as zoning requirements and nuisance ordinances.

Pursuant to Paragraph (4) of Subsection H of 20.6.2.3109 NMAC, the term of the Discharge Permit shall be five years from the effective date. The term of this Discharge Permit will end on July 27, 2020. Prior to discharging, written notification shall be given to NMED stating the date the discharge is to commence.

NMED requests that the permittee submit an application for renewal (or renewal and modification) at least 180 days prior to the date the Discharge Permit term ends.

An invoice for the Discharge Permit Fee of \$6,900 is being sent under separate cover. Payment of the Discharge Permit Fee must be received by NMED within 30 days of the date the Discharge Permit is issued.

If you have any questions, please contact Steven Huddleson at (505) 827-2936. Thank you for your cooperation during this Discharge Permit review.

Sincerely,



Michelle Hunter, Acting Chief
Ground Water Quality Bureau

MH:SMH

Encs: Discharge Permit DP-1793
Ground Water Discharge Permit Conditions for Synthetically Lined Lagoons – Liner
Material and Site Preparation, Revision 0.0, May 2007
Ground Water Discharge Permit Monitoring Well Construction and Abandonment
Conditions, Revision 1.1, March 2011

GROUND WATER DISCHARGE PERMIT
LANL Groundwater Projects, DP-1793

I. INTRODUCTION

The New Mexico Environment Department (NMED) issues this Discharge Permit (Discharge Permit), DP-1793, to the United States Department of Energy (DOE) and to Los Alamos National Security, LLC (LANS) (collectively the permittees) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Regulations, 20.6.2 NMAC.

NMED's purpose in issuing this Discharge Permit, and in imposing the requirements and conditions specified herein, is to control the discharge of water contaminants from activities related to groundwater remediation projects (project) into ground and surface water, so as to protect ground and surface water for present and potential future use as domestic and agricultural water supply and other uses and protect public health. In issuing this Discharge Permit, NMED has determined that the requirements of Subsection C of 20.6.2.3109 NMAC have been or will be met. Pursuant to Section 20.6.2.3104 NMAC, it is the responsibility of the permittee to comply with the terms and conditions of this Discharge Permit; failure may result in an enforcement action(s) by NMED (20.6.2.1220 NMAC).

The activities which produce the discharge, the location of the discharge, and the quantity, quality and flow characteristics of the discharge are briefly described as follows.

Up to 350,000 gallons per day (gpd) of groundwater associated with aquifer and pumping tests, well development and rehabilitation, groundwater tracer studies, and groundwater remediation activities is to be discharged. Groundwater pumped during the covered activities will be discharged into a lined modular tank, a synthetically-lined lagoon, or other containment system prior to land application. Treatment systems will be appropriate to the potential contaminants and may include (but not limited to) Ion Exchange and/or Granular Activated Carbon. Treated water monitoring will ensure that contaminant concentrations do not exceed the 20.6.2.3103 NMAC standards or the limits in Table A-1 of the most recent version of NMED *Risk Assessment Guidance for Site Investigation and Remediation* (Table A-1) for 20.6.2.7.WW NMAC Toxic Pollutants. Under circumstances where multiple projects are overlapping then the maximum daily discharge volume could reach approximately 250 gpm or approximately 350,000 gallons per day as a batched discharge.

The groundwater to be treated and discharged may contain water contaminants which may be elevated above the standards of Section 20.6.2.3103 NMAC and/or toxic pollutants as defined in Subsection WW of 20.6.2.7 NMAC. Prior 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 and <90% of the numeric standards established for tap water in Table A-1 for constituents not listed in 20.6.2.3103.NMAC.

Projects conducted by the Los Alamos National Laboratory are located within the 55 sections referenced in this permit (Table and Figure provided as Attachment), approximately 1.5 miles to 7 miles south of Los Alamos, New Mexico. Discharge of treated effluent is through surface application to one of the 55 sections identified by the permittee (Table and Figure provided as

Attachment) in Sections 25 and 36 Township 19N, Range 05E, Sections 1, 2, 3, 4, 10, 11, 12, 13, 14, 24 and 25 Township 18N, Range 06E, Sections 13 through 36, Township 19N, Range 06E, Sections 5, 6, 7, 8, 16, 17, 18, 19, 20, 21, 29, and 30 Township 18N, Range 07E, and Sections 17, 18, 19, 20, 31 and 32 Township 19N, Range 07E, Los Alamos County. Ground water most likely to be affected ranges in depth between approximately 45 and 900 feet below ground surface and has a total dissolved solids concentration of between 270 and 300 milligrams per liter.

The application (i.e., Discharge Plan) consists of the materials submitted by the permittee originally in December 2011 (withdrawn and re-submitted on January 8, 2014), and materials contained in the administrative record prior to issuance of this Discharge Permit. The discharge shall be managed in accordance with all conditions and requirements of this Discharge Permit.

Pursuant to Section 20.6.2.3109 NMAC, NMED reserves the right to require a Discharge Permit Modification in the event NMED determines that the requirements of 20.6.2 NMAC are being or may be violated or the standards of Section 20.6.2.3103 NMAC are being or may be violated. This may include a determination that structural controls and/or management practices approved under this Discharge Permit are not protective of ground water quality, and that more stringent requirements to protect ground water quality may be required by NMED. The permittee may be required to implement abatement of water pollution and remediate ground water quality.

Issuance of this Discharge Permit does not relieve the permittee of the responsibility to comply with the WQA, WQCC Regulations, and any other applicable federal, state and/or local laws and regulations, such as zoning requirements and nuisance ordinances.

The following acronyms and abbreviations may be used in this Discharge Permit:

Abbreviation	Explanation	Abbreviation	Explanation
BOD ₅	biochemical oxygen demand (5-day)	NTU	nephelometric turbidity units
CFR	Code of Federal Regulations	Org	organisms
Cl	chloride	TDS	total dissolved solids
EPA	United States Environmental Protection Agency	TKN	total Kjeldahl nitrogen
gpd	gallons per day	total nitrogen	= TKN + NO ₃ -N
LADS	land application data sheet(s)	TRC	Total Residual Chlorine
mg/L	milligrams per liter	TSS	total suspended solids
mL	milliliters	UPC	Uniform Plumbing Code
NMAC	New Mexico Administrative Code	WQA	New Mexico Water Quality Act
NMED	New Mexico Environment Department	WQCC	Water Quality Control Commission
NMSA	New Mexico Statutes Annotated	WWTF	Wastewater Treatment Facility
NO ₃ -N	nitrate-nitrogen	Table A-1	Table A-1 of the NMED <i>Risk Assessment Guidance for Site Investigation and Remediation</i> (most recent version)

II. FINDINGS

In issuing this Discharge Permit, NMED finds:

1. The permittee would discharge effluent or leachate from the projects so that such effluent or leachate may move directly or indirectly into ground water within the meaning of Section 20.6.2.3104 NMAC.
2. The permittee is discharging effluent or leachate from the projects so that such effluent or leachate may move into ground water of the State of New Mexico which has an existing concentration of 10,000 mg/L or less of TDS within the meaning of Subsection A of 20.6.2.3101 NMAC.
3. The discharge from the projects are not subject to any of the exemptions of Section 20.6.2.3105 NMAC.

III. AUTHORIZATION TO DISCHARGE

Pursuant to 20.6.2.3104 NMAC, it is the responsibility of the permittee to ensure that discharges authorized by this Discharge Permit are consistent with the terms and conditions herein.

Up to 350,000 gallons per day gpd of treated groundwater derived from individual projects (including the Chromium Project), pumping tests, aquifer tests, well development and tracer studies conducted to characterize groundwater quality or aquifer properties may be discharged via land application to one of 55 sections identified in tabular format and Figure provided as Attachment to this permit.

[20.6.2.3104 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection C of 20.6.2.3109 NMAC]

IV. CONDITIONS

The following conditions shall be complied with by the permittee and are enforceable by NMED. The permittee is authorized to discharge water contaminants subject to the following conditions:

A. OPERATIONAL PLAN

#	Terms and Conditions
1.	The permittee shall implement the following operational plan to ensure compliance with Title 20, Chapter 6, Parts 1 and 2 NMAC. [Subsection C of 20.6.2.3109 NMAC]
2.	The permittee shall operate in a manner such that standards and requirements of Sections

#	Terms and Conditions
	<p>20.6.2.3101 and 20.6.2.3103 NMAC are not violated.</p> <p>[20.6.2.3101 NMAC, 20.6.2.3103 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
3.	<p>Prior to initiating discharge from an individual project, pumping test, aquifer test or tracer study, the permittee shall submit a workplan to NMED for approval. Included in the workplan will be:</p> <ul style="list-style-type: none"> • a detailed description of the proposed activity, including a statement of purpose; • a description of water conservation and reuse options considered; • a topographic map showing the proposed land application sites and the location of all monitoring wells, Site Monitoring Areas (SMA), Solid Waste Management Units (SWMU), National Pollution Discharge Elimination System (NPDES) outfalls, groundwater discharge permits, Areas of Concern (AOC) identified in the 2005 NMED Order on Consent, drinking water wells, surface impoundments and surface drainage features in the vicinity; • existing data showing the depth to and general groundwater quality at the proposed discharge location including concentrations of contaminants exceeding regulatory standards; • estimated groundwater flow direction; • a detailed description of the on-site treatment system to remove contaminants of concern from the effluent; • a schematic of treatment system and treatment unit specifications; • a detailed descriptions of the storage/containment systems associated with the treatment; • Safety Data Sheets for tracer constituents; • a maximum estimated daily discharge volume; • total estimated volume of the proposed discharge; • a proposed sampling plan to demonstrate treatment efficiency and compliance with regulatory standards; Proposed method(s) of land application, application rates and area of application; and • a project schedule including the date the discharge is to commence and anticipated duration. <p>Public comments on each work plan shall be accepted by NMED for a period not exceeding 30 days following posting of the workplan by the permittees to the EPRR (Condition 12). The workplan shall be enacted as approved by NMED including specific monitoring requirements that may be required.</p> <p>[20.6.2.3107.A NMAC]</p>
4.	<p>Land application of treated groundwater will be conducted in accordance with, but not limited to, the following criteria.</p>

#	Terms and Conditions
	<ol style="list-style-type: none"> 1. Land application is prohibited at the following locations: <ul style="list-style-type: none"> • Watercourses; • Water Bodies; • Wetlands; • Areas of Concern (AOCs) (with the exception of the following canyon-bottom AOCs : C-00-001; through C-00-019 and C-00-021); • Solid Waste Management Units (SWMUs); • Slopes greater than 2% if the site is poorly vegetated (<50% ground cover); and • Slopes greater than 5% if the site is well vegetated (>50% ground cover). 2. Land application cannot result in water flow from an approved land application site. 3. Land application cannot create ponds or pools or standing water. 4. Land application must be conducted in a manner that maximizes infiltration and evaporation. 5. Land application is restricted to daylight hours and for a maximum of 10 hrs/day. 6. Land application must be supervised. 7. Land application cannot extend off LANL property without written permission from the land owner. 8. Land Application will be terminated if leaks in the application system are detected. 9. Land application is prohibited while precipitation is occurring or when temperatures are below freezing. <p>[20.6.2.3107 NMAC]</p>

B. MONITORING, REPORTING, AND OTHER REQUIREMENTS

#	Terms and Conditions
5.	<p>The permittee shall conduct the monitoring, reporting, and other requirements listed below.</p> <p>[20.6.2.3107 NMAC]</p>
6.	<p>METHODOLOGY - Unless otherwise approved in writing by NMED, the permittee shall conduct sampling and analysis in accordance with the most recent edition of the following documents.</p> <ol style="list-style-type: none"> a) American Public Health Association, Standard Methods for the Examination of Water and Wastewater (18th, 19th or current) b) U.S. Environmental Protection Agency, Methods for Chemical Analysis of Water and Waste c) U.S. Geological Survey, Techniques for Water Resources Investigations of the U.S. Geological Survey

#	Terms and Conditions
	<p>d) American Society for Testing and Materials, Annual Book of ASTM Standards, Part 31. Water</p> <p>e) Federal Register, latest methods published for monitoring pursuant to Resources Conservation Recovery Act regulations</p> <p>f) U.S. Geological Survey, et al., National Handbook of Recommended Methods for Water Data Acquisition</p> <p>g) Methods of Soil Analysis: Part 1. Physical and Mineralogical Methods; Part 2. Microbiological and Biochemical Properties; and Part 3. Chemical Methods, American Society of Agronomy.</p> <p>[20.6.2.3107.B NMAC]</p>
7.	<p>Laboratory analysis requirements will be established prior to discharge (Condition #3) and unless approved otherwise by NMED, will be conducted by an independent environmental laboratory, certified under the National Environmental Laboratory Accreditation Program (NELAP).</p> <p>[Subsection A of 20.6.2.3107 NMAC and Subsection B of 20.6.2.3107 NMAC]</p>
8.	<p>Following completion of an approved workplan discharge, permittees will submit a report within 60 days of completing the discharge. Discharge reports shall include:</p> <ul style="list-style-type: none"> • The total volume of groundwater discharged; • an estimated average application rate for the period of discharge; • analytical results from samples collected under the water quality sampling plan or soil sampling, if required by NMED (Condition #3); and • a map depicting areas which received land applied groundwater. <p>[20.6.2.3107 NMAC]</p>
9.	<p>The permittee shall submit annual monitoring report to NMED by the 1st of March each year summarizing all discharges conducted under this permit during the prior calendar year. Included will be quantity, source, and date of each individual discharge, water quality tables listing analytical results from samples collected under the water quality sampling plan, a map(s) depicting discharge locations, and copies of laboratory analytical reports.</p> <p>Annual monitoring reports shall be performed during the following period:</p> <ul style="list-style-type: none"> • January 1st through December 31st report due by March 1st. <p>[20.6.2.3107 NMAC]</p>
10.	<p>Groundwater quality monitoring shall be conducted in accordance to the <i>Interim Facility-Wide Groundwater Monitoring Plan</i> (most recent version), which is conducted under the direction of the NMED Hazardous Waste Bureau. In some cases, NMED Groundwater</p>

#	Terms and Conditions
	<p>Quality Bureau may request additional analytes or wells be added to the sampling regime in cases where specific locations, constituents or monitoring may not be included in the Interim Facility Wide Groundwater Monitoring Plan.</p> <p>[20.6.2.3107 NMAC]</p>
11.	<p>Sampling of surficial soils may be required by NMED at areas of land application of treated groundwater. At NMED's direction, soil samples collected shall be submitted for analysis in accordance with Condition #6 of this permit by a NELAP certified independent environmental laboratory, and results compared to the Residential Soil screening levels of Table A-1.</p> <p>[20.6.2.3107 NMAC]</p>
12.	<p>ELECTRONIC POSTING – MANDATORY Commencing on the Effective Date of this Discharge Permit the permittees shall, within seven calendar days of submittal to NMED, post on LANL's Electronic Public Reading Room located at http://epr.lanl.gov/oppie/service (or as updated) the following submittals to NMED.</p> <ol style="list-style-type: none"> 1. Condition 3 – Submittal of workplan for individual discharge to NMED. 2. Condition 8 – Discharge (Workplan Completion) Report to NMED. 3. Condition 13 - Notification of groundwater exceedance and submittal of Corrective Action Plan to NMED. 4. Condition 14 – Soil Sampling exceedance workplan. 5. Condition 17 – Release (“spill”) notification, corrective action report/plan and any abatement proposal. <p>ELECTRONIC POSTING – VOLUNTARY Commencing on the effective date of this Discharge Permit, permittees voluntarily agree to post on LANL's Electronic Public Reading Room located at http://epr.lanl.gov/oppie/service (or as updated) within seven calendar days after submission to NMED, the information listed below. Because permittees have voluntarily agreed to post the below-information, such posting shall not be subject to civil or criminal enforcement actions.</p> <ol style="list-style-type: none"> 1. Condition 3 – NMED Response to Workplan Submittals. 2. Condition 9 – Annual monitoring report – due March 1. 3. Condition 15 – Improperly constructed groundwater well notification. 4. Condition 16 – Groundwater well not hydrologically downgradient notification. 5. Condition 18 – Notification of failure of discharge plan. 6. Condition 19 – Closure and post-closure activities – all documents submitted to the

#	Terms and Conditions
	<p>NMED by the permittees under this Condition.</p> <ol style="list-style-type: none">7. Condition 23 – Modifications and/or amendments – all documents submitted to the NMED by the permittees under this Condition.8. Condition 24 – Plans and specifications – all documents submitted to the NMED by the permittees under this Condition.9. Condition 28 – Right to appeal – all documents submitted to the Water Quality Control Commission by the permittees under this Condition.10. Condition 29 – Transfer of discharge permit – all documents submitted to the NMED by the permittees under this Condition. <p>[20.6.2.3107.A NMAC]</p>

C. CONTINGENCY PLAN

#	Terms and Conditions
13.	<p>In the event that ground water monitoring (Condition #10) in the vicinity of a discharge conducted under this permit indicates that a ground water quality standard identified in Section 20.6.2.3103 NMAC is exceeded; the total nitrogen concentration in ground water is greater than 10 mg/L; or a toxic pollutant (defined in Subsection WW of 20.6.2.7 NMAC) is present in a ground water sample, and in any subsequent ground water sample, that are attributable to a discharge conducted under this permit, the permittee shall enact the following contingency plan.</p> <p>Within 30 days of receipt of the data confirming the exceedance, the permittee shall propose measures to ensure that the exceedance of the standard or the presence of a toxic pollutant will be mitigated by submitting a corrective action plan to NMED for approval. The corrective action plan shall include a description of the proposed actions to control the source and an associated completion schedule. The plan shall be enacted as approved by NMED.</p> <p>Once invoked (whether during the term of this Discharge Permit; or after the term of this Discharge Permit and prior to the completion of the Discharge Permit closure plan requirements), this condition shall apply until the permittee has fulfilled the requirements of this condition and ground water monitoring confirms for a minimum of two years of consecutive ground water sampling events that the standards of Section 20.6.2.3103 NMAC are not exceeded and toxic pollutants are not present in ground water.</p> <p>The permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000</p>

#	Terms and Conditions
	<p>through 20.6.2.4115 NMAC, should the corrective action plan not result in compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC within 180 days of confirmed ground water contamination.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]</p>
14.	<p>In the event that soil sampling (Condition #11) indicates that inorganic constituents exceed the Residential Soil Screening levels of Table A-1, permittee will submit to NMED for approval within 120 days of receipt of laboratory analysis reports, a workplan for comprehensive investigation of the nature and extent of impact and a corrective action/remedial plan to address exceedances. The workplan will propose sampling methodology, scheduling and proposed analytical methodology to characterize the nature of impact and a corrective action/remediation plan.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]</p>
15.	<p>In the event that information available to NMED indicates that a well(s) included in a project workplan submitted under this Discharge Permit is not constructed in a manner consistent with its intended use; contains insufficient water to effectively monitor ground water quality; or is not completed in a manner that is protective of ground water quality, the permittee shall, at the request of NMED, submit a drilling workplan and project schedule for NMED approval within 120 days following notification. The permittee shall survey the new monitoring well(s) within 30 days following well construction.</p> <p>Replacement well location(s) shall be approved by NMED prior to installation and completed in accordance with the attachment titled <i>Ground Water Quality Bureau Monitoring Well Construction and Abandonment Conditions</i>, Revision 1.1, March 2011, or permittee may propose specific construction details for approval by NMED. The permittee shall submit construction and lithologic logs, survey data and a ground water potentiometric surface map to NMED within 60 days following well completion.</p> <p>Upon completion of the replacement monitoring well(s), the monitoring well(s) requiring replacement shall be properly plugged and abandoned. Well plugging, abandonment and documentation of the abandonment procedures shall be completed in accordance with the attachment titled <i>Ground Water Quality Bureau, Monitoring Well Construction and Abandonment Conditions</i>, Revision 1.1, March 2011, and all applicable local, state, and federal regulations. The well abandonment documentation shall be submitted to NMED within 60 days of completion of well plugging activities.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>
16.	<p>In the event that ground water flow information obtained pursuant to this Discharge Permit indicates that a monitoring well(s) included in a project workplan submitted under this</p>

#	Terms and Conditions
	<p>permit is not located hydrologically downgradient of the discharge location(s) it is intended to monitor, the permittee shall submit a drilling workplan and project schedule for NMED approval within 120 days following notification from NMED. The permittee shall survey the new monitoring well(s) within 30 days following well construction.</p> <p>New well location(s) shall be approved by NMED prior to installation and completed in accordance with the attachment titled <i>Ground Water Quality Bureau, Monitoring Well Construction and Abandonment Conditions</i>, Revision 1.1, March 2011, or permittee may propose specific construction details for approval by NMED. The permittee shall submit construction and lithologic logs, survey data and a ground water elevation contour map within 90 days following well completion.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>
17.	<p>In the event that a release (commonly known as a "spill") occurs that is not authorized under this Discharge Permit, the permittee shall take measures to mitigate damage from the unauthorized discharge and initiate the notifications and corrective actions required in Section 20.6.2.1203 NMAC and summarized below.</p> <p>Within <u>24 hours</u> following discovery of the unauthorized discharge, the permittee shall verbally notify NMED and provide the following information:</p> <ol style="list-style-type: none"> a) The name, address, and telephone number of the person or persons in charge of the facility, as well as of the owner and/or operator of the facility; b) The name and address of the facility; c) The date, time, location, and duration of the unauthorized discharge; d) The source and cause of unauthorized discharge; e) A description of the unauthorized discharge, including its estimated chemical composition; f) The estimated volume of the unauthorized discharge; and g) Any actions taken to mitigate immediate damage from the unauthorized discharge. <p>Within <u>one week</u> following discovery of the unauthorized discharge, the permittee shall submit written notification to NMED with the information listed above and any pertinent updates.</p> <p>Within <u>15 days</u> following discovery of the unauthorized discharge, the permittee shall submit a corrective action report/plan to NMED describing any corrective actions taken and/or to be taken relative to the unauthorized discharge that includes the following:</p> <ol style="list-style-type: none"> a) A description of proposed actions to mitigate damage from the unauthorized discharge; b) A description of proposed actions to prevent future unauthorized discharges of this nature; and c) A schedule for completion of proposed actions.

#	Terms and Conditions
	<p>In the event that the unauthorized discharge causes or may with reasonable probability cause water pollution in excess of the standards and requirements of Section 20.6.2.4103 NMAC, and the water pollution will not be abated within 180 days after notice is required to be given pursuant to Paragraph (1) of Subsection A of 20.6.2.1203 NMAC, the permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC.</p> <p>Nothing in this condition shall be construed as relieving the permittee of the obligation to comply with all requirements of Section 20.6.2.1203 NMAC.</p> <p>[20.6.2.1203 NMAC]</p>
18.	<p>In the event that NMED or the permittee identifies any failures of the discharge plan or this Discharge Permit not specifically noted herein, NMED may require the permittee to submit a corrective action plan and a schedule for completion of corrective actions to address the failure(s). Additionally, NMED may require a Discharge Permit modification to achieve compliance with 20.6.2 NMAC.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]</p>

D. CLOSURE PLAN

#	Terms and Conditions
19.	<p>Upon cessation of the activity pursuant to the Discharge Permit, the permittee shall perform the following closure measures:</p> <ul style="list-style-type: none"> a) Cap or plug all lines to prevent the flow of wastewater to treatment or disposal systems; b) Empty, clean and remove tanks; c) Empty lagoons, remove liners, backfill and re-grade to surface topography; d) Appropriately dispose of liquids and solids; e) Regrade and cover stockpiles; f) Continue groundwater monitoring for at least two years, or as appropriate; g) Enact contingency plans if groundwater standards or Residential Soil screening criteria are exceeded including any abatement required by NMED pursuant to actions related to this Discharge Permit; h) Remove any compounds and equipment pertaining to the remediation activities; i) Appropriately dispose of all treatment resins and media in accordance with all applicable local, state and federal regulations; and j) When all post-closure requirements have been met, the permittee may request to terminate the Discharge Permit.

Should individual components utilized under this Discharge Permit be required for completion of Consent Order activities under other regulatory oversight, permittee may request a variance from specific closure activities required under this condition.

[20.6.2.3107 (A)11 NMAC]

E. GENERAL TERMS AND CONDITIONS

#	Terms and Conditions
20.	<p>RECORD KEEPING - The permittee shall maintain a written record of:</p> <ul style="list-style-type: none">• information and data used to complete the application for this Discharge Permit;• any releases (commonly known as "spills") not authorized under this Discharge Permit and reports submitted pursuant to 20.6.2.1203 NMAC;• the operation, maintenance, and repair of all facilities/equipment used to treat, store or dispose of wastewater;• facility record drawings (plans and specifications) showing the actual construction of the facility and bear the seal and signature of a licensed New Mexico professional engineer;• copies of monitoring reports completed and/or submitted to NMED pursuant to this Discharge Permit;• the volume of wastewater or other wastes discharged pursuant to this Discharge Permit;• ground water quality and wastewater quality data collected pursuant to this Discharge Permit;• copies of construction records (well log) for all ground water monitoring wells required to be sampled pursuant to this Discharge Permit;• the maintenance, repair, replacement or calibration of any monitoring equipment or flow measurement devices required by this Discharge Permit; and• data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit, including:<ul style="list-style-type: none">○ the dates, location and times of sampling or field measurements;○ the name and job title of the individuals who performed each sample collection or field measurement;○ the sample analysis date of each sample○ the name and address of the laboratory, and the name of the signatory authority for the laboratory analysis;○ the analytical technique or method used to analyze each sample or collect each field measurement;○ the results of each analysis or field measurement, including raw data;○ the results of any split, spiked, duplicate or repeat sample; and○ a copy of the laboratory analysis chain-of-custody as well as a description of

#	Terms and Conditions
	<p style="text-align: center;">the quality assurance and quality control procedures used.</p> <p>The written record shall be maintained by the permittee at a location accessible during a facility inspection by NMED for a period of at least five years from the date of application, report, collection or measurement and shall be made available to the department upon request.</p> <p>[Subsections A and D of 20.6.2.3107 NMAC]</p>
21.	<p>INSPECTION and ENTRY – The permittee shall allow inspection by NMED of the facility and its operations which are subject to this Discharge Permit and the WQCC regulations. NMED may upon presentation of proper credentials, enter at reasonable times upon or through any premises in which a water contaminant source is located or in which are located any records regarding this discharge permit or related discharges required to be maintained by regulations of the federal government or the WQCC.</p> <p>The permittee shall allow NMED to have access to and reproduce for their use any copy of the records, and to perform assessments, sampling or monitoring during an inspection for the purpose of evaluating compliance with this Discharge Permit and the WQCC regulations.</p> <p>Nothing in this Discharge Permit shall be construed as limiting in any way the inspection and entry authority of NMED under the WQA, the WQCC Regulations, or any other local, state or federal regulations.</p> <p>[Subsection D of 20.6.2.3107 NMAC, NMSA 1978, §§ 74-6-9.B and 74-6-9.E]</p>
22.	<p>DUTY to PROVIDE INFORMATION - The permittee shall, upon NMED's request, allow for NMED's inspection/duplication of records required by this Discharge Permit and/or furnish to NMED copies of such records.</p> <p>[Subsection D of 20.6.2.3107 NMAC]</p>
23.	<p>MODIFICATIONS and/or AMENDMENTS – In the event the permittee proposes a change to the facility or the facility's discharge that would result in a change in the volume discharged; the location of the discharge; or in the amount or character of water contaminants received, treated or discharged by the facility, the permittee shall notify NMED prior to implementing such changes. The permittee shall obtain approval (which may require modification of this Discharge Permit) by NMED prior to implementing such changes.</p> <p>[Subsection C of 20.6.2.3107 NMAC, Subsections E and G of 20.6.2.3109 NMAC]</p>
24.	<p>PLANS and SPECIFICATIONS – In the event the permittee is proposing to construct a</p>

#	Terms and Conditions
	<p>wastewater system or change a process unit of an existing system such that the quantity or quality of the discharge will change substantially from that authorized by this Discharge Permit, the permittee shall submit construction plans and specifications to NMED for the proposed system or process unit prior to the commencement of construction.</p> <p>In the event the permittee implements changes to the wastewater system authorized by this Discharge Permit which result in only a minor effect on the character of the discharge, the permittee shall report such changes (including the submission of record drawings, where applicable) in the annual report due to NMED by March 1st of each year .</p> <p>[Subsections A and C of 20.6.2.1202 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]</p>
25.	<p>CIVIL PENALTIES - Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow properly credentialed NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information required to be maintained by this Discharge Permit or related regulation may subject the permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the WQCC Regulations, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit.</p> <p>[20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10 and 74-6-10.1]</p>
26.	<p>CRIMINAL PENALTIES – No person shall:</p> <ol style="list-style-type: none"> 1) make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or required to be maintained under the WQA; 2) falsify, tamper with or render inaccurate any monitoring device, method or record required to be maintained under the WQA; or 3) fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation. <p>Any person who knowingly violates or knowingly causes or allows another person to violate the requirements of this condition is guilty of a fourth degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who is convicted of a second or subsequent violation of the requirements of this condition is</p>

#	Terms and Conditions
	<p>guilty of a third degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition or knowingly causes another person to violate the requirements of this condition and thereby causes a substantial adverse environmental impact is guilty of a third degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition and knows at the time of the violation that he is creating a substantial danger of death or serious bodily injury to any other person is guilty of a second degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15.</p> <p>[20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10.2.A through 74-6-10.2.F]</p>
27.	<p>COMPLIANCE with OTHER LAWS - Nothing in this Discharge Permit shall be construed in any way as relieving the permittee of the obligation to comply with all applicable federal, state, and local laws, regulations, permits or orders.</p> <p>[NMSA 1978, § 74-6-5.L]</p>
28.	<p>RIGHT to APPEAL - The permittee may file a petition for review before the WQCC on this Discharge Permit. Such petition shall be in writing to the WQCC within thirty days of the receipt of postal notice of this Discharge Permit and shall include a statement of the issues to be raised and the relief sought. Unless a timely petition for review is made, the decision of NMED shall be final and not subject to judicial review.</p> <p>[20.6.2.3112 NMAC, NMSA 1978, § 74-6-5.O]</p>
29.	<p>TRANSFER of DISCHARGE PERMIT - Prior to the transfer of any ownership, control, or possession of this facility or any portion thereof, the permittee shall:</p> <ol style="list-style-type: none"> 1) notify the proposed transferee in writing of the existence of this Discharge Permit; 2) include a copy of this Discharge Permit with the notice; and 3) deliver or send by certified mail to NMED a copy of the notification and proof that such notification has been received by the proposed transferee. <p>Until both ownership and possession of the facility have been transferred to the transferee, the permittee shall continue to be responsible for any discharge from the facility.</p> <p>[20.6.2.3111 NMAC]</p>
30.	<p>PERMIT FEES - Payment of permit fees is due at the time of Discharge Permit approval. Permit fees shall be paid in a single payment or shall be paid in equal installments on a yearly basis over the term of the Discharge Permit. Single payments shall be remitted to NMED no later than 30 days after the Discharge Permit effective date. Initial installment payments shall be remitted to NMED no later than 30 days after the Discharge Permit</p>

#	Terms and Conditions
	<p>effective date; subsequent installment payments shall be remitted to NMED no later than the anniversary of the Discharge Permit effective date.</p> <p>Permit fees are associated with <u>issuance</u> of this Discharge Permit. Nothing in this Discharge Permit shall be construed as relieving the permittee of the obligation to pay all permit fees assessed by NMED. A permittee that ceases discharging or does not commence discharging from the facility during the term of the Discharge Permit shall pay all permit fees assessed by NMED. An approved Discharge Permit shall be suspended or terminated if the facility fails to remit an installment payment by its due date.</p> <p>[Subsection F of 20.6.2.3114 NMAC, NMSA 1978, § 74-6-5.K]</p>

PERMIT TERM & SIGNATURE

EFFECTIVE DATE: July 27, 2015

TERM ENDS: July 27, 2020, or five years from the date the discharge commences, whichever comes first

[Subsection H of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.I]



Michellé Hunter
Acting Chief, Ground Water Quality Bureau
New Mexico Environment Department

Los Alamos National Laboratory; DP-1793
July 27, 2015
Page 17

ATTACHMENT

List of Sections (55) at Los Alamos National Laboratory Displaying a Public Notice Sign.

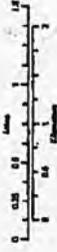
Section	Range	Township	Section
1	R05E	T19N	S25
2	R05E	T19N	S36
3	R06E	T18N	S1
4	R06E	T18N	S2
5	R06E	T18N	S3
6	R06E	T18N	S4
7	R06E	T18N	S10
8	R06E	T18N	S11
9	R06E	T18N	S12
10	R06E	T18N	S13
11	R06E	T18N	S14
12	R06E	T18N	S24
13	R06E	T18N	S25
14	R06E	T19N	S13
15	R06E	T19N	S14
16	R06E	T19N	S15
17	R06E	T19N	S16
18	R06E	T19N	S17
19	R06E	T19N	S18
20	R06E	T19N	S19
21	R06E	T19N	S20
22	R06E	T19N	S21
23	R06E	T19N	S22
24	R06E	T19N	S23
25	R06E	T19N	S24
26	R06E	T19N	S25
27	R06E	T19N	S26
28	R06E	T19N	S27
29	R06E	T19N	S28
30	R06E	T19N	S29
31	R06E	T19N	S30
32	R06E	T19N	S31
33	R06E	T19N	S32
34	R06E	T19N	S33
35	R06E	T19N	S34
36	R06E	T19N	S35
37	R06E	T19N	S36
38	R07E	T18N	S5
39	R07E	T18N	S6
40	R07E	T18N	S7
41	R07E	T18N	S8
42	R07E	T18N	S16
43	R07E	T18N	S17

Count	Area	Location	Section
44	R07E	T18N	S18
45	R07E	T18N	S19
46	R07E	T18N	S20
47	R07E	T18N	S21
48	R07E	T18N	S29
49	R07E	T18N	S30
50	R07E	T19N	S17
51	R07E	T19N	S18
52	R07E	T19N	S19
53	R07E	T19N	S20
54	R07E	T19N	S31
55	R07E	T19N	S32

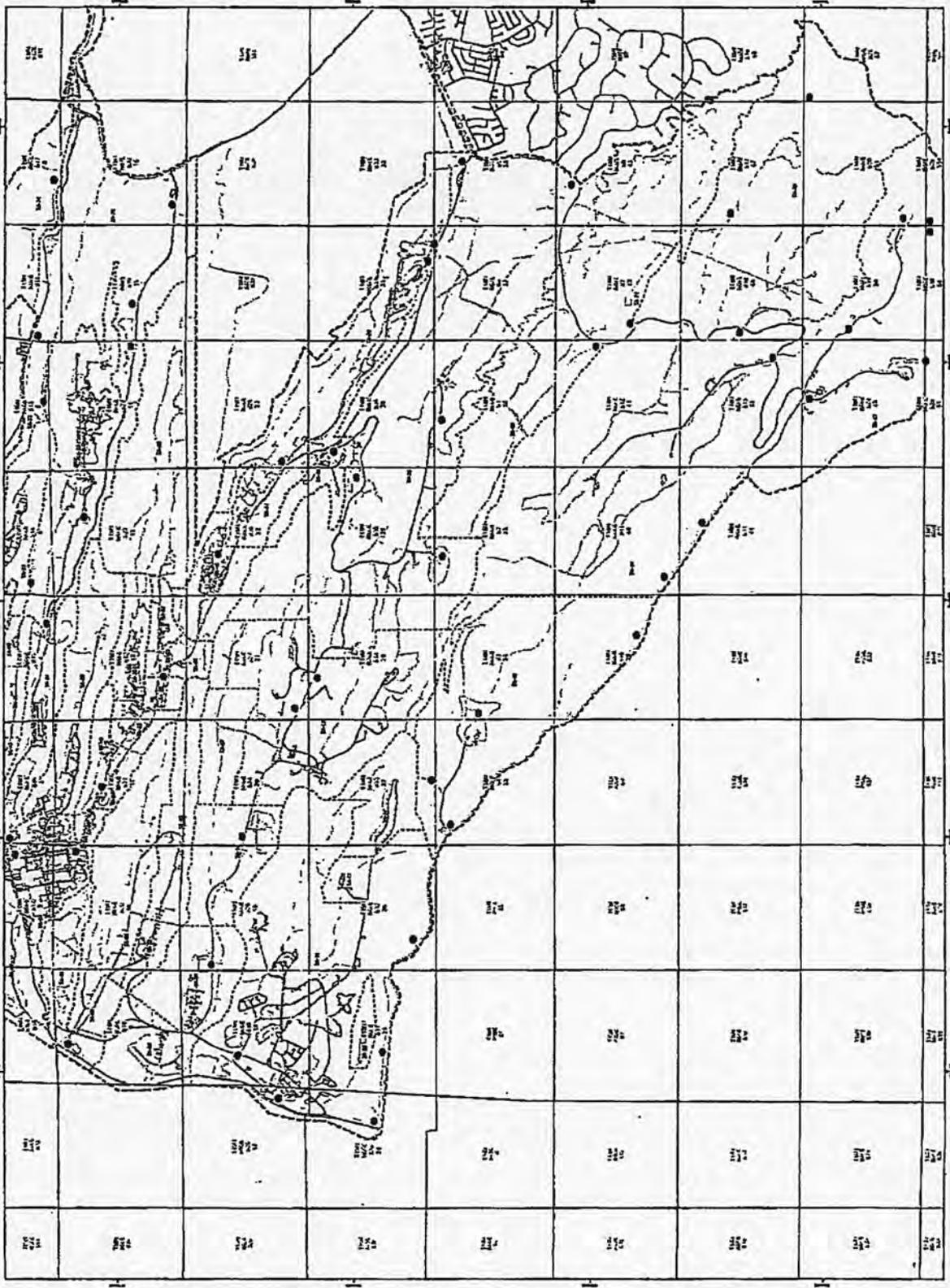
LA-UR-15-23428

Los Alamos National Laboratory Section, Township, Range

- Paved road
- - - Unpaved road
- TA boundary
- Township, Range and Section



How to Use This Map
This map is a reproduction of the original map prepared by the Los Alamos National Laboratory in 1952. It is a reproduction of the original map prepared by the Los Alamos National Laboratory in 1952. It is a reproduction of the original map prepared by the Los Alamos National Laboratory in 1952.



Copyright © 1952 by the Los Alamos National Laboratory
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of the Los Alamos National Laboratory.



**New Mexico Environment Department Ground Water Quality Bureau
Discharge Permit Summary**

Facility Information

Facility Name	Los Alamos National Laboratory
Discharge Permit Number	DP-1793
Legally Responsible Party	Allison Dorries, Division Leader, ENV-DO, LANS, LLC Los Alamos National Security, LLC 3747 West Jemez Road Los Alamos, New Mexico 87545 (505) 667-7969
	Gene E. Turner Environmental Permitting Manager Department of Energy P.O. Box 1663, K490 Los Alamos, New Mexico 87545

Treatment, Disposal and Site Information

Primary Waste Type	Remediation, aquifer testing groundwater
Facility Type	Industrial

Treatment Methods

Type	Designation	Description & Comments
Influent Storage Tank	Frac tank, lined modular tanks, synthetically-lined lagoons	Groundwater from one of 61 regional wells and 38 intermediate wells to be treated prior to discharge
Treatment Unit	Raw water treatment units including ion exchange and/or granulated activated carbon	Discharge from aquifer testing, well development and well rehabilitation and tracer studies, or groundwater remediation will be stored in influent storage containment prior to treatment and discharge
Effluent Storage Tank	Frac tanks, lined modular tanks and synthetically-lined lagoons	Water from treatment unit stored in effluent treatment tanks prior to discharge by land application via water truck or spray irrigation systems.

Discharge Locations

Type	Designation	Description & Comments
Land Application	To be identified in workplan submitted prior to discharge	Discharge will be via land application at one of 55 locations identified in Attachment 1 to Discharge Permit.

Flow Metering Locations

Type	Designation	Description & Comments
Totalizing Flow Meter	Influent	Pumping rates, times and volumes will be monitored and recorded at the well head during all pumping/aquifer testing, well development/rehabilitation and tracer study activities,



New Mexico Environment Department Ground Water Quality Bureau
Discharge Permit Summary

Totalizing Flow meter	Effluent	Each surface discharge will be metered and recorded at the loading rack
-----------------------	----------	---

Ground Water Monitoring Locations

Type	Designation	Description & Comments
Monitoring Wells	Intermediate and Regional	61 regional and 28 intermediate zone monitoring wells are sampled under the <i>Interim Facility-Wide Groundwater Monitoring Plan</i> , under the direction of the NMED Hazardous Waste Bureau

Depth-to-Ground Water 45 to 900 feet below ground surface
Total Dissolved Solids (TDS) 270 to 300 mg/L

Permit Information

Application Received January 8, 2014
Public Notice Published PN-1 12-15-14
Discharge Permit Issued July 31, 2015
Discharge Permit Term Ends July 31, 2020
Permitted Discharge Volume 350,000 gallons per day

NMED Contact Information

Mailing Address Ground Water Quality Bureau
 P.O. Box 5469
 Santa Fe, New Mexico 87502-5469

GWQB Telephone Number (505) 827-2900

NMED Lead Staff Steve Huddleson
Lead Staff Telephone Number (505) 827-2936
Lead Staff Email steven.huddleson@state.nm.us

**NEW MEXICO ENVIRONMENT DEPARTMENT
GROUND WATER POLLUTION PREVENTION SECTION
SYNTHETICALLY LINED LAGOONS - LINER MATERIAL AND SITE PREPARATION
GUIDELINES**

Purpose: These guidelines represent minimum liner material and site preparation requirements for wastewater treatment, storage and evaporation lagoons. These requirements do not apply to lagoons storing hazardous wastes or high strength waste. The Ground Water Quality Bureau may impose additional requirements (e.g., double-lined lagoons with leak detection) for facilities discharging hazardous or high strength waste to lagoons through the development of specific Discharge Permit conditions for such facilities.

Liner Material Requirements:

1. The liner shall be chemically compatible with any material that will contact the liner.
2. The liner material shall be resistant to deterioration by sunlight if any portion of the liner will be exposed.
3. Synthetic liner material shall be of sufficient thickness to have adequate tensile strength and tear and puncture resistance. Under no circumstances shall a synthetic liner material less than 40 mils in thickness be accepted. Any liner material shall be certified by a licensed New Mexico professional engineer and approved by the New Mexico Environment Department (NMED) prior to its installation.

Lagoon Design and Site Preparation Requirements:

1. The system shall be certified by a licensed New Mexico professional engineer and approved by NMED prior to installation.
2. Inside slopes shall be a maximum of 3 (horizontal): 1 (vertical), and a minimum of 4 (horizontal); 1 (vertical).
3. Lagoon volume shall be designed to allow for a minimum of 24 inches of freeboard.
4. The liner shall be installed with sufficient liner material to accommodate shrinkage due to temperature changes. Folds in the liner are not acceptable.
5. To a depth of at least six inches below the liner, the sub-grade shall be free of sharp rocks, vegetation and stubble. In addition, liners shall be placed on a sub-grade of sand or fine soil. The surface in contact with the liner shall be smooth to allow for good contact between liner and sub-grade. The surface shall be dry during liner installation.
6. Sub-grade shall be compacted to a minimum of 90% of standard proctor density.
7. The minimum dike width shall be eight feet to allow vehicle traffic for maintenance.
8. The base of the pond shall be as uniform as possible and shall not vary more than three inches from the average finished elevation.
9. Synthetic liners shall be anchored in an anchor trench in the top of the berm. The trench shall be a minimum of 12 inches wide, 12 inches deep and shall be set back at least 24 inches from the inside edge of the berm.
10. If the lagoon is installed over areas of decomposing organic materials or shallow ground water, a liner vent system shall be installed.
11. Any opening in the liner through which a pipe or other fixture protrudes shall be properly sealed. Liner penetrations shall be detailed in the construction plans and record drawings.
12. A synthetic liner shall not be installed in temperatures below freezing.
13. The liner shall be installed or supervised by an individual that has the necessary training and experience as required by the liner manufacturer.
14. All manufacturer's installation and field seaming guidelines shall be followed.
15. All synthetic liner seams shall be field tested by the installer and verification of the adequacy of the seams shall be submitted to NMED along with the record drawings.

16. Concrete slabs installed on top of the synthetic liner for operational purposes shall be completed in accordance with manufacturer and installer recommendations to ensure liner integrity.
17. NMED shall be notified in advance when construction of the lagoon is to begin. NMED shall be notified upon completion of the liner installation and prior to any discharge to the lagoon to allow NMED the opportunity to inspect the liner installation.
18. Record drawings, final specifications and final lagoon capacity calculations shall be submitted to NMED within 30 days of completion of construction. These plans shall be certified by a licensed New Mexico professional engineer.

NEW MEXICO ENVIRONMENT DEPARTMENT
GROUND WATER QUALITY BUREAU
MONITORING WELL CONSTRUCTION AND ABANDONMENT GUIDELINES

Purpose: These guidelines identify minimum construction and abandonment details for installation of water table monitoring wells under ground water Discharge Permits issued by the NMED's Ground Water Quality Bureau (GWQB) and Abatement Plans approved by the GWQB. Proposed locations of monitoring wells required under Discharge Permits and Abatement Plans and requests to use alternate installation and/or construction methods for water table monitoring wells or other types of monitoring wells (e.g., deep monitoring wells for delineation of vertical extent of contaminants) must be submitted to the GWQB for approval prior to drilling and construction.

General Drilling Specifications:

1. All well drilling activities must be performed by an individual with a current and valid well driller license issued by the State of New Mexico in accordance with 19.27.4 NMAC. Use of drillers with environmental well drilling experience and expertise is highly recommended.
2. Drilling methods that allow for accurate determinations of water table locations must be employed. All drill bits, drill rods, and down-hole tools must be thoroughly cleaned immediately prior to the start of drilling. The borehole diameter must be drilled a minimum of 4 inches larger than the casing diameter to allow for the emplacement of sand and sealant.
3. After completion, the well should be allowed to stabilize for a minimum of 12 hours before development is initiated.
4. The well must be developed so that formation water flows freely through the screen and is not turbid, and all sediment and drilling disturbances are removed from the well.

Well Specifications (see attached monitoring well schematic):

5. Schedule 40 (or heavier) polyvinyl chloride (PVC) pipe, stainless steel pipe, carbon steel pipe, or pipe of an alternate appropriate material that has been approved for use by NMED must be used as casing. The casing must have an inside diameter not less than 2 inches. The casing material selected for use must be compatible with the anticipated chemistry of the ground water and appropriate for the contaminants of interest at the facility. The casing material and thickness selected for use must have sufficient collapse strength to withstand the pressure exerted by grouts used as annular seals and thermal properties sufficient to withstand the heat generated by the hydration of cement-based grouts. Casing sections may be joined using welded, threaded, or mechanically locking joints; the method selected must provide sufficient joint strength for the specific well installation. The casing must extend from the top of the screen to at least one foot above ground surface. The top of the casing must be fitted with a removable cap, and the exposed casing must be protected by a locking steel well shroud. The shroud must be large enough in diameter to allow easy access for removal of the cap. Alternatively, monitoring wells may be completed below grade. In this case, the casing must extend from the top of the screen to 6 to 12 inches below the ground surface; the monitoring wells must be sealed with locking, expandable well plugs; a flush-mount, watertight well vault that is rated to withstand traffic loads must be emplaced around the wellhead; and the cover must be secured with at least one bolt. The vault cover must indicate that the wellhead of a monitoring well is contained within the vault.
6. A 20-foot section (maximum) of continuous-slot, machine slotted, or other manufactured PVC or stainless steel well screen or well screen of an alternate appropriate material that has been approved for use by NMED must be installed across the water table. Screens created by cutting slots into solid casing with saws or other tools must not be used. The screen material selected for use must be compatible with the anticipated chemistry of the ground water and appropriate for the contaminants of interest at the facility. Screen sections may be joined using welded, threaded, or mechanically

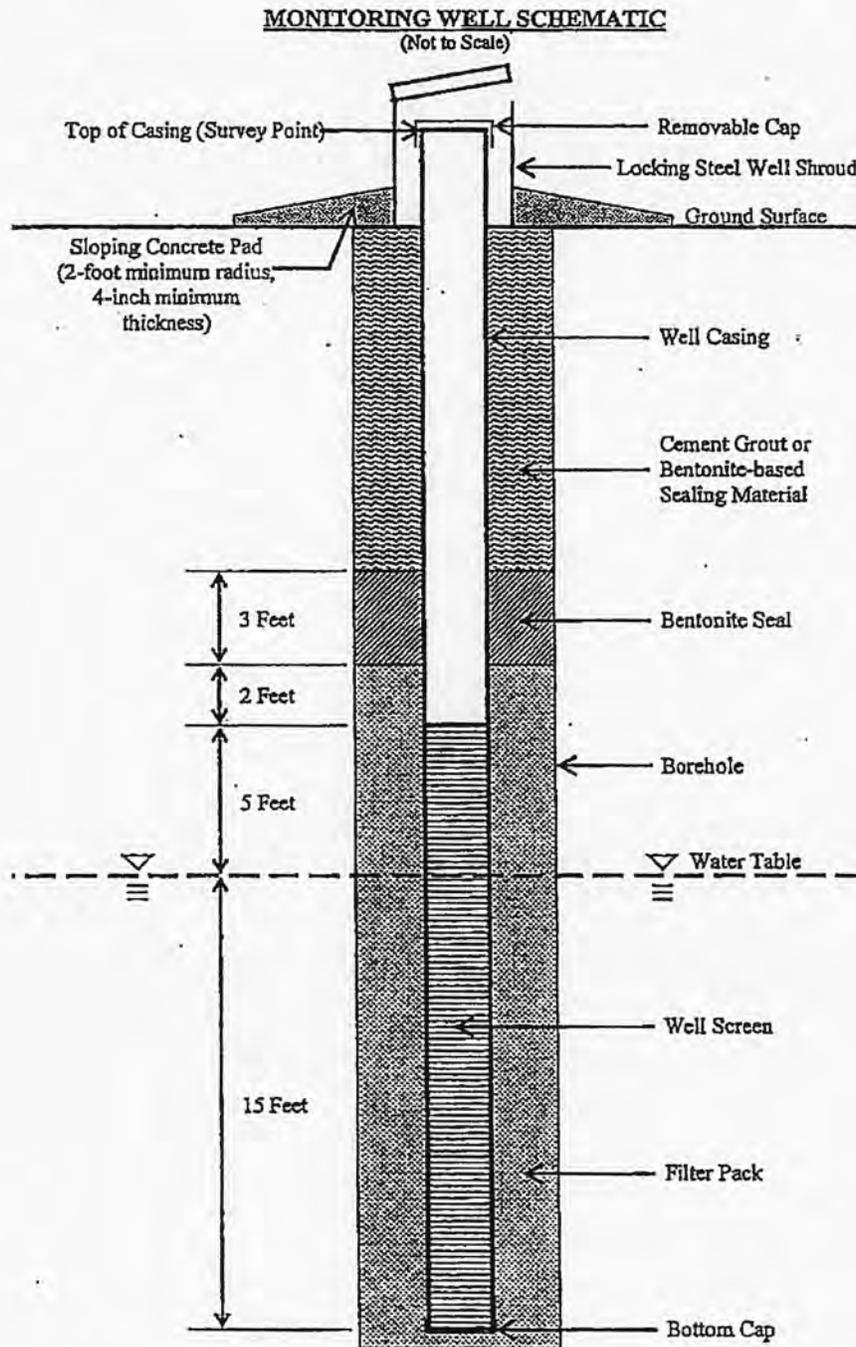
locking joints; the method selected must provide sufficient joint strength for the specific well installation and must not introduce constituents that may reasonably be considered contaminants of interest at the facility. A cap must be attached to the bottom of the well screen; sumps (i.e., casing attached to the bottom of a well screen) should not be installed. The bottom of the screen must be installed no more than 15 feet below the water table; the top of the well screen must be positioned not less than 5 feet above the water table. The well screen slots must be appropriately sized for the formation materials and should be selected to retain 90 percent of the filter pack. A slot size of 0.010 inches is generally adequate for most installations.

7. Casing and well screen must be centered in the borehole by placing centralizers near the top and bottom of the well screen.
8. A filter pack must be installed around the screen by filling the annular space from the bottom of the screen to 2 feet above the top of the screen with clean silica sand. The filter pack must be properly sized to prevent fine particles in the formation from entering the well; clean medium to coarse silica sand is generally adequate as filter pack material for 0.010-inch slotted well screen. For wells deeper than 30 feet, the sand must be emplaced by a tremmie pipe. The well should be surged or bailed to settle the filter pack and additional sand added, if necessary, before the bentonite seal is emplaced.
9. A bentonite seal must be constructed immediately above the filter pack by emplacing bentonite chips or pellets (3/8-inch in size or smaller) in a manner that prevents bridging of the chips/pellets in the annular space. The bentonite seal must be 3 feet in thickness and hydrated with clean water. Adequate time should be allowed for expansion of the bentonite seal before installation of the annular space seal.
10. The annular space above the bentonite seal must be sealed with cement grout or a bentonite-based sealing material acceptable to the State Engineer pursuant to 19.27.4 NMAC. A tremmie pipe must be used when placing sealing materials at depths greater than 20 feet below the ground surface. Annular space seals must extend from the top of the bentonite seal to the ground surface (for wells completed above grade) or to a level 3 to 6 inches below the top of casing (for wells completed below grade).
11. For monitoring wells finished above grade, a concrete pad (2-foot minimum radius, 4-inch minimum thickness) must be poured around the shroud and wellhead. The concrete and surrounding soil must be sloped to direct rainfall and runoff away from the wellhead. The installation of steel posts around the well shroud and wellhead is recommended for monitoring wells finished above grade to protect the wellhead from damage by vehicles or equipment. For monitoring wells finished below grade, a concrete pad (2-foot minimum radius, 4-inch minimum thickness) must be poured around the well vault and wellhead. The concrete and surrounding soil must be sloped to direct rainfall and runoff away from the well vault.

Abandonment:

12. Approval for abandonment of monitoring wells used for ground water monitoring in accordance with Discharge Permit and Abatement Plan requirements must be obtained from NMED prior to abandonment.
13. Well abandonment must be accomplished by removing the well casing and placing neat cement grout, bentonite-based plugging material, or other sealing material approved by the State Engineer for wells that encounter water pursuant to 19.27.4 NMAC from the bottom of the borehole to the ground surface using a tremmie pipe. If the casing cannot be removed, neat cement grout, bentonite-based plugging material, or other sealing material approved by the State Engineer must be placed in the well using a tremmie pipe from the bottom of the well to the ground surface.
14. After abandonment, written notification describing the well abandonment must be submitted to the NMED. Written notification of well abandonment must consist of a copy of the well plugging record submitted to the State Engineer in accordance with 19.27.4 NMAC, or alternate documentation containing the information to be provided in a well plugging record required by the State Engineer as specified in 19.27.4 NMAC.

Deviation from Monitoring Well Construction and Abandonment Requirements: Requests to construct water table monitoring wells or other types of monitoring wells for ground water monitoring under ground water Discharge Permits or Abatement Plans in a manner that deviates from the specified requirements must be submitted in writing to the GWQB. Each request must state the rationale for the proposed deviation from these requirements and provide detailed evidence supporting the request. The GWQB will approve or deny requests to deviate from these requirements in writing.





Communities For Clean Water

March 2, 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: 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,

Joni Arends
Concerned Citizens for Nuclear Safety
jarends@nuclearactive.org

Kathy Sanchez and Beata Tsosie-Peña
Tewa Women United
Kathy@tewawomenunited.org
Beata@tewawomenunited.org

Marian Naranjo
Honor Our Pueblo Existence
mariannaranjo@icloud.com

Rachel Conn
Amigos Bravos
rconn@amigosbravos.org

Joan Brown and Marlene Perrotte
Partnership for Earth Spirituality
marlenep@swcp.com
joankansas@swcp.com



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

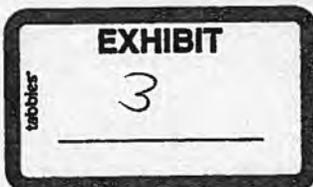
Dear Mr. Huddleson:

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 15th 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. 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

On April 15th, 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. 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.

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 15th, 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. 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.

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. 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.

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. 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.

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 treat the water to less than 50% of the applicable standards?

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

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

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.

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. 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.

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. 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.

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. 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.

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. 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.

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. 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.

Agreed.

13. Condition 13. Soil Sampling. 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. 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.

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. 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?

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. 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.

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, Id.:

- * 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 16th to December 15th 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,

Joni Arends
Concerned Citizens for Nuclear Safety
jarends@nuclearactive.org

Kathy Sanchez and Beata Tsosie-Peña
Tewa Women United
Kathy@tewawomenunited.org
Beata@tewawomenunited.org

Marian Naranjo
Honor Our Pueblo Existence
mariannaranjo@icloud.com

Rachel Conn
Amigos Bravos
rconn@amigosbravos.org

Joan Brown and Marlene Perrotte
Partnership for Earth Spirituality
marlenep@swcp.com
joankansas@swcp.com





Communities For Clean Water

June 15, 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 Comments about May 28, 2015 draft DP-1793 for
Los Alamos National Laboratory Groundwater Projects

Dear Mr. Huddleson:

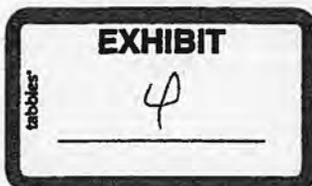
The Communities for Clean Water ("CCW") submit the following request for a public hearing and specific comments about the above referenced draft Discharge Permit DP-1793 for Los Alamos National Laboratory ("LANL") Groundwater Projects. We incorporate by reference our March 2, 2015 and April 29, 2015 comments into these comments.

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 substantial public interest in this permit by the CCW member groups and our individual constituencies. A public hearing should be held because the permit is too broad and as a result, violates our procedural due process rights.

1. **Permit is Too Broad.** The draft permit allows for discharge/land application across 55 sections at LANL with no specificity. The details are provided in the



Condition 3 workplans. The public process for the workplans is limited. Condition 3 does not provide formal public notice. It provides a limited opportunity for review and comment, but it does not provide opportunity to request a public hearing – an important right to address a new method for utilizing treated groundwater.

The term “workplan” is not defined in 20.6.2 NMAC. As a result, it is vague and ambiguous.

A workplan is a “discharge permit modification” because each workplan could change “the location of the discharge,” and/or could allow “a significant increase in the quantity of the discharge.” 20.6.2.7.P NMAC. Under the draft permit, no one specifically knows the location and the proposed quantity of the discharge. *Id.* The discharge quality is provided in the fifth paragraph in the Introduction of the draft permit. The increase in quantity could be more than the NMED guideline of 10 percent; in fact, in some cases it could be 100% because previously the discharge/land application had not been allowed.

A discharge permit modification allows for formal public notice, opportunity for review and comment, and opportunity to request a public hearing. 20.6.2.3108 NMAC – Public Notice and Participation. The draft permit provides for a minimal, non-mandatory public notice through the Applicants’ Electronic Public Reading Room (EPRR) and no opportunity to request a public hearing. This is unacceptable and violates our procedural due process rights.

Further, Condition 13 provides that the

permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC [Prevention and Abatement of Water Pollution], should the corrective action plan not result in compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC [Abatement Standards and Requirements] within 180 days of confirmed ground water contamination.” [Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]

Within the abatement regulations, Section 20.6.2.4108 – Public Notice and Participation – allows for public notice, review and comment, and opportunity to request a public hearing. Section 20.6.2.4114 – Appeals from Secretary’s Decisions – provides for appeals to the Water Quality Control Commission by a person who participated in the “action before the secretary and who is adversely affected by the decision.”

But, there are exemptions within the abatement regulations. Section 20.6.2.4105 – Exemptions from Abatement Plan Requirements – exempts:

a person who is abating water pollution

(6) under the authority of a ground-water discharge plan approved by the secretary, provided that such abatement is consistent with the requirements and provisions of Section 20.6.2.4101, 20.6.2.4103, Subsections C and E of Section 20.6.2.4106 [Abatement Plan Proposal], Section 20.6.2.4107 [Other Requirements] and 20.6.2.4112 NMAC [Completion and Termination];

A workplan may serve as a groundwater discharge plan; but we don't know because "workplan" is not defined. In a worst case scenario, CCW and our constituents would be excluded from public notice, public review and comment and opportunity to request a public hearing on the abatement. Our public participation opportunities to prevent the need for abatement are found in 20.6.2.3108 NMAC - Public Notice and Participation - regulations. *Please see* our analysis in our April 29, 2015 comments about the nature of the public notice and participation requirements.

The workplans are discharge permit modifications and the public should be provided with a formal public notice, public review and comment and opportunity to request a public hearing. The final permit should not attempt to shortcut our 20.6.2.3108 NMAC procedural due process rights.

2. Electronic Public Reading Room (EPRR) postings. Condition 12. CCW objects that all documents required to be submitted by the Permittees to the NMED, and the NMED responses, are not required to be posted promptly to the EPRR.

Nothing in the Ground Water Quality regulations prevent NMED from requiring the Applicants/Permittees to post in a timely manner their deliverables/documents and the NMED responses to the EPRR.

3. Amount of Discharge. The draft permit does not accurately reflect the amount of the discharge. The draft permit allows for a maximum daily discharge of 350,000 gallons per day (gpd). Section III - Authorization to Discharge. Operations are limited to daylight hours and for a maximum of 10 hours per day. Condition 4. The discharge is limited to 250 gallons per minute (gpm). Our calculations find that the maximum daily discharge should be 150,000 gpd and not 350,000 gpd.

$$250 \text{ gpm} \times 60 \text{ min/hr} = 15,000 \text{ gallons per hour} \times 10 \text{ hrs} = 150,000 \text{ gpd}$$

The final permit should limit the daily discharge to 150,000 gpd.

4. No Certification Process for Plans and Specification Approval. The draft permit does not require a licensed New Mexico professional engineer to approve plans and specifications required by the permit. Condition 20(d). The proposed language is incomplete in that it does not require a professional to approve the plans and

specification. There is no requirement that the Applicants have to certify that the facility record drawings “comply with all applicable statutes, regulations and codes including applicable DOE and LANL Engineering Standards.”

Nothing in the Ground Water Quality regulations prevent NMED from requiring approval by a licensed New Mexico professional engineer.

Recent history of errors at LANL clearly shows that more oversight of the nuclear weapons facility is needed. This is the facility that took shortcuts to get waste to the Waste Isolation Pilot Plant (WIPP) and as a result shut down waste disposal operations for an indeterminate period of time at a cost of at least a half a billion dollars. Requiring the certification of a NM licensed professional engineer should be required in order to add another layer of protection of the waters and public health and safety.

5. No Public Comment about Closure and Post-Closure Activities. Condition 19 does not require a public comment period about the closure and post-closure activities under the draft permit. And in fact, the condition allows the Permittees to apply for a variance. It is unclear if the variance would be under the Ground Water Quality regulations or the Resource Conservation and Recovery Act (RCRA) 2005 NMED Order on Consent for LANL. More information should be required in the permit.

Specific Comments

1. Limit discharges to times when the ground is not frozen as discussed at the April 15, 2015 meeting. See Applicants’ February 25, 2014 (or 2015?) Comment No. 14, which stated discharges/land applications would be done from March 16th to December 15th. Section III Authorization to Discharge.
2. Require full public notice, review and comment and opportunity for a public hearing as required by 20.6.2.3109 NMAC for the Condition 3 workplans.
3. Condition 3. Require pre- and post soil sampling in the area used for discharge/land application.
4. Condition 3. Require notification about whether the proposed area for land application has been used before or is being used concurrently for another project.
5. Condition 4. It is not clearly stated that NMED approves the discharge/land application “off LANL property.”
6. Condition 6 states that the “most recent edition” will be used. However (a) states that the “18th, 19th or current” version may be used. Please clarify.
7. Condition 6(e) - RCRA is the Resource Conservation and Recovery Act.
8. The *NMED Risk Assessment Guidance for Site Investigations and Remediation*, December 2014 should be listed in Condition 6.
9. Condition 9. Require soil sampling, if required by NMED (Condition 8), to be included in the annual monitoring report.

10. Condition 9. Require influent and effluent concentrations be included in the annual monitoring report.
11. Condition 9. Require annual reporting for areas where land application was done more than once during the reporting period and the cumulative use over the permit term.
12. Condition 10. Add, "approved" in "(most recent *approved* version).
13. Condition 12. Under protest, CCW submits the following:
 - A. Mandatory Postings: NMED stated that they would copy CCW on all correspondence between the Department and the Permittees. We do not find such language in the draft permit.
 1. Condition 3 - submittal of workplan for individual discharge to NMED and NMED's responses;
 2. Condition 8 - discharge (workplan completion) report to NMED and NMED's responses;
 3. Condition 13 - notification of groundwater exceedance and submittal of Corrective Action Plan to NMED and NMED responses;
 4. Condition 14 - notification of soil sampling exceedance workplan and NMED responses;
 5. Condition 15 - improperly constructed groundwater well notification and NMED responses;
 6. Condition 16 - groundwater well not hydrologically downgradient notification and NMED responses;
 7. Condition 17 - release ("spill") notification, corrective action report/plan and any abatement proposal and NMED responses;
 8. Condition 18 - notification of failure of discharge plan and NMED responses;
 9. Condition 19 - closure and post-closure activities - all documents submitted to NMED by Permittees under this condition and NMED responses;
 10. Condition 23 - modification and/or amendments - all documents submitted to NMED by Permittees under this condition and NMED responses;
 11. Condition 24 - plans and specifications - all documents submitted to NMED by Permittees under this condition and NMED responses; and
 12. Condition 29 - transfer of discharge permit - all documents submitted to NMED by Permittees under this condition and NMED responses.
 - B. Voluntary postings:
 1. Condition 9 - annual monitoring report - due March 1 - and NMED responses; and
 2. Condition 28 - right to appeal - all documents submitted to the Water Quality Control Commissions by the Permittees and NMED under this condition;

14. Condition 19. Provide regulatory cite for new variance language in the last paragraph. Are there public notice and participation requirements associated with applying for a variance?
15. Condition 20. We object to the deletion of the requirement for the signature and seal of a licensed New Mexico professional engineer.

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,

Joni Arends
Concerned Citizens for Nuclear Safety
jarends@nuclearactive.org

Kathy Sanchez and Beata Tsosie-Peña
Tewa Women United
Kathy@tewawomenunited.org
Beata@tewawomenunited.org

Marian Naranjo
Honor Our Pueblo Existence
mariannaranjo@icloud.com

Rachel Conn
Amigos Bravos
rconn@amigosbravos.org

Joan Brown and Marlene Perrotte
Partnership for Earth Spirituality
marlenep@swcp.com
joankansas@swcp.com



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

Harold Runnels Building

1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, New Mexico 87502-5469
Phone (505) 827-2900 Fax (505) 827-2965
www.env.nm.gov



RYAN FLYNN
Cabinet Secretary

BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

July 24, 2015

Joni Arends
Communities for Clean Water
107 Cienega Street
Santa Fe, NM 87501

RE: Denial of Public Hearing Request of June 15, 2015, Discharge Permit DP-1793, Los Alamos National Laboratory Groundwater Projects

Dear Ms. Arends:

On June 15, 2015, the New Mexico Environment Department (NMED) Ground Water Quality Bureau received your request for a public hearing on the ground water Discharge Permit application submitted by the Department of Energy (DOE) and Los Alamos National Security (LANS) in December 2011 (withdrawn and re-submitted on January 8, 2014).

A draft Discharge Permit (DP-1793), based on the revised application, was made available for public comment from January 30, 2015 through March 2, 2015. Comments were received by Communities for Clean Water (representing Tewa Women United, Honor Our Pueblo Existence, Amigos Bravos, and Partnership for Earth Spirituality). Meetings were held with interested parties and representatives of DOE/LANS to discuss the terms of the permit, which was subsequently modified and re-distributed. Your request for public hearing was submitted based upon that Draft Permit.

Your request for a public hearing on the January 8, 2014 ground water Discharge Permit application for the Los Alamos National Laboratory Groundwater Projects has been denied by the Secretary. It is the opinion of the Department that NMED has drafted a Discharge Permit that provides transparency and opportunity for community involvement at an unprecedented level. The proposed activity by LANL is intended to address historic impacts to groundwater and protect water resources and communities, and issuance of this Discharge Permit is in the public interest.

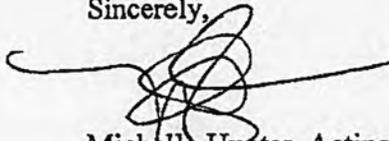


Joni Arends
July 24, 2015
Page 2 of 2

The Discharge Permit will be issued in the very near future. Please be advised that pursuant to the New Mexico Water Quality Act (NMSA 1978, 74-6-5 (O)) a person who participated in a permitting action and is adversely affected may appeal the decision. Petitions must be made in writing to the Water Quality Control Commission within thirty days of receipt of this letter and must provide a statement of the issues to be raised and the relief sought.

NMED wishes to thank you for your participation in the ground water Discharge Permit public notice process. If you have any questions, please feel free to contact Steven Huddleson at (505) 827-2936.

Sincerely,



Michelle Hunter, Acting Chief
Ground Water Quality Bureau

MH:SMH

Cc: Kathy Sanchez, via email at Kathy@Tewawomenunited.org
Beata Tsosie-Pena via email at Beata@tewawomenunited.org
Marian Naranjo via email at Mariannaranjo@icloud.org
Rachael Conn via email at Rconn@amigosbravos.org
Joan Brown via email at Joankansas@swcp.com
Marlene Perrotte via email at Marlenep@swcp.com
Joni Arends via email at Jarends@nuclearactive.org



Communities For Clean Water

August 5, 2015

Michelle Hunter, Acting Chief
Ground Water Quality Bureau
New Mexico Environment Department
P. O. Box 5469
Santa Fe, NM 87502-5469

Re: Corrections to Denial of Public Hearing Request of the Communities for Clean Water on June 15, 2015, Discharge Permit DP-1793, Los Alamos National Laboratory (LANL) Groundwater Projects

Dear Ms. Hunter:

Thank you for your letter of July 24, 2015 referenced above. The Communities for Clean Water (CCW), 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, respectfully offer the following corrections to your letter. The CCW network includes the organizations of Amigos Bravos, Concerned Citizens for Nuclear Safety, Don Gabino Andrade Community Acequia, Honor Our Pueblo Existence, Partnership for Earth Spirituality, Rio Grande Restoration, Tewa Women United, and individuals, Kathy Wanpovi Sanchez and J. Gilbert Sanchez. We are concerned that our numerous requests for a public hearing were not accurately described in your letter. We provide the following chronology of events:

1. In response to the January 30, 2015 Public Notice (PN2) of the New Mexico Environment Department (NMED), on March 2, 2015 CCW submitted environmental justice, general and specific comments about the draft Ground Water Discharge Permit DP-1793, along with a request for a public hearing. *CCW March 2, 2015 Comments, p. 2*. The Applicants (Department of Energy (DOE) and Los Alamos National Security, LLC (LANS)) also requested a public hearing.



2. On April 15, 2015, CCW, the Applicants and NMED met for three hours to discuss the draft permit and the submitted comments.
3. Following that meeting, NMED accepted additional comments from CCW and the Applicants. On April 29, 2015, CCW submitted additional comments and again requested a public hearing. *CCW April 29, 2015 Comments, p. 1.*

CCW also requested a written response from NMED about the issues raised in our comments. The July 24, 2015 NMED letter is the only written response we have received. Unfortunately, the letter does not address the substantive issues raised in our April 29, 2015 comments, incorporating our March 2, 2015 comments. *Id., p. 2.*

4. Another draft permit was released by NMED to the Applicants and CCW for comment. On June 15, 2015, CCW provided additional comments along with renewing our request for a public hearing. *CCW June 15, 2015 Comments, p. 1.*
5. On July 24, 2015, NMED wrote to CCW stating, "Petitions must be made in writing to the Water Quality Control Commission within thirty days of receipt of this letter and must provide a statement of the issues to be raised and the relief sought." We questioned how we would know what issues to raise before the Water Quality Control Commission if we had not yet received the final permit.
6. On July 30, 2015, Steve Huddleson, of your staff, emailed the final permit to Joni Arends and stated, "Having received notification of the Secretary's denial of your hearing request yesterday, and pursuant to the New Mexico Water Quality Act (NMSA 1978, 74-6-5 (O)), you have 30 days from this date (July 30, 2015) to formally submit a petition to the WQCC appealing the decision." We anticipate filing an appeal with the WQCC on or before August 28, 2015.

Finally, Joni Arends is submitting these comments on behalf of CCW, not as CCNS. Her organization is Concerned Citizens for Nuclear Safety, which is a member of CCW. The correct address for CCNS is P. O. Box 31147, Santa Fe, NM 87594-1147. Please email any communication to her at jarends@nuclearactive.org.

Thank you in advance for ensuring that this letter is placed in the DP-1793 Administrative Record so that it is clear that CCW requested a public hearing three times, filed extensive comments, and actively gave of representative members' time and energy by participating in a good-faith effort to resolve the issues CCW has with this permit.

Please contact us with any questions or concerns about the above.

Sincerely,

Communities for Clean Water Core Group and DP-1793 Commenters

Joni Arends
Concerned Citizens for Nuclear Safety
jarends@nuclearactive.org

Kathy Sanchez and Beata Tsosie-Peña
Tewa Women United
Kathy@tewawomenunited.org
Beata@tewawomenunited.org

Marian Naranjo
Honor Our Pueblo Existence
mariannaranjo@icloud.com

Rachel Conn
Amigos Bravos
rconn@amigosbravos.org

Joan Brown and Marlene Perrotte
Partnership for Earth Spirituality
marlenep@swcp.com
joankansas@swcp.com

cc: Don Gabino Andrade Community Acequia
Rio Grande Restoration
Kathy Wanpovi Sanchez
J. Gilbert Sanchez

Jaimie Park

From: Joni Arends [jarends@nuclearactive.org]
Sent: Wednesday, August 05, 2015 1:32 PM
To: Jon Block; jpark@nmelc.org
Subject: 4-15-15 DP-1793 Sign in Sheet
Attachments: 20150415153610223.pdf

----- Forwarded Message -----

Subject: DP-1793 Sign in Sheet
Date: Mon, 20 Apr 2015 16:23:16 +0000
From: Huddleson, Steven, NMENV <Steven.Huddleson@state.nm.us>
To: Joni Arends <jarends@nuclearactive.org>, Beers, Bob <bbeers@lanl.gov>, Turner, Gene E <gene.turner@nnsa.doe.gov>, kathy@tewawomenunited.org <kathy@tewawomenunited.org>
CC: Hayden, Kathryn, NMENV <Kathryn.Hayden@state.nm.us>

Joni, Kathy, Bob and Gene. Here is our signup sheet from Wednesdays meeting regarding DP-1793. I appreciate both parties willingness to participate and engage in discussion. I hope that we can resolve the issues to the satisfaction of all and proceed with issuing a permit that protects our groundwater resources. As always, please feel free to contact me with any questions.

Steve Huddleson, P.G., C.P.G.
Manager, Pollution Prevention Section
Groundwater Quality Bureau
New Mexico Environment Department
(505) 827-2936



4-15-15

DP 1793

<u>Name</u>	<u>Phone</u>	<u>email</u>
Steve Huddlera	827-2936	Steve.Huddlera@state.nm.us
Kathryn Hayden	827-1046	kathryn.hayden@state.nm.us
Marianne Naeumjo	747-9652	marianne@windstream.net
JONI ARENDS	986-1973	jarends@nuclearactive.org
Kathy Sanchez	505 363-7100	Kathy@kwa.womenunited.org
Trais Kliphuis	505-827-1758	trais.kliphuis@state.nm.us
Danny Katzman	505 667-6333	Katzman@lanl.gov
Cheryl Rodriguez	(505) 665-5330	cheryl.rodriguez@em.doe.gov
GENE TURNER	505-667-5794	gene.turner@nnsa.doe.gov
Mike Saladen	665-6085	saladen@lanl.gov
Stephani Smickley	412-8937	sfuller@lanl.gov
Katie Roberts	827-1603	Kathryn.roberts@state.nm.us
DAVE MCINROY	667-0819	mcinroy@lanl.gov
Tony Grieggs	70666	grieggst@lanl.gov
Bob Beers	667-7969	bbeers@lanl.gov