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Date: October 12, 2017
Symbol: LC-ESH: SLM-2017-004

Clerk of the Board
U.S. Environmental Protection Agency
Environmental Appeals Board, 1103M
1200 Pennsylvania Avenue, NW
Washington D.C. 20460

Re: Los Alamos National Security, LLC and U.S. Department of Energy for the Los Alamos National Laboratory
Permit No: NM0028355
Appeal No: NPDES 17-05

Greetings:

This letter responds to the *Order for Additional Briefing* dated September 21, 2017 in the above-referenced matter. This matter relates to an Informal Appeal filed with EPA's Environmental Appeals Board (EAB) by the Concerned Citizens for Nuclear Safety (CCNS) requesting review of the U.S. Environmental Protection Agency Region 6's (Region) denial of CCNS's request to terminate Outfall 051 under NPDES Permit No. 0028355 (NPDES Permit). The NPDES Permit is issued to the U.S. Department of Energy and the Los Alamos National Security, LLC (Co-Permittees) for the Los Alamos National Laboratory (the Laboratory).

The Laboratory strongly opposes CCNS' request to terminate NPDES Permit coverage for Outfall 051, and does not intend to request termination for this outfall associated with the Radioactive Liquid Waste Treatment Facility (RLWTF). The 2012 NPDES Permit Re-Application explicitly included coverage for Outfall 051, which is integral to RLWTF operations. CCNS has not alleged any factual basis to support the drastic measure of unilaterally terminating the Laboratory's NPDES Permit under 40 C.F.R. §122.64.

As requested by the Order, the Laboratory is providing information in the attached Affidavit that addresses the technical topics identified on page 3. See Enclosure, Affidavit of Michael T. Saladen.

We appreciate the opportunity to respond and would be pleased to provide additional information as necessary.

Respectfully Submitted,



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SLM:mma

Enclosure (Affidavit)

CERTIFICATE OF SERVICE

On this 12th day of October 2017, the undersigned certifies that copies of the forgoing *Letter Responding to the Order for Additional Briefing* was sent to the following persons by U.S. First Class Mail:

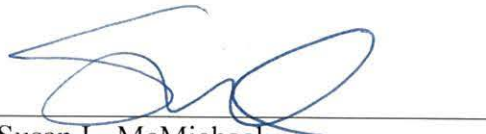
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Susan L. McMichael
Attorney for Los Alamos National Security, LLC

ENCLOSURE

Affidavit of Michael Thomas Saladen

AFFIDAVIT OF MICHAEL THOMAS SALADEN

1. I, Michael Thomas Saladen, am an employee of Los Alamos National Security, LLC at the Los Alamos National Laboratory (LANL). I have been employed at LANL since April 1, 1991.
2. I am currently employed as an Environmental Manager 3 (ENV Manager 3). I have served in this position since April of 2016. Prior to this position, I served as an Environmental Manager 2 (ENV Manager 2) for approximately eight years. Prior to my position as an Environmental Manager, I served as a Technical Staff Member (TSM) at LANL.
3. As an Environmental Manager, I am the Team Leader for the Environmental Compliance Programs Group (EPC-CP), Water Quality Permitting, and Compliance Team. In this position, I provide leadership for several Laboratory environmental programs, including management and compliance with federal Clean Water Act and NPDES Permitting. I also provide support for EPC-CP's institutional environmental compliance programs, projects, work activities in compliance with regulatory requirements, Laboratory policies, and procedures.
4. As part of my current job responsibilities, I am the responsible line manager for compliance oversight for the NPDES Permit #NM0028355 (NPDES Permit) issued to the U.S. Department of Energy (DOE) and Los Alamos National Security, LLC (LANS) as co-permittees for the Los Alamos National Laboratory. I also served as the program lead for this NPDES Permit from 1991 through 2008. The NPDES Permit authorizes the Laboratory to discharge from eleven (11) sanitary and/or industrial outfalls, including the discharge of treated radioactive liquid waste from the Radioactive Liquid Waste Treatment Facility (RLWTF) through Outfall 051. The NPDES Permit has been renewed multiple times, and was re-issued on August 12, 2014 after a timely Re-Application was filed which is referenced as the "2012 NPDES Permit Re-Application February 2012" (CCNS Request to Terminate, September 14, 2017, Exhibit W).
5. I am familiar with the September 14, 2017 Petition to the EPA's Environmental Appeals Board filed by Concerned Citizens for Nuclear Safety (CCNS) requesting the Board to review EPA Region 6's decision to deny CCNS' Request to Terminate NPDES Permit #NM0028355.
6. The Laboratory opposes CCNS' Request to Terminate NPDES Permit #NM0028355, and has no intention of terminating coverage under the Permit for Outfall 051. The Laboratory has been operating RLWTF pursuant to the NPDES Permit, and, as stated in the 2012 NPDES Permit Re-Application Outfall Fact Sheet, permit coverage for Outfall 051 explicitly included "*re-permit the outfall so that the RLWTF can maintain the capability to discharge should the Mechanical Evaporator and/or Zero Liquid Discharge (ZLD) Solar Evaporation Tanks become unavailable due to maintenance, malfunction, and/or there is an increase in treatment capacity caused by changes in LANL scope/mission*" (see page 5 of the 2012 Permit Re-Application Outfall Fact Sheet (Attachment 051 to the February 2012 NPDES Permit Re-Application)).

7. I am also familiar with the *Order for Additional Briefing* issued by the EAB on September 21, 2017. I provide the following responses to technical questions raised on page 3 of the Order, and shown in italics below:

A. *[T]he information in the administrative record relating in the nature and extent of any discharges from Outfall 051 and when EPA publicly noticed the draft NPDES Permit No. 0028355 in June 2013, and when EPA issued a final permit decision in August 2014; and how that information compares to what is known now about the nature and extent of any discharges from Outfall 051.*

There has been no change to any condition that impacts the nature and extent of any discharge from Outfall 051 from the date the NPDES Renewal Application was submitted in 2012 until the current date, including from the date that EPA publicly noticed the draft NPDES permit (June 2013) to issuance of a final permit decision (August 2014). Under the NPDES permit, the Laboratory submits monthly Discharge Monitoring Reports (DMRs) to EPA Region 6, and these DMRs confirm that during this time period there have been no discharges from Outfall 051, and that there has been no change to the nature and extent of any discharges.

B. *Whether the permittee has constructed and made operational the “two new Concrete Evaporation Tanks” referenced at page 7 of the 2012 NPDES Permit Re-Application Outfall Fact Sheet (citations omitted).*

The two new Contract Evaporation Tanks (Tanks) referenced above at page 7 in 2012 NPDES Permit Re-Application Outfall Fact Sheet were constructed in September 2012. As explained below under Paragraph 7.C, these Tanks are the same as the Zero Liquid Discharge (ZLD) “Solar Evaporation Tanks” referenced at page 5 of the 2012 NPDES Permit Re-Application Outfall Fact Sheet.

The Laboratory has not and cannot operate the Solar Evaporative Tanks or “Tanks” because the operational use of these Tanks is also regulated by the New Mexico Environment Department (NMED) under the New Mexico Water Quality Act at NMSA 1978, §§76-6-1 *et. seq.*, and New Mexico Water Quality Regulations at 20.6.2.1 NMAC through issuance of a Ground Water Discharge Permit. In 2012, the Laboratory submitted a renewal application for a Ground-Water Discharge Permit (DP-1132). On May 5, 2017, NMED issued a public notice for comment on DP-1132 which on page 4 of the notice authorizes, among other items, the use and operation of these Tanks referenced in the notice as “Solar Evaporative Tanks.” A true and accurate copy of the Public Notice and Draft DP-1132 is included as Exhibit 1. Until the state administrative processes are complete and a final decision is issued by NMED, the Laboratory cannot operate the Solar Evaporative Tanks or “Tanks.” At the current time, this decision is anticipated in Spring of 2018.

C. Whether these "Concrete Evaporation Tanks" are the same as the "Solar Evaporation Tanks" referenced at page 5 of the 2012 NPDES Permit Re-Application Outfall Fact Sheet (citations omitted).

As stated above, the "Concrete Evaporation Tanks" are the same as the "Solar Evaporation Tanks" at page 5 of the 2012 NPDES Permit Re-Application Outfall Fact Sheet.

FURTHER AFFIANT SAYETH NAUGHT.

Michael T. Saladen
Michael T. Saladen

STATE OF NEW MEXICO)
) ss.
COUNTY OF LOS ALAMOS)

SUBSCRIBED, SWORN TO AND ACKNOWLEDGED before me this 12th day of October 2017, by Michael T. Saladen

Michelle Alarid
NOTARY PUBLIC

My Commission Expires: 7/23/2018

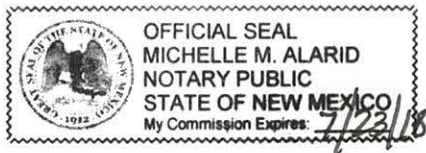


EXHIBIT 1

Public Notice (May 5, 2017)
Draft DP-1132



Notice is hereby given pursuant to 20.6.2.3108.H NMAC, the following Groundwater Discharge Permit applications have been proposed for approval. To request additional information or to obtain a copy of a draft permit, contact the Ground Water Quality Bureau in Santa Fe at (505) 827-2900. Draft permits may also be viewed on-line at <https://www.env.nm.gov/gwb/NMED-GWQB-PublicNotice.htm>

NOTE – If viewing by WEB - Click on facility name to review a copy of the draft permit.

DP #	Facility/Applicant	Closest City	County	Notice	NMED Permit Contact
674	SAS Dairy Albin Smith Owner SAS Dairy 506 State Rd. 467 Clovis, NM 88101 Enviro-Ag Engineering, Inc. Stuart Joy, P.E. 203 E. Main St. Artesia, NM 88210	Clovis	Curry	DP-674 – SAS Dairy: Albin Smith, Owner, proposes to renew and modify the Discharge Permit for the discharge of up to 40,000 gallons per day (gpd) from the production area of a dairy facility to a treatment and disposal system. Wastewater flows to a concrete sump and is pumped through a passive solids separator to a synthetically lined wastewater impoundment system for storage prior to transfer to a synthetically lined combination wastewater/stormwater impoundment at Arrowhead Dairy, managed under DP-1553. The modification consists of the transfer of up to 40,000 gpd to Arrowhead Dairy and changes to reflect the amendments to 20.6.6 NMAC. Potential contaminants associated with this type of discharge include nitrogen compounds. The facility is located at 506 State Rd. 467, approximately 10 miles southwest of Clovis, in Section 1, T01N, R35E, Curry County. Groundwater beneath the site is at a depth of approximately 219 feet and had a pre-discharge total dissolved solids concentration of approximately 320 milligrams per liter.	Matthew Smith Matthew.Smith3@state.nm.us
1553	Arrowhead Dairy Albin Smith Owner Arrowhead Dairy 506 State Rd. 467 Clovis, NM 88101	Clovis	Curry	DP-1553 – Arrowhead Dairy: Albin Smith, Owner, proposes to renew and modify the Discharge Permit for the discharge of up to 85,000 gallons per day (gpd) from the production area of a dairy facility to a treatment and disposal system. Wastewater flows to a passive solids separator to a synthetically lined wastewater impoundment before flowing into a combination wastewater/stormwater	Matthew Smith Matthew.Smith3@state.nm.us



	<p>Enviro-Ag Engineering, Inc. Stuart Joy, P.E. 203 E. Main Street. Artesia, NM 88210</p>			<p>impoundment for storage prior to land application. The permittee proposes to receive up to 40,000 gpd of additional agricultural wastewater from SAS Dairy managed under DP-674. Wastewater from both facilities is comingled and land applied by center pivot irrigation to up to 500 acres of irrigated cropland under cultivation. The modification consists of an increase in the maximum daily discharge from 70,000 gpd to 85,000 gpd, an increase in land application area from 375 acres to 500 acres, and changes to reflect the amendments to 20.6.6 NMAC. Potential contaminants associated with this type of discharge include nitrogen compounds. The facility is located at 1763 CR 6, 10 miles southwest of Clovis, in Sections 1 and 2, T01N, R35E, Curry County. Groundwater beneath the site is at a depth of approximately 206 feet and had a pre-discharge total dissolved solids concentration of approximately 765 milligrams per liter.</p>	
1281	<p><u>West Mesa/Santa Teresa Wastewater Treatment Facility</u> Brent Westmoreland Executive Director Camino Real Regional Utility Authority 4950 McNutt Rd. Sunland Park, NM 88063</p>	Santa Teresa	Doña Ana	<p>DP-1281 - West Mesa/Santa Teresa Wastewater Treatment Facility: Brent Westmoreland, Executive Director, proposes to modify the Discharge Permit for the discharge of up to 450,000 gallons per day (gpd) of treated wastewater from a wastewater treatment facility. Treated wastewater is stored in two synthetically-lined impoundments and then discharged to three surface disposal areas totaling 48.7 acres. Up to 50,000 gpd of treated wastewater may be discharged to a leachfield on an emergency basis. The modification consists of an increase in the maximum daily discharge volume from 300,000 gpd to 450,000 gpd and an increase in surface disposal acreage from 11.5 to 48.7 acres. Potential contaminants associated with this type of discharge include nitrogen compounds. The facility is located at 4770 Pete Domenici Hwy, approximately 2.5 miles southwest of Santa Teresa, in Section 30, T28S, R03E, Doña Ana County. Groundwater beneath the site is at a depth</p>	<p>Gerald Knutson <u>Gerald.Knutson@state.nm.us</u></p>



				of approximately 315 feet and has a total dissolved solids concentration ranging from 500 to 1,000 milligrams per liter.	
1620	<p><u>Hobbs Generating Station</u></p> <p>Rob Hanna, First Reserve Asset Manger Lea Power Partners, LLC. One Lafayette Place Greenwich, CT 06830</p>	Hobbs	Lea	<p>DP-1620, Hobbs Generating Station: Lea Power Partners, LLC. proposes to renew the Discharge Permit for the discharge of up to 5 million gallons per month, or 165,000 gallons per day, on an annual average, of evaporative cooler blowdown, boiler blowdown, reverse osmosis reject, and filter backwash to two double synthetically-lined storage impoundments then to approximately 58.62 acres of cropland under cultivation and/or native vegetation. Potential contaminants associated with this type of discharge include nitrogen compounds and metals. The facility is located at latitude 32.7283° North, longitude 103.3099° West, on North Maddox Road, approximately 10 miles northwest of Hobbs, in Section 25, T18S, R36E, Lea County. Groundwater beneath the site is at a depth of approximately 50 feet and has a total dissolved solids concentration of approximately 340 milligrams per liter.</p>	<p>Kathryn Hayden Kathryn.Hayden@state.nm.us</p>
1132	<p><u>The Radioactive Liquid Waste Treatment Facility</u></p> <p>John C. Bretzke Division Leader Environmental Protection & Compliance Division Los Alamos National Security LLC PO Box 1663, K491 Los Alamos, NM 87545</p>	Los Alamos	Los Alamos	<p>DP-1132 - The Radioactive Liquid Waste Treatment Facility (RLWTF) is a wastewater treatment facility that is authorized to discharge up to 40,000 gallons per day (gpd) and consists of a collection, storage, treatment, and disposal system (including the Waste Management Risk Mitigation Facility or WMRM); the low-level radioactive liquid waste treatment system; the transuranic waste water treatment system; the secondary treatment system; the Mechanical Evaporator System (MES); the Solar Evaporative Tank (SET) impoundment; and an outfall (Outfall 051) regulated by a National Pollutant Discharge Elimination System (NPDES) permit issued by the United States Environmental Protection Agency (EPA) pursuant to the federal Clean Water Act Section 402, 33 U.S.C § 1342. The facility is</p>	<p>Steve Huddleson Steven.Huddleson@state.nm.us</p> <p>Kathryn Hayden Kathryn.Hayden@state.nm.us</p>



	<p>Cheryl L. Rodriguez Program Manager, FPD-II Environmental Management Los Alamos Field Office 3747 West Jemez Road Los Alamos, NM 87544</p>			<p>located within Los Alamos National Laboratory, approximately 1.5 miles south of Los Alamos, New Mexico, in Sections 16, 17, 20, 21, and 22, T19N, R06E, Los Alamos County. Groundwater most likely to be affected ranges from depths of approximately one foot to 1,306 feet and has a total dissolved solids concentration ranging from approximately 162 to 255 milligrams per liter. The discharge may contain water contaminants with concentrations above the standards of 20.6.2.3103 NMAC and may contain toxic pollutants as defined in 20.6.2.7.WW NMAC.</p>	
1769	<p><u>New Mexico State University Agricultural Science Center at Tucumcari</u></p> <p>Glen Haubold Assistant Vice President Office of Facilities and Services New Mexico State University PO Box 30001 MSC 3545 Las Cruces, NM 88003-3545</p>	Tucumcari	Quay	<p>DP-1769, New Mexico State University Agricultural Science Center at Tucumcari, Glen Haubold, Assistant Vice President, Office of Facilities and Services, proposes to discharge up to 720,000 gallons per day (gpd) of reclaimed domestic wastewater received from the City of Tucumcari Wastewater Treatment Facility (WWTF). Reclaimed wastewater is discharged to a 464-acre area for spray, drip, or flood irrigation of cultivated cropland, ornamental landscapes and grounds, and improved/native pastures for conducting science based agricultural investigation on crops and conditions and associated non-research uses. Additionally, the permittee is authorized to discharge up to 465 gpd of domestic wastewater from the facility buildings to a septic tank/leachfield system for treatment and disposal. The discharge contains water contaminants which may be elevated above the standards of Section 20.6.2.3103 NMAC and/or the presence of toxic pollutants as defined in Subsection WW of 20.6.2.7 NMAC. The facility is located at 6502 Quay Road, AM.5, Tucumcari, New Mexico, 88401, approximately 3 miles northeast of Tucumcari, in Sections 6 and 7, Township 11N, Range 31E, and Section 1, Township 11N, Range 30E, Quay County. Ground water most likely to be affected is at a depth of approximately 36 – 84 feet and has a</p>	<p>Kellie Jones Kellie.Jones@state.nm.us</p>



				total dissolved solids concentration of approximately 490 to 1,300 milligrams per liter.	
1313	<p><u>Desertview Dairy</u></p> <p>Anthony Ekren, Permitting and Compliance Riverview, LLP 26406 470th Ave. Morris, MN 56267</p> <p>Stuart Joy, P.E. Enviro-Ag Engineering, Inc. 203 E Main St. Artesia, NM 88210</p>	Texico	Roosevelt	<p>DP-1313 - Desertview Dairy: Anthony Ekren, Member, - dba Riverview Dairy, LLP, proposes to renew and modify the Discharge Permit for the discharge of up to 230,000 gallons per day (gpd) of agricultural wastewater from the production area of a dairy facility to a treatment and disposal system. Wastewater is pumped through a screen solids separator and drains to a two-cell synthetically lined impoundment system for storage prior to land application. Wastewater is land applied by center pivot irrigation to up to 660 acres of irrigated cropland under cultivation. The modification consists of an increase in the maximum daily discharge from 40,000 gpd to 230,000 gpd, an increase in the acreage of the land application area from 187.5 acres to 660 acres, and a change in the location of the discharge which includes the addition of fields in the land application area. Potential contaminants associated with this type of discharge include nitrogen compounds. The facility is located at 012 North Roosevelt Road A, approximately 9 miles south of Texico, in Sections 3 and 4, T1S, R37E, and Sections 33 and 34, T1N, R37E, Roosevelt County. Groundwater beneath the site is at a depth of approximately 230 feet and had a pre-discharge total dissolved solids concentration of approximately 370 milligrams per liter.</p>	<p>Sarah M. Ogden Sarah.Ogden@state.nm.us</p>
563	<p><u>A & M Dairy, LLC</u></p> <p>Pedram Ghoreishi Owner A&M Dairy, LLC PO Box 591 Veguita, NM 87062</p>	Veguita	Socorro	<p>DP-563 – A & M Dairy, LLC: Pedram Ghoreishi, Owner, proposes to renew the Discharge Permit for the discharge of 4,200 gallons per day of agricultural wastewater from the production area of a dairy facility to a treatment and disposal system. Wastewater flows to a clay-lined combination wastewater/stormwater impoundment for disposal by evaporation. Potential contaminants associated with this type of discharge include nitrogen</p>	<p>Marc Bonem Marc.Bonem@state.nm.us</p>



	<p>Stuart Joy, P.E. Consultant Enviro-Ag Engineering, Inc. 203 East Main Street Artesia, NM 88210</p>			<p>compounds. The facility is located at 125 Carlos Martinez Rd., approximately 2 miles south of Veguita, in Section 29, T03N, R02E, Socorro County. Groundwater beneath the site is at a depth of approximately 63 feet and had a pre-discharge total dissolved solids concentration of approximately 300 milligrams per liter.</p>	
1477	<p><u>HAW Farms, LLC</u> John Woelber, Owner HAW Farms, LLC P.O. Box 909 Belen, NM 87002 Stuart Joy, P.E. Consultant Enviro-Ag Engineering, Inc. 203 East Main St. Artesia, NM 88210</p>	Veguita	Socorro	<p>DP-1477 – HAW Farms, LLC: John Woelber, Owner, proposes to renew and modify the Discharge Permit for the discharge of up to 20,000 gallons per day (gpd) of agricultural wastewater from the production area of a dairy facility to a treatment and disposal system. Wastewater is pumped to a passive two-cell concrete solids separator and then flows to two synthetically lined combination wastewater/stormwater impoundments in series for disposal by evaporation. The modification consists of an increase in maximum daily discharge from 13,838 gpd to 20,000 gpd, and changes to reflect the amendments to 20.6.6 NMAC. Potential contaminants associated with this type of discharge include nitrogen compounds. The facility is located at #5 Military Hwy, approximately 8 miles east of Veguita, in Section 16, T03N, R03E, Socorro County. Groundwater beneath the site is at a depth of approximately 366 feet and had a pre-discharge total dissolved solids concentration of approximately 600 milligrams per liter.</p>	<p>Gary Westerfield <u>Gary.Westerfield@state.nm.us</u></p>



Prior to ruling on any proposed Discharge Permit or its modification, the New Mexico Environment Department (NMED) will allow thirty days after the date of publication of this notice to receive written comments and during which time a public hearing may be requested by any interested person, including the applicant. Requests for public hearing shall be in writing and shall set forth the reasons why a hearing should be held. A hearing will be held if NMED determines that there is substantial public interest. Comments or requests for hearing should be submitted to the Ground Water Quality Bureau at PO Box 5469, Santa Fe, NM 87502-5469.

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, you may contact: Kristine Pintado, Non-Discrimination Coordinator, New Mexico Environment Department, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@state.nm.us. If you believe that you have been discriminated against with respect to a NMED program or activity, you may contact the Non-Discrimination Coordinator identified above or visit our website at <https://www.env.nm.gov/NMED/EJ/index.html> to learn how and where to file a complaint of discrimination.

El Departamento del Medio Ambiente de Nuevo México (NMED, por su sigla en inglés) no discrimina por motivos de raza, color, origen nacional, discapacidad, edad o sexo en la administración de sus programas o actividades, según lo exigido por las leyes y los reglamentos correspondientes. El NMED es responsable de la coordinación de esfuerzos para el cumplimiento de las reglas y la recepción de indagaciones relativas a los requisitos de no discriminación implementados por 40 C.F.R. Parte 7, que incluye el Título VI de la Ley de Derechos Civiles de 1964, como fuera enmendado; la Sección 504 de la Ley de Rehabilitación de 1973; la Ley de Discriminación por Edad de 1975; el Título IX de las Enmiendas de Educación de 1972; y la Sección 13 de las Enmiendas a la Ley Federal de Control de la Contaminación del Agua de 1972. Si tiene preguntas sobre este aviso o sobre cualquier programa de no discriminación, norma o procedimiento de NMED, puede comunicarse con la Coordinadora de No Discriminación: Kristine Pintado, Non-Discrimination Coordinator, New Mexico Environment Department, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@state.nm.us. Si piensa que ha sido discriminado con respecto a un programa o actividad de NMED, puede comunicarse con la Coordinadora de No Discriminación antes indicada o visitar nuestro sitio web en <https://www.env.nm.gov/NMED/EJ/index.html> para saber cómo y dónde presentar una queja por discriminación.

To view this and other public notices issued by the Ground Water Quality Bureau on-line, go to:
<https://www.env.nm.gov/gwb/NMED-GWQB-PublicNotice.htm>

DP-1132
Effective date
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DRAFT GROUND WATER DISCHARGE PERMIT (DP-1132)
RADIOACTIVE LIQUID WASTE TREATMENT FACILITY
LOS ALAMOS NATIONAL LABORATORY

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I. ACRONYMS:

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

BOD₅-biochemical oxygen demand (5-day)
CAS-Chemical Abstract Service
CFR-Code of Federal Regulations
Cl- chloride
CQCAP- Construction Quality Control Assurance Plan
DOE-United States Department of Energy
EPA- United States Environmental Protection Agency
gpd- gallons per day
LANL-Los Alamos National Laboratory
LANS- Los Alamos National Security, LLC
MES-Mechanical Evaporator System
Mg/L-milligrams per liter (or parts per million)
NMAC-New Mexico Administrative Code
NMSA-New Mexico Statutes Annotated
NO₃-N-nitrate-nitrogen
NPDES-National Pollutant Discharge Elimination System
PCBs-Polychlorinated Biphenyls
QA/QC-Quality Assurance/Quality Control
RLW-Low-level radioactive waste water
RLWTF-Radioactive Liquid Waste Treatment Facility
SET-Solar Evaporative Tank System
TA-Technical Area
TDS-total dissolved solids
TKN-total Kjeldahl nitrogen
TRU-Transuranic
TSS-total suspended solids
WQA-Water Quality Act
WQCC-Water Quality Control Commission

II. DEFINITIONS:

The following is a list of definitions as they pertain specifically to this Discharge Permit:

- A. Average daily flow-** the rate determined by dividing the total monthly volume by the number of days for the reporting period.
- B. Active portion-** the portion of the Facility where treatment, storage or disposal of waste water occurs or has occurred in the past, including those portions of the Facility which are not in use and have not been closed in accordance with the conditions in this Discharge Permit.
- C. Calibration-** a comparison between an instrument of known magnitude or correctness (standard) and another measurement made in as similar a way as possible with a second device (test instrument).
- D. Closure-** to permanently discontinue the use of a unit, system, or component of the Facility (partial) or the entire Facility (final).
- E. Construction Quality Control Assurance Plan-** a written plan of activities necessary to ensure that construction and installation meet design criteria. A CQCAP includes practices and procedures for inspections, testing and evaluations of material and workmanship necessary to verify the quality of the constructed unit or system, and corrective actions to be implemented when necessary.
- F. Consent Order-** March 1, 2005 Compliance Order on Consent agreed to by NMED, DOE, and the Regents of the University of California (predecessor to LANS) or subsequent versions.
- G. Discharge-** the intentional or unintentional release of an effluent or leachate which has the potential to move directly or indirectly into ground water or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property.
- H. Effluent-** a liquid waste product resulting from the treatment or partial treatment of an influent waste stream intended to be discharged.
- I. Exfiltration-** the uncontrolled passage or penetration of waste water or sludge from a structural component of a unit or system through defective pipes, pipe joints, connections, cracks, structural failure, or material incompatibility and enters the surrounding environment.
- J. Flow meter-** a quantitative instrument or device that measures, displays, and records the flow of a fluid in a conduit or an open channel.
- K. Freeboard-**the vertical distance between the crest of the embankment and the carrying capacity level of an open tank, impoundment, or other open unit that contains a liquid or semi-liquid
- L. Impoundment-** a unit which is a natural topographic depression, man-made excavation, or diked area primarily constructed of earthen or other materials, specifically designed to hold, evaporate or store, an accumulation of liquid or semi-liquid waste.
- M. Industrial waste water-** the liquid wastes from industrial processes or non-household waste water which is generated through activity not solely derived from human excreta, residential sinks, showers, baths, clothes and dish-washing machines; or exceeds the characteristics of a domestic waste as defined in 20.7.3.7.D(6) NMAC; 300 mg/L BOD, 300 mg/L TSS, 80 mg/L total nitrogen or 105 mg/L fats, oils and

grease.

- N. Infiltration-** the uncontrolled passage or penetration of liquids or semi-liquids into a unit or system through defective pipes, pipe joints or connections, or manhole walls, cracks, structural failure, or material incompatibility.
- O. Influent collection system-** the infrastructure and associated components (e.g. sumps, pumps) used for the collection and conveyance of waste water from the originator to the Facility's treatment systems.
- P. Influent-** untreated water, waste water or other liquid or semi-liquid flowing into a reservoir, basin, or treatment plant.
- Q. Incident Command System (ICS)-** A standardized approach to the command, control, and coordination of emergency response providing a common hierarchy within which responders from multiple agencies can be effective.
- R. Leak detection system-** a system capable of detecting the failure of either the primary or secondary containment structure or the presence or release of an accumulated liquid in the secondary containment structure. The system must employ operational controls or consist of an interstitial monitoring device designed to detect continuously and automatically the failure of the primary or secondary containment structure or the presence of a release into the secondary containment structure.
- S. Maintenance and repair-** all actions associated with keeping a system or component functioning as designed or restoring a system or component to its intended function. Maintenance and repair does not include alterations to a unit or system which change the intended function or design of the unit or alter the treatment process.
- T. Maximum daily discharge-** the total daily volume of waste water (expressed in gallons per day) authorized for discharge by a discharge permit.
- U. Open unit or system-** a unit or system designed to store, treat or dispose of liquids, semi-liquids or solids in which the uppermost portion of the unit is exposed.
- V. Outfall-** the point where a treated waste water discharges to waters of the United States, or a tributary to waters of the United States.
- W. Peak instantaneous flow-** the highest design flow rate for a unit or system, expressed in gallons per minute or cubic feet per second.
- X. Record drawings-** the official record of the actual as-built conditions of the completed construction, to be held as the permanent record of each unit and system, which shall comply with the New Mexico Engineering and Surveying Practice Act (Chapter 61, Article 23 NMSA 1978).
- Y. Secondary containment-** a constructed unit or system designed to prevent any migration of waste streams or accumulated liquid out of the unit or system to the soil, ground water, or surface water at any time. Secondary containment can include, but is not limited to: double-walled pipes, concrete and floors equipped with sumps and alarm systems to detect potential leaks and must be:
- Designed, constructed and maintained to surround the unit on sides and bottom;
 - Free of cracks, gaps, or fissures;
 - Constructed of, or lined with, materials that are compatible with the waste streams to be in contact with the unit or system;
 - Placed on a foundation or base capable of withstanding pressure gradients, settling or uplift which may cause failure of the unit or system; and

- Equipped with a leak detection system that is designed and operated so that it will detect the failure of the primary containment structure;
- Z. Settled solids measurement device-** an apparatus for testing settled solids in a liquid suspension for settling rate, compaction of the settled solids, and the resulting clarity of the liquid, or thickness of solids accumulated in an impoundment or tank.
- AA. Sludge or settled solids-** a solid or semisolid residue that results from the treatment or precipitation of solids from a waste stream, or the accumulation of natural sediment and debris settling in an open unit or system.
- BB. Synthetic Liner-** a continuous layer of man-made materials which restricts the downward or lateral escape of effluent or leachate.
- CC. Tank-** a stationary device, designed to contain an accumulation of waste water which is constructed primarily of non-earthen materials (e.g., concrete, steel, plastic) which provide structural support. Tanks can be further identified as either an **On ground tank** meaning a tank that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surface allowing for visual inspection of the vertical walls but not the external tank bottom, an **In-ground tank** meaning a tank constructed or installed so that a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that portion of the external surface area, or an **Aboveground tank** meaning a tank that is completely elevated above the adjacent surrounding surface allowing for visual inspection of the vertical walls and external tank bottom.
- DD. Total Nitrogen-** The sum of total Kjeldahl nitrogen (TKN) and nitrate-nitrogen (NO₃-N).
- EE. Toxic Pollutant-** a water contaminant or combination of water contaminants in concentration(s) which, upon exposure, ingestion, or assimilation either directly from the environment or indirectly by ingestion through food chains, will unreasonably threaten to injure human health, or the health of animals or plants which are commonly hatched, bred, cultivated or protected for use by man for food or economic benefit; as used in this definition injuries to health include death, histopathologic change, clinical symptoms of disease, behavioral abnormalities, genetic mutation, physiological malfunctions or physical deformations in such organisms or their offspring; in order to be considered a toxic pollutant a contaminant must be one or a combination of the potential toxic pollutants identified in the list in 20.6.2.7.WW NMAC and be at a concentration shown by scientific information currently available to the public to have potential for causing one or more of the effects listed above; any water contaminant or combination of the water contaminants identified in the list in 20.6.2.7.WW NMAC creating a lifetime risk of more than one cancer per 100,000 exposed persons is a toxic pollutant.
- FF. Treatment-** any method, technique or process that, through chemical biological and mechanical processes, modify waste water characteristics with the objective to neutralize and reduce or remove organic and inorganic water contaminants which if released to the environment could potentially impact ground water quality or pose a threat to human health.
- GG. Unauthorized Release or spill-** the intentional or unintentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil or other water contaminant

not authorized in this Discharge Permit.

HH. Water Contaminant - any substance that could alter if discharged or spilled the physical, chemical, biological or radiological qualities of water; "water contaminant" does not mean source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954.

III. Introduction

The New Mexico Environment Department (NMED) issues this Discharge Permit (Discharge Permit), DP-1132, 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, and potential release, of water contaminants from the Los Alamos National Laboratory (LANL) Radioactive Liquid Waste Treatment Facility (Facility) so as to protect public health, ground water for present and potential future use as a domestic water supply or an agricultural water supply, and those segments of surface water gaining from ground water inflow. In issuing this Discharge Permit, NMED has determined that the requirements of 20.6.2.3109.C NMAC have been or will be met.

The application (i.e., discharge plan) consists of the materials submitted by the Permittees on August 19, 1996, an updated application submitted to NMED on February 16, 2012, an amendment to the application submitted to NMED on August 10, 2012, supplemental information submitted on June 6, 2016, and materials contained in the administrative record prior to issuance of this Discharge Permit.

The Facility is located within Los Alamos National Laboratory, approximately 1.5 miles south of Los Alamos, New Mexico, in Sections 16, 17, 20, 21 and 22, Township 19N, Range 06E, Los Alamos County. Ground water most likely to be affected ranges from depths of approximately one foot to 1,306 feet and has a total dissolved solids concentration ranging from approximately 162 to 255 milligrams per liter.

The Facility, as it pertains to conditions within this Discharge Permit (DP-1132), is a wastewater treatment facility that is authorized to discharge up to 40,000 gallons per day (gpd), specifically described in section V(D) of this Discharge Permit and includes: the influent collection and storage system including the Waste Management Risk Mitigation Facility (WMRM); the low-level radioactive liquid waste treatment system; the transuranic waste water treatment system; the secondary treatment system; the Mechanical Evaporator System (MES); the Solar Evaporative Tank (SET) impoundment; and an outfall (Outfall 051) regulated by a National Pollutant Discharge Elimination System (NPDES) permit issued by the United States Environmental Protection Agency (EPA) pursuant to the federal Clean Water Act Section 402, 33 U.S.C § 1342. The

discharge may contain water contaminants with concentrations above the standards of 20.6.2.3103 NMAC and may contain toxic pollutants as defined in 20.6.2.7.WW NMAC.

Pursuant to 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 that the standards of 20.6.2.3103 NMAC are being or may be violated or a toxic pollutant as defined in 20.6.2.7.WW NMAC is present. Such modifications may include, without limitation, the implementation of structural controls, treatment processes, monitoring criteria, operational processes, changes in discharge activities and the abatement of water pollution and remediation of ground water quality.

Issuance of this Discharge Permit does not relieve the Permittees of the responsibility to comply with the WQA, WQCC Regulations, and all other applicable federal, state, and local laws and regulations.

IV. Findings

In issuing this Discharge Permit, NMED finds:

- A. The Permittees are discharging effluent or leachate from the Facility so that such effluent or leachate may move directly or indirectly into ground water within the meaning of 20.6.2.3104 NMAC.
- B. The Permittees are discharging effluent or leachate from the Facility 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 total dissolved solids (TDS) within the meaning of 20.6.2.3101.A NMAC.
- C. The discharge from the Facility is within or into a place of withdrawal of ground water for present or reasonably foreseeable future use within the meaning of the WQA, NMSA 1978, § 74-6-5.E.3, and the WQCC Regulations at 20.6.2.3103 NMAC
- D. The discharge from the Facility to Outfall 051 is subject to the exemption set forth in 20.6.2.3105.F NMAC, to the extent that effective and enforceable effluent limitations (not including monitoring requirements) are imposed, unless the NMED Secretary determines that a hazard to public health may result.

V. Authorization to Discharge

- A. Pursuant to 20.6.2.3104 NMAC, it is the responsibility of the Permittees to ensure that discharges authorized by this Discharge Permit are consistent with the terms and conditions herein.
- B. The Permittees are authorized to discharge up to 40,000 gpd of low-level and transuranic radioactive industrial waste water using a series of treatment processes as described in Section V(D) of this Discharge Permit in accordance with the Conditions set forth in Section VI of this Discharge Permit.

C. The Permittees are authorized to discharge up to 40,000 gpd of treated waste water, in accordance with the Conditions set forth in Section VI of this Discharge Permit. Discharges shall be to either the Mechanical Evaporator System (MES), the synthetically lined Solar Evaporative Tank System (SET), or through an outfall (identified as Outfall 051) also regulated by a National Pollutant Discharge Elimination System (NPDES) permit (Permit No. NM0028355) issued by the United States Environmental Protection Agency [20.6.2.3104 NMAC, 20.6.2.3106.C NMAC, 20.6.2.3109.C NMAC].

D. The Permittees are authorized to use the following defined systems with their associated units for the process of collecting, treating, and disposing of waste water:

The Influent Collection System is defined herein as all primary and secondary containment lines that convey transuranic or low-level radioactive waste water from Technical Areas TA-03, TA-35, TA-48, TA-50, TA-55, and TA-59 to the Transuranic Waste (TRU) treatment system and the Low-level Radioactive waste water (RLW) treatment system at TA-50. It includes the conveyance lines beginning at the point the pipe emerges from the building or other structure that comprises the site of generation, and extending to the vault immediately upstream of the influent tanks at TA-50. It also includes the conveyance of low-level radioactive waste water to the RLW treatment system by truck.

The Waste Mitigation Risk Management (WMRM) Facility (Building 50-250) is located about 50 meters southeast of Building 50-01. WMRM houses six tanks, with a capacity of 50,000 gallons each, for the storage of low-level RLW influent. Four of these tanks will be held in reserve for use in emergency situations; two will be used for day-to-day influent collection and storage. Tanks are located in the basement of WMRM; the basement further serves as secondary containment for the facility.

The Low-level Radioactive Waste Water (RLW) Treatment System is defined herein as the low-level radioactive waste water influent storage tanks, the associated treatment units (filters, feed tanks, ion exchange columns, reverse osmosis units, etc.) effluent storage tanks, and other associated low-level radioactive waste water components at TA-50 and subsequent replacement facilities utilizing the same treatment processes located within the physical confines of TA-50. The process by which the individual treatment units within the low-level radioactive treatment system are utilized may, for attaining compliance with the effluent limits set forth in this Discharge Permit, be altered, by-passed, replaced, or removed in accordance with the Conditions set forth in this Discharge Permit. The physical location of each unit and system and replacement systems that convey, store, or treat RLW waste streams coming into the low-level radioactive waste water treatment system is within TA-50.

The Transuranic (TRU) Waste Water Treatment System is defined herein as the influent storage tanks for each form of TRU (acidic and caustic) waste streams, the associated neutralization unit, pressure filters, the final processing tanks, and other associated TRU waste stream conveyance, storage and treatment components at TA-50. Sludge associated with TRU shall be disposed of at an off-

site facility permitted to receive TRU waste.

The Secondary Treatment System is defined herein as the receiving tanks for reverse osmosis concentrate waste water generated through the RLW Treatment System and treated effluent generated from the TRU Treatment System, the treatment process units for secondary reverse osmosis, the rotary vacuum filter, and other associated post-treatment conveyance, storage and treatment components at TA-50 designed to reduce waste stream volumes.

The Mechanical Evaporator System (MES) is defined herein as TA-50-0257 and the units in which treated RLW effluent is disposed of through natural gas generated mechanical evaporation.

The Solar Evaporative Tank System (SET) is defined herein as the concrete impoundment at TA-52 that receives treated effluent from the RLWTF for disposal by evaporation, and the conveyance line from TA-50. The SET consists of two cells separated by a single partitioned wall; each cell has a containerized volume of approximately 380,000 gallons. The SET is an unsealed subgrade concrete structure with a double-lined synthetic liner, and a leak detection system between the synthetic liners.

Outfall 051 is defined herein as the outfall through which treated waste water from the Facility is discharged to Effluent Canyon, which is a tributary to Mortandad Canyon.

[20.6.2.3104 NMAC, 20.6.2.3106.C NMAC, 20.6.2.3109.C NMAC].

VI. Conditions

NMED issues this Discharge Permit for the discharge of water contaminants subject to the following conditions:

A. Operational Plan

1. **ANNUAL UPDATE**-The Permittees shall submit to NMED an updated Facility Process Description annually by February 1 of each year in conjunction with the February Quarterly Report. The annual Facility Process Description shall include the following:
 - a. A schematic of all major structures associated with the Facility, including all influent lines, buildings, exterior tanks, effluent lines, outfall and discharge locations identified in this Discharge Permit.
 - b. A comprehensive flow chart demonstrating the most current processes in operation for the collection, treatment and disposal of waste water for the Facility. The flow chart shall indicate any processes which have been bypassed, decommissioned, or are no longer used for the collection, treatment or final disposal of the waste water.
 - c. An associated narrative describing each of the systems and treatment units outlined in the flow chart. This narrative shall include the collection system, primary treatment units, secondary treatment units and any systems used in the disposition of any associated waste streams at the Facility. For each unit or system, the narrative shall include:

- 1) The identification of the unit or system.
- 2) The physical location.
- 3) Intended function.
- 4) Physical description.
- 5) Operational capacity, if applicable.
- 6) The date the unit or system was placed in operation.
- 7) Origin of waste streams that the unit or system receives.
- 8) The unit or system(s) to which it discharges.

d. The Annual Update shall also include the following documents to be submitted annually by February 1 of each year.

- 1) Summary of maintenance and repairs made during the reporting period.
- 2) Water Tightness Testing results (VI.A.8).
- 3) Settled Solids measurements (VI.A.10).
- 4) Ground Water Flow report (VI.A.32).

[20.6.2.3106.C NMAC]

- 2. NOTIFICATION OF CHANGES-**The Permittees shall submit to NMED a written notification of any changes in the Facility's collection, treatment or disposal systems which are not maintenance and repair (as defined in this permit Section II), and which are not modifications (as defined in Condition VI.A.3, Plans and Specifications). The notification shall be submitted no less than thirty days prior to the date proposed for implementation. The notification shall include, at a minimum, the following items listed herein and others which may be determined to be required by NMED.
- a. Date process change is planned to be implemented.
 - b. Narrative of process change.
 - c. Justification for making the process change.
 - d. Units or components being removed from the process.
 - e. Units or components being incorporated into the process.
 - f. Operational controls implemented for the change in processes.
 - g. Intended duration of process change (e.g., permanent or limited duration).

LANL shall submit to NMED and add to the posting required in Condition VI.E.49 (Electronic Posting) any follow-up material required later by NMED, after NMED's review of a notification.

[20.6.2.3106.C NMAC]

- 3. SUBMITTAL OF PLANS AND SPECIFICATIONS-**The Permittees shall not implement any expansion, process modification, or alteration of a system or unit that could constitute a discharge permit modification (as defined in 20.6.2.7.P NMAC) of the intended function, design or capacity for any of the systems, units or components of the Facility's collection, treatment or disposal systems without prior written approval by NMED. Prior to implementing any such changes, the Permittees shall submit to NMED for approval a written

proposal, including plans and specifications that describes in detail the proposed changes in the processes or components of the Facility's collection, treatment, or disposal systems. The proposal shall be delivered by certified mail or hand delivery. The Permittees shall not place any waste in a new or changed unit or system unless the Permittees receive prior written approval from NMED. NMED will provide such approval only if it finds that the Permittees have submitted the required elements listed herein in sufficient detail to demonstrate that the unit or system is designed and constructed to minimize the possibility of an unauthorized release of water contaminants which could directly or indirectly impact ground water quality or pose a threat to human health. If NMED determines that the proposed changes require an amendment or modification of this Discharge Permit, NMED will so inform, in writing, Permittees.

The proposal shall include, at a minimum, the following information.

- a. Identification of all applicable units and a description of how they will be constructed.
- b. A map, to scale, of the Facility, with the location of the proposed unit relative to other identified structures or systems referenced in this Discharge Permit.
- c. Specifications for all new unit and system components (e.g., lift stations, valves, transfer lines, process units); whether new, retrofitted, or proposed for abandonment. All new system components for the collection, treatment or disposal of waste water at the Facility shall be designed to meet the projected needs of the Facility.
- d. Plans and specifications for proposed flow meters that will be used to measure the volume of waste water discharged to or from the unit or system.
- e. Demonstration that the proposed unit or system is adequately designed for its intended function.
- f. Compatibility of the unit or system's constructed material with the proposed waste stream, including, if applicable, information regarding corrosion protection to ensure that it will maintain its structural integrity and not collapse, rupture or fail.
- g. Certification that the foundation, structural support, seams, connections, and pressure controls, if applicable, are adequately designed and the unit or system has sufficient structural strength to convey, store, treat or dispose of the intended waste stream.
- h. Certification for all plans and specifications attesting to the capacity of the unit or system including, without limitation, waste water flow data derived using both average daily flow and peak instantaneous flow. Computations should be presented in a tabular form showing depths and velocities at minimum, design average, and peak instantaneous flow for all new system components.
- i. Water balance calculations for the capacity and evaporative potential for

units which are subject to exposure to the environment and to which precipitation events may impact total capacity of the unit. The unit shall be designed such that two feet of freeboard or an NMED approved alternative is maintained at all times.

- j. Design specifications for secondary containment for all units or systems intended to convey, store, treat, or dispose of liquid or semi-liquid waste streams.
- k. Design specifications for leak detection systems associated with systems designed to convey, store, treat, or dispose of liquid or semi-liquid waste streams, which demonstrate the capability of detecting the failure of either primary or secondary containment or the presence of any release of any accumulated liquid in the secondary containment system within the earliest practicable time as approved in advance by NMED;
- l. Proposed leakage tests shall be specified for all new unit or system components with direct contact to treated or untreated waste water. This may include appropriate water or low pressure air testing. The use of a camera or other visual methods used for documentation of the inspection, prior to placing the unit or system in service is recommended.
- m. Design specifications for all units or systems designed to convey, store, treat, or dispose of liquid or semi-liquid waste streams, which demonstrate the ability to remove liquids and semi-liquids from the area of containment within the earliest practicable time as approved in advance by NMED.
- n. A Construction Quality Control Assurance Plan (CQCAP) assuring that the proposed unit or system will meet or exceed all design criteria and specifications.

Plans and specifications shall comply with the New Mexico Engineering and Surveying Practice Act (Chapter 61, Article 23 NMSA 1978) as well as applicable DOE and LANL Engineering Standards.

[20.6.2.1202 NMAC, 20.6.2.3106.C NMAC, 20.6.2.3109.C NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]

4. **CONSTRUCTION REPORT**-Within 90 days following completion of construction for a unit or system that requires NMED approval, the Permittees shall prepare a final construction report that contains the following items.
 - a. A complete copy of record drawings, specifications, final design calculations, addenda, and change orders, as applicable, or in the alternative, a list and description of any substantive changes to design plans and specification made during construction (based on field concerns and changes).
 - b. Description of the procedures and results from all inspection and tests that occur before, during, and after construction to ensure that the construction materials and the installed unit or system components meet the design specifications.

- c. A complete copy of the Operation and Maintenance Manual, specific to the unit or system being constructed.
[20.6.2.1202 NMAC, 20.6.2.3109.C NMAC, 20.6.2.3106.C NMAC, 20.6.2.3107.C NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]
5. **RESTRICTING ENTRY**-The Permittees shall, at all times, prevent the unauthorized entry of persons, wildlife, or livestock into the active portions of this Facility (with the exception of Outfall 051) so that physical contact with the waste streams, structures and equipment is restricted. Means to control unauthorized access shall include an artificial or natural barrier which completely surrounds the active portions of the Facility and a means to control entry, at all times, through gates or other entrances to the active portions of the Facility (e.g., locks, surveillance system).
[20.6.2.3109.C NMAC]
6. **SIGNS**-The permittees shall post bilingual warning signs (in English and Spanish) at all gates and perimeter fences, where present, around the Facility. Signs shall be posted in sufficient numbers to be visible at all angles of approach as well as from a distance of at least 25 feet, Permittees shall include on the signs the following or an equivalent warning: DANGER – UNAUTHORIZED PERSONNEL KEEP OUT (PELIGRO – SE PROHIBE LA ENTRADA A PERSONAS NO AUTORIZADAS).
[20.6.2.3109.C NMAC]
7. **VERIFICATION OF SECONDARY CONTAINMENT**-Within 90 days following the effective date of this Discharge Permit (by DATE), the Permittees shall submit to NMED verification demonstrating all units and systems intended to convey, store, treat or dispose of an untreated liquid or semi-liquid waste streams meet the requirements of secondary containment as defined in this Discharge Permit. Verification must also include certification of an operational leak detection system for the unit or system.
[20.6.2.3106.C NMAC, 20.6.2.3107.A NMAC, 20.6.2.3109.C NMAC]
8. **WATER TIGHTNESS TESTING**-Within 180 days following the effective date of this Discharge Permit (by DATE), and every 540 days thereafter, the Permittees shall demonstrate that each unit and system intended to convey, store, treat or dispose of a liquid or semi-liquid waste stream without secondary containment is not leaking and is otherwise fit for use. To make the demonstration, the Permittees shall conduct both a visual test, for those units and systems that are above-ground and visually inspectable, and a quantifiable test, as applicable.

For units and systems that are above-ground and visually inspectable, the visual assessment shall be adequate to detect obvious cracks, leaks, and corrosion or erosion that may lead to cracks and leaks. If necessary, the

Permittees shall remove the stored waste from the unit or system to allow the condition of internal surfaces to be assessed.

The quantifiable assessment for units and systems that are used to store, treat or dispose of liquid or semi-liquid waste streams shall consist of obtaining tank level measurements over at least a 36 hour period during which no liquid or semi-liquid is added to or removed from the unit. The exfiltration or infiltration rate shall not exceed 0.07 gallons per hour per thousand gallons of capacity for the unit or system.

The quantifiable assessment for units and systems designed to convey a liquid or semi-liquid waste stream shall be determined through passive testing for leakage exfiltration and infiltration. The infiltration or exfiltration rate shall not exceed 50 gallons per mile per consecutive 24 hour period for any section of the system. Infiltration and exfiltration tests for conveyance lines shall be conducted as follows:

- a. Prior to testing for infiltration, the conveyance lines shall be isolated and evacuated so that maximum infiltration conditions exist at the time of testing. The Permittees shall measure and document the volume of infiltration entering each section of the conveyance line being tested. The cumulative results for the entire collection system shall not be a satisfactory method for gauging infiltration compliance.
- b. Prior to testing for exfiltration, the conveyance lines shall be isolated and filled with water to a level that produces, at minimum, two feet of hydrologic head above the uppermost point of the section being tested. The cumulative results for the entire collection system shall not be a satisfactory method for gauging exfiltration compliance.

Demonstration of water tightness shall comply with the New Mexico Engineering and Surveying Practice Act (Chapter 61, Article 23 NMSA 1978). The Permittees shall submit to NMED the procedures and findings of the evaluation in the Annual Update (Condition VI.A.1, Annual Update) by February 1 of each year immediately following the date when the water tightness test was performed. In the event that inspection reveals that the leakage rate is greater than permissible in this Discharge Permit, the Permittees shall implement the requirements of Condition V.I.A.9 (Actual or Potential Water-Tightness Failure) in this Discharge Permit.
[20.6.2.3106.C NMAC, 20.6.2.3107.A NMAC, 20.6.2.3109.C NMAC]

9. **ACTUAL OR POTENTIAL WATER-TIGHTNESS FAILURE**-In the event that any unit or system does not demonstrate water-tightness in accordance with this Discharge Permit or should inspection reveal damage to the unit that could result in structural failure, the Permittees shall take the following actions.

- a. If the unit or system failure resulted in an unauthorized release the Permittees shall provide NMED oral notification of the release in 20.6.2.1203 NMAC within 24 hours of learning of the release and take the following corrective actions.
 - 1) The Permittees shall remove the unit or system from service immediately; and
 - 2) As soon as possible following the failure of the unit or system, but within 30 days of the failure, the Permittees shall submit to NMED for approval a written proposal including a schedule for corrective actions to be taken to repair or permanently cease operation of the unit or system.

If repair or replacement of a unit or system requires construction, the Permittees shall submit plans and specifications to NMED with the proposed corrective actions. Plans and specifications shall comply with the New Mexico Engineering and Surveying Practice Act (Chapter 61, Article 23 NMSA 1978).

Upon NMED approval, the Permittees shall implement the approved corrective actions according to the approved schedule.

Prior to placing a repaired or replaced unit or system back into service, the Permittee shall repeat the water-tightness testing in accordance with Condition VI.A.8 (Water Tightness Testing) to verify the effectiveness of the repair or replacement, and submit a report detailing the completion of the corrective actions to NMED. The report shall include the date of the test, the name of the individual that performed the test, written findings, photographic documentation of the unit's interior and water tightness test results. If notified to do so by NMED, the Permittees shall also submit record drawings that include the final, construction details of the unit. Record drawings shall comply with the New Mexico Engineering and Surveying Practice Act (Chapter 61, Article 23 NMSA 1978).

[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A NMAC, 20.6.2.3109.B NMAC]

- 10. SETTLED SOLIDS; SETTLED SOLIDS REMOVAL-**The Permittees shall inspect and measure the thickness of the settled solids in the SET on an annual basis. The Permittees shall measure the thickness of settled solids in accordance with the following procedure.
- a. The total surface area of each basin shall be divided into nine equally sized areas.
 - b. A settled solids measurement device shall be utilized to obtain one settled solids thickness measurement (to the nearest half foot) within each area.
 - c. The individual settled solids thickness for each of the nine measurement areas shall be averaged.

The Permittees shall record all measurements in an inspection log which must include, at a minimum, the following.

- a. Date and time of the inspection.
- b. The name of the inspector.
- c. Identification of the unit.
- d. The location of the unit.
- e. The estimated total volume of liquid or semi-liquid in the unit or system at the time of inspection.
- f. The total depth capacity of the unit or system (allowing for freeboard requirements).
- g. The method used to determine the settled solids thickness.
- h. The average measured thickness of settled solids in the unit.

The Permittees shall not allow settled solids to accumulate in any open unit or system used to convey, store, treat, or dispose of liquid or semi-liquid at an average depth greater than one foot. In the event that the settled solids accumulation in an open unit or system exceeds an average thickness of one foot, or in the event that the Permittees otherwise plan to initiate removal of settled solids from an open unit or system, the Permittees shall propose a plan for the removal and disposal of the settled solids from the unit or system. At least 60 days prior to any settled solids removal, the Permittees shall submit to NMED for approval a written settled solids removal and disposal plan. The plan shall include characterization of the settled solids, the estimated volume of settled solids to be removed, a method for removal throughout the unit or system in a manner that is protective of the structural integrity of the unit or system, a schedule for completing the settled solids removal and disposal, and a description of how the settled solids will be contained, transported, and disposed of in accordance with all applicable local, state, and federal laws and regulations. Upon NMED approval, the Permittees shall implement the plan according to the approved schedule.

The Permittees shall keep the inspection log on site for a minimum of five years from the date of inspection. The Permittees shall submit a summary report of all settled solids activities to NMED in the Annual Report submitted by February 1 of each year as well as the Quarterly Report for the period during which the activity occurs.

[NMSA 1978, § 74-6-5.D, 20.6.2.3109.C NMAC, 20.6.2.3107.A NMAC]

- 11. FACILITY INSPECTIONS-**The Permittees shall inspect the Facility for malfunctions, deterioration, leaks or spills which may be causing, or may lead to, an unauthorized release to the environment or pose a threat to human health.

The inspection shall be performed at the frequency prescribed for each unit or system in this Discharge Permit or based on the rate of deterioration of the

equipment and the probability of an environmental or human health incident for those units and systems not specifically described herein.

- a. The Permittees shall inspect and test all leak detection systems to ensure performance within manufacturer specifications on a regular monthly basis.
- b. The Permittees shall inspect all externally observable portions of units and systems conveying, treating or storing liquids, semi-liquids, or solids including any secondary containment areas on a weekly basis. The Permittees shall examine for evidence of deterioration or failure of the units and systems. The visible portions of all synthetic liners used to store or dispose of liquids or semi-liquids shall be inspected for uniformity, damage, imperfections, punctures, blisters, and evidence of seam or joint failure on a regular monthly basis.
- c. The Permittees shall inspect, on a weekly basis through indirect observation, all units and systems conveying, processing, or storing liquids, semi-liquids, or solids that are inaccessible or otherwise cannot be directly observed. The Permittees shall identify the unit or system and note any observations which may suggest a breach or failure of containment in accordance with Condition VI.A.12 (Containment).
- d. The Permittees shall inspect all open units and systems which contain a liquid or semi-liquid, on each day during which the Facility is in operation, to ensure capacity of the unit or system is not exceeded.

The Permittees shall record all inspections in an inspection log which shall be kept on site for a minimum of five years from the date of inspection. At a minimum, these inspections shall include the date and time of the inspection, the name of the inspector, identification of the unit, the location of the unit, the total volume of liquid or semi-liquid in the unit or system at the time of inspection, a notation of the observations made, and the date and nature of any maintenance and repairs made.

[20.6.2.3107.A NMAC]

12. CONTAINMENT-The Permittees shall institute corrective actions, as necessary, to ensure the protection of ground water and human health. In the event that a unit or system or secondary containment for a unit or system reveals damage that could result in structural failure or a release to the environment, the Permittees shall take the following actions.

- a. The Permittees shall remove the unit or system from service immediately.
- b. The Permittees shall take immediate, and if necessary temporary, corrective actions to minimize the potential for a release.
- c. Within 90 days following identification of the potential failure, the Permittees shall submit to NMED for approval a written corrective action report to include, at minimum, the following.
 - 1) Identification of the unit or system, or secondary containment for a unit or system in which the failure was observed.

- 2) The date and time the failure was observed and the date and time it was estimated to have begun.
 - 3) The potential cause of the failure.
 - 4) For units in which a release occurred to secondary containment but was not released to the environment, the rate at which the release occurred and total volume released to the secondary containment.
 - 5) The characteristics of the waste stream being treated, stored or conveyed by the unit or system, with analytical results from waste stream samples taken with date, time, technical staff collecting the sample and the lab report with QA/QC.
 - 6) The corrective actions taken to remediate the failure or release with a timeline of when actions were implemented.
 - 7) Long-term actions, if any, that are proposed to be employed for maintaining the integrity of the secondary containment and the schedule for implementing such actions.
 - 8) Ongoing measures for monitoring, inspecting, and determining structural integrity of the secondary containment.
 - 9) Proposed operation and maintenance and repair protocol, if applicable, to be instituted to prevent future failures.
- d. If failure of the unit or system or secondary containment resulted in a release to the environment, the Permittees shall comply with the requirements of Condition VI.C.38 (Spill or Unauthorized Release) of this Discharge Permit.

Upon NMED approval of the corrective action report, the Permittees shall implement any approved long-term actions to maintain the integrity of the secondary containment, and any other approved measures or protocols, according to the approved schedule.

[20.6.2.3107.A NMAC]

13. MAINTENANCE and REPAIR-The Permittees shall maintain the function and structural integrity of the Facility at all times except during maintenance or repair. All routine maintenance and repair actions shall be noted in a maintenance log which shall be kept on site for a minimum of five years. Maintenance and repair of a unit or system required due to potential malfunction which could lead to an unauthorized discharge to the environment or pose a threat to human health shall be corrected as soon as possible, but no later than 30 days from the date of the observed malfunction. For good cause, NMED may approve a longer period. The Permittees shall submit to NMED a summary and description of the maintenance and repair activities performed on the Facility as part of the quarterly monitoring reports.

In the event that routine maintenance and repair reveal significant damage likely to affect the structural integrity of a unit or system or any of its associated components, or its ability to function as designed, the Permittees

shall implement the requirements of Condition VI.A.14 (Damage to Structural Integrity) of this Discharge Permit.
[20.6.2.3107.A NMAC]

14. DAMAGE TO STRUCTURAL INTEGRITY-In the event that an inspection required in this Discharge Permit, or any other observation, reveals damage likely to affect the structural integrity of a unit or system or any of its associated components, or its ability to function as designed, the Permittees shall take the affected unit out of service as quickly as possible, notify NMED orally within 24 hours, and shall propose the repair or replacement of the treatment system or its associated components. Within 30 days after discovery by the Permittees or following notification from NMED that corrective action is required, the Permittees shall submit to NMED for approval a written corrective action plan that includes a schedule for implementation and completion. The Permittees may request an extension of the submittal deadline pursuant to Condition VI.E.53 (Extensions of Time). Upon NMED approval, the Permittees shall implement the plan according to the approved schedule. The Permittees shall remedy any deterioration or malfunction of equipment or structures which are discovered during inspection.
[20.6.2.3107.A NMAC]

15. FREEBOARD; FREEBOARD EXCEEDANCE-The Permittees shall maintain two feet of freeboard in all open units and systems that contain a liquid or semi-liquid. If the Permittees determine that two feet of freeboard cannot be maintained, the Permittees shall submit to NMED for approval a written request for alternate freeboard requirements. In the request the Permittees shall, at a minimum, propose freeboard levels that will be maintained and propose demonstrated spill prevention controls and overflow prevention controls that include the prevention of overtopping by wave, wind or precipitation events.

In the event that established freeboard of two feet or an NMED approved alternative, is not maintained in an open tank, impoundment or other open unit or system that contains a liquid or semi-liquid, the Permittees shall take immediate corrective actions to restore the required freeboard.

In the event that the required freeboard cannot be restored within a period of 72 hours following discovery, the Permittees shall submit to NMED for approval a proposed corrective action plan to restore the required freeboard within 15 days following the date when exceedance of the required freeboard was initially discovered. The plan shall include a schedule for completion of corrective actions and quantifiable assessments to demonstrate preservation of the required freeboard for a period no less than five years. Upon NMED approval, the Permittees shall implement the corrective action plan according

to the approved schedule.

[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A NMAC, 20.6.2.3109.B & .C NMAC]

16. EFFLUENT LIMITS: OUTFALL 051-The Permittees shall not discharge treated waste water to Outfall 051 that exceeds the following limits (or is outside the following pH range):

- a. All water contaminants and their associated limits as listed in Table 1.

Table 1. Effluent Quality Limits for Discharges to Outfall 051

Inorganic Chemicals:	CAS#	mg/L	Organic Chemicals:	CAS#	mg/L
Aluminum (dissolved)	7429-90-5	5.0	Benzene (total)	71-43-2	0.01
Arsenic (dissolved)	7440-38-2	0.1	Benzo (a) pyrene (total)	50-32-8	0.0007
Barium (dissolved)	7440-39-3	1.0	Carbon tetrachloride (total)	56-23-5	0.01
Boron (dissolved)	7440-42-8	0.75	Chloroform (total)	67-66-3	0.1
Cadmium (dissolved)	7440-43-9	0.01	1,1-Dichloroethane (total)	75-34-3	0.025
Chromium (dissolved)	7440-47-3	0.05	1,2-Dichloroethane (total)	107-06-2	0.01
Chloride (dissolved)	7647-14-5	250.0	1-1-Dichloroethylene (total)	75-35-4	0.005
Cobalt (dissolved)	7440-48-4	0.05	1,1,2,2-Tetrachloroethylene (PCE) (total)	127-18-4	0.02
Copper (dissolved)	7440-50-8	1.0	1,1,2-Trichloroethylene (TCE) (total)	86-42-0	0.1
Cyanide (dissolved)	57-12-5	0.2	Ethylbenzene (total)	100-41-4	0.75
Fluoride(dissolved)	16984-48-8	1.6	Ethylene dibromide (total)	1106-93-4	0.0001
Iron (dissolved)	7439-89-6	1.0	Naphthalene plus monomethylnaphthalenes (total)	91-20-3, 90-12-0, 91-57-6	0.03
Lead (dissolved)	7439-92-1	0.05	Methylene chloride (total)	75-09-2	0.1
Manganese (dissolved)	7439-96-5	0.2	Total PCBs (total)		0.001
Molybdenum (dissolved)	7439-98-7	1.0	Phenols (total)	108-95-2	0.005
Mercury (total)	92786-62-4	0.002	Toluene (total)	108-88-3	0.75
Nickel (dissolved)	7440-02-0	0.2	1,1,1-Trichloroethane(total)	74552-83-3	0.06
Perchlorate (total)	14797-73-0	0.0138	1,1,2-Trichloroethane (total)	79-00-5	0.01
pH (total)		6 – 9	1,1,2,2-Tetrachloroethane (total)	79-34-5	0.01
Selenium (dissolved)	7782-49-2	0.05	Vinyl Chloride (total)	75-01-4	0.001
Silver (dissolved)	7440-22-4	0.05	Xylenes (total)	108-38-3, 1330-20-7, 95-47-6, 106-42-3	0.62
Sulfate (dissolved)		600.0			

Total Dissolved Solids (dissolved)		1000.0
Uranium (dissolved)	7440-61-1	0.03
Zinc (dissolved)	9029-97-4	10.0

Radioactivity:		pCi/L
Combined Radium-226 & Radium-228 (total)		30

Nitrogen Compounds:		mg/L
Total Nitrogen (sum of TKN+NO ₃ -N) (dissolved)		15

- b. Until LANL is operating new reverse osmosis treatment units, but no later than 120 days following the effective date of this Discharge Permit, the following alternative effluent quality limits for Total Nitrogen shall apply for discharges to Outfall 051:
- Daily Maximum: 45 mg/L
 - Quarterly average: 15 mg/L
- c. For any water contaminant that is not listed in Table 1 of this Discharge Permit but is listed as a toxic pollutant in 20.6.2.7.WW NMAC, the limit shall be the concentration listed in Table A-1 of NMED, Risk Assessment Guidance for Site Investigation and Remediation (most recent edition and provided as Appendix 1). For any water contaminant that is not listed in Table 1 of this Discharge Permit or in Table A-1 of the Risk Assessment Guidance, the limit shall be the most recent EPA Regional Screening Level (RSL) for residential tap water. If an RSL is applicable for a carcinogenic water contaminant, the limit shall be adjusted to represent a lifetime risk of no more than one cancer occurrence per 100,000 persons (i.e., a cancer risk of 1×10^{-5}).

In the event that effluent limits are exceeded, the Permittees shall enact the requirements of Condition VI.A.18 (Effluent Exceedance) of this Discharge Permit. Water contaminants that are subject to effective and enforceable limitations in NPDES Permit No. NM0028355 for discharges to Outfall 051 are exempt from the limits set forth in this Condition.
 [20.6.2.3107.A NMAC, 20.6.2.3109.C NMAC]

- 17. EFFLUENT LIMITS: MES and SET-**The Permittees shall not discharge treated waste water to either the MES or SET that exceeds the following limits (or is outside the following pH range):
- a) All water contaminants and their associated limits as listed in Table 2.

Table 2. Effluent Quality Limits for Discharges to the MES and SET

Inorganic Chemicals:	CAS#	mg/L
Aluminum (dissolved)	7429-90-5	5.0
Arsenic (dissolved)	7440-38-2	0.1

Inorganic Chemicals:	CAS#	mg/L
Lead (dissolved)	7439-92-1	0.05
Manganese (dissolved)	7439-96-5	0.2

Barium (dissolved)	7440-39-3	2.0
Boron (dissolved)	7440-42-8	0.75
Cadmium (dissolved)	7440-43-9	0.01
Chromium (dissolved)	7440-47-3	0.1
Chloride (dissolved)	7647-14-5	250.0
Cobalt (dissolved)	7440-48-4	0.05
Copper (dissolved)	7440-50-8	1.3
Cyanide (dissolved)	57-12-5	0.2
Fluoride(dissolved)	16984-48-8	1.6
Iron (dissolved)	7439-89-6	1.0

Molybdenum (dissolved)	7439-98-7	1.0
Mercury (total)	92786-62-4	0.002
Nickel (dissolved)	7440-02-0	0.2
Perchlorate (total)	04797-73-0	0.0138
pH (total)		6 – 9
Selenium (dissolved)	7782-49-2	0.05
Silver (dissolved)	7440-22-4	0.1
Sulfate (dissolved)		600.0
Total Dissolved Solids (dissolved)		1000.0
Uranium (dissolved)	7440-61-1	0.03
Zinc (dissolved)	9029-97-4	10.0

Radioactivity:		pCi/L
Combined Radium-226 & Radium-228 (total)		30

Nitrogen Compounds:		mg/L
NO ₃ -N (dissolved)		10

- d. Until LANL is operating new reverse osmosis treatment units, but no later than 120 days following the effective date of this Discharge Permit, the following alternative effluent quality limits for NO₃-N shall apply for discharges to the SET and MES:
- Daily Maximum: 30 mg/L
 - Quarterly average: 10 mg/L

In the event that effluent limits are exceeded; the Permittee shall enact the requirements of Condition VI.A.18 (Effluent Exceedance) of this Discharge Permit.
 [20.6.2.3107.A NMAC, 20.6.2.3109.C NMAC]

18. EFFLUENT EXCEEDANCE-In the event that analytical result of an effluent sample indicate an exceedance for any of the effluent limits set forth in Conditions VI.A.16 (Effluent Limits: Outfall 51) and VI.A.17 (Effluent Limits: MES and SET) of this Discharge Permit, the Permittees shall, within 24 hours following receipt of analytical results indicating the exceedance, collect and submit for analysis a subsequent sample for the particular analyte that was in exceedance. In the event the analytical results of the subsequent sample confirm that the maximum limitation has been exceeded (i.e., confirmed exceedance), the Permittees shall take the following actions.

- Within 24 hours of becoming aware of a confirmed exceedance, the Permittees shall:
- a. Cease discharges to the system for which limits have been exceeded with the exception of the MES to which a confirmed exceedance shall not require immediate cessation;
 - b. Notify the NMED Ground Water Quality Bureau that an effluent limit set forth in this Discharge Permit has been confirmed to be in exceedance; and

- c. Increase the frequency of effluent sampling to adequately establish the quality of discharges prior to resuming discharges to the system that was in exceedance. The sampling frequency for the particular analyte that was in exceedance shall increase from monthly or quarterly, as required by Condition VI.B.29 (Effluent Sampling) of this Discharge Permit, to weekly. If the particular analyte in exceedance remains below the effluent limit in three consecutive weekly samples, then the Permittees may resume discharges to the system that was in exceedance.

Within one week of becoming aware of a confirmed exceedance, the Permittees shall:

- a. Submit copies of the analytical results for the initial and subsequent sample confirming the exceedance to NMED;
- b. Examine the internal operational procedures, and maintenance and repair logs, required by Condition VI.A.13 (Maintenance and Repair) of this Discharge Permit, for evidence of improper operation or function of the units and systems; and
- c. Conduct a physical inspection of the treatment system to detect abnormalities, and correct any abnormalities.

A report detailing the corrections made shall be submitted to NMED within 30 days following correction.

In the event that analytical results from any two independent monthly effluent samples indicate an exceedance of the effluent limits for all discharge systems set forth in this Discharge Permit within any 12-month period, the Permittees shall propose to modify operational procedures or upgrade the treatment process to achieve the effluent limits. Within 90 days of receipt of the second sample analysis in which effluent limits have been exceeded, the Permittees shall submit to NMED for approval a corrective action plan. The plan shall include a schedule for completion of corrective actions. Upon NMED approval, the Permittees shall implement the corrective action plan according to the approved schedule.

When analytical results from three consecutive months of effluent sampling do not exceed the maximum limitations set forth by this Discharge Permit, the Permittees are authorized to return to a monthly or quarterly monitoring frequency as required in this Discharge Permit.

[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A NMAC, 20.6.2.3109.B NMAC, 20.6.2.3107.C NMAC]

- 19. PERSONNEL QUALIFICATIONS**-Personnel responsible for the operation and maintenance and repair of the Facility shall successfully complete a program of classroom instruction or on-the-job training that provides the skills required to ensure the Facility is operated and maintained in a manner that

complies with this Discharge Permit and all applicable local, state and federal laws and regulations. At a minimum, the operators shall be competent in the following.

- a. Management procedures for hazardous waste materials.
- b. Conducting inspections.
- c. Communications or alarm systems.
- d. Emergency response due to unauthorized releases, fire, explosions, or other potential unauthorized releases from the Facility and threat to human health.
- e. Emergency shutdown operations.

The operations and maintenance and repair of all or any part of the Facility shall be performed by, or under the direct supervision of, qualified personnel. Facility personnel shall review training and certifications on an annual basis to ensure training and certifications are current with any changes to the Facility's processes.

The Permittees shall maintain the following documents and records at the Facility for current personnel until closure of the Facility.

- a. The job title for each position at the Facility with a narrative of the position responsibilities, reporting hierarchy, requisite skill, education and other qualifications assigned to the position.
- b. The name of the individual who holds each position and all records documenting training and job experience demonstrating the qualifications of that individual to hold the position.

The Permittees shall maintain all documents and records pertaining to the training of operation and maintenance personnel, including former employees, for a period of five years and shall make such documents and records available to NMED upon request.

[20.6.2.3106.C NMAC, 20.7.4 NMAC]

20. EMERGENCY RESPONSE PROCEDURES The Permittees shall keep and maintain emergency response procedures at the Facility at all times. At a minimum, the procedures shall include the following.

- a. Actions Facility personnel must take in response to fires, explosions or any unplanned sudden or non-sudden release of a water contaminant from the Facility to the environment.
- b. A spill prevention and response plan to address all unauthorized releases to the environment or those that pose a threat to human health, chronic or acute.
- c. A list of all emergency equipment at the Facility that may be utilized in the event of an emergency, its intended function and physical location.
- d. An evacuation procedure for all Facility personnel which describes signals

to be used to notify personnel of an evacuation, routes to evacuated the Facility and alternate evacuation routes.

- e. Description of the use of the Incident Command System (ICS) in response to all emergencies. The ICS is based on the on-scene management structure protocols of the National Incident Management System (NIMS).
- f. Conditions under which activation of Los Alamos National Laboratory's Emergency Operations Center (EOC) is appropriate for incidents requiring Laboratory and/or community involvement. The EOC provides a central location for interagency and interjurisdictional coordination and executive decision making in support of an incident response.

The emergency response procedures shall be reviewed, and updated as necessary, by the Permittees on no less than a triennial basis or in the event the plan fails during an emergency, the Facility changes design, construction, or accessibility, key personnel changes or the list of equipment changes. The emergency response procedures shall be made available for inspection at the facility.

The Permittees shall submit a written summary of the procedures to NMED within 120 days of the effective date of this permit (by date) and provide written updates no more than 30 days following finalization of an amended plan.

[20.6.2.3109.C NMAC]

21. INSTALLATION OF FLOW METERS-Within 180 days following the effective date of this Discharge Permit, (by DATE), the Permittees shall install the following flow meters.

- a. One flow meter to be installed on the RLW influent line to the Facility at a location that will capture and measure all influent to the Facility including waste water conveyed to the Facility by alternative methods (e.g. truck).
- b. One flow meter to be installed on the effluent line to the SET at a location that will capture and measure all discharges of treated water to the SET.
- c. One flow meter to be installed on the effluent line to the MES at a location that will capture and measure all discharges of treated water to the MES.
- d. One flow meter to be installed on the discharge line to Outfall 051 at a location that will capture and measure all effluent discharges to Outfall 051.

Within 60 days following the installation of flow meters, and within 240 days following the effective date of this Discharge Permit (by DATE), the Permittees shall submit to NMED written confirmation of the meter installation, describing the type, calibration, and location of each flow meter. The flow meters shall be operational except during repair or replacement. Should a meter fail, it shall be repaired or replaced as soon as practical, but no later than 30 days from the date of the failure. Prior to installation of the flow meters, and during periods of repair or replacement, an alternative method for

determining the volume of influent and effluent shall be used until the meter is operational.

[20.6.2.3107.A NMAC, 20.6.2.3109.C NMAC]

- 22. CALIBRATION OF FLOW METERS**-All flow meters referenced in this Discharge permit shall be capable of having their accuracy ascertained under actual working (field) conditions. A field calibration method shall be developed for each flow meter and that method shall be used to check the accuracy of each respective meter. Field calibrations shall be performed within 180 days following the effective date of this Discharge Permit (by DATE) and, at a minimum, on an annual basis thereafter, and immediately upon repair or replacement of a flow meter.

Flow meters for the effluent lines to the SET, the MES and Outfall 051 shall be calibrated to within plus or minus 5 percent of actual flow, as measured under field conditions. The flow meter installed on the 10-inch influent line to the RLWTF shall be calibrated to within plus or minus 10 percent of actual flow, as measured under field conditions. Field calibrations shall be performed by an individual knowledgeable in flow measurement and in the installation and operation of the particular device in use. A calibration report shall be prepared for each flow meter at the frequency calibration is required.

The flow meter calibration report shall include the following information

- a. The meter location and identification.
- b. The method of flow meter field calibration employed.
- c. The measured accuracy of each flow meter prior to adjustment indicating the positive or negative offset as a percentage of actual flow as determined by an in-field calibration check.
- d. The measured accuracy of each flow meter following adjustment, if necessary, indicating the positive or negative offset as a percentage of actual flow of the meter.
- e. Any flow meter repairs made during the previous year or during field calibration.

The Permittees shall maintain records of flow meter calibration at a location accessible for review by NMED during Facility inspections.

[20.6.2.3107.A NMAC, 20.6.2.3109.C NMAC, 20.6.2.3109.H NMAC]

B. Monitoring and Reporting

- 23. METHODOLOGIES**-Unless otherwise approved in writing by NMED, the Permittees shall conduct sampling and analysis in accordance with the most recent edition of the following documents.
- a. American Public Health Association, Standard Methods for the Examination of Water and Waste water.

- 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.
- d. American Society for Testing and Materials, Annual Book of ASTM Standards, Part 31. Water.
- e. U.S. Geological Survey, et al., National Handbook of Recommended Methods for Water Data Acquisition.
- f. Federal Register, latest methods published for monitoring pursuant to Resource Conservation and Recovery Act regulations.
- g. Methods of Soil Analysis: Part 1. Physical and Mineralogical Methods; Part 2. Microbiological and Biochemical Properties; Part 3. Chemical Methods, American Society of Agronomy;
[20.6.2.3107.A NMAC, 20.6.2.3107.B NMAC]

24. MONITORING REPORTS-The Permittees shall submit monitoring reports to NMED on a quarterly basis. Quarterly sampling and analysis as required in this Discharge Permit shall be performed within the following periods and reports shall be submitted as described below.

- a. Sampling and analysis completed between January 1 and March 31- report to be submitted to NMED by May 1.
- b. Sampling and analysis completed between April 1 and June 30 - report to be submitted to NMED by August 1.
- c. Sampling and analysis completed between July 1 and September 30- report to be submitted to NMED by November 1.
- d. Sampling and analysis completed between October 1 and December 31- report to be submitted to NMED by February 1.

[NMSA 1978, § 74-6-5.D, 20.6.2.3109.B NMAC, 20.6.2.3109.C NMAC, 20.6.2.3107.A NMAC]

25. INFLUENT VOLUMES RLW-The Permittees shall measure the volume of all RLW influent waste water being conveyed to the Facility on a daily basis using the flow meter required to be installed pursuant to this Discharge Permit.

The total daily and monthly volumes of RLW influent conveyed to the Facility shall be submitted to NMED in the quarterly monitoring reports.

[20.6.2.3107.A NMAC, 20.6.2.3109.C NMAC, 20.6.2.3109.H NMAC]

26. INFLUENT VOLUMES TRU-The Permittees shall measure the daily volume of TRU influent waste water being conveyed to the Facility using electronic sensors which measure tank levels in both the acid waste and caustic waste influent tanks.

The electronic sensors on these tanks shall be operational except during repair

or replacement. Should a sensor used to calculate TRU influent volumes fail, it shall be repaired or replaced as soon as practical, but no later than 30 days from the date of the failure. During repair or replacement, an alternative method for determining the flow of TRU influent shall be used until the defective sensor is repaired or replaced.

Volumes shall be determined by calculation using the head change and tank size. Operators shall record changes in influent tank levels whenever a batch of TRU waste water is conveyed to the Facility. The total daily and monthly volumes of TRU influent received by the Facility shall be submitted to NMED in the quarterly monitoring reports.

[20.6.2.3107.A NMAC, 20.6.2.3109.C NMAC, 20.6.2.3109.H NMAC].

- 27. DISCHARGE VOLUMES**-The Permittees shall measure and record the volume of treated waste water discharged to the SET, MES and Outfall 051 on a daily basis. The Permittees shall determine effluent volumes as follows.
- a. Discharge volumes to the SET shall be determined by daily totalized meter readings on the flow meter required in this Discharge Permit, located on the effluent line to the unit.
 - b. Discharge volumes to Outfall 051 shall be determined by daily totalized meter readings on the flow meter required in this Discharge Permit, located on the effluent line to the outfall.
 - c. Discharge volumes to the MES shall be determined by daily totalized meter readings on the flow meter required in this Discharge Permit, located on the effluent line to the unit.

The daily and monthly discharge volumes for the reporting period shall be submitted to NMED in the quarterly monitoring reports.

[20.6.2.3107.A NMAC, 20.6.2.3109.C NMAC, 20.6.2.3109.H NMAC]

- 28. WASTE TRACKING**-The Permittees shall maintain current written or electronic records of all waste streams conveyed to the Facility. At a minimum, the Permittees shall record the following information.
- a. The name of the generator and a unique waste stream identification number.
 - b. The time period for which the Permittee approved the generator to convey the waste stream to the Facility.
 - c. The location where the waste stream was generated.
 - d. Estimated volume and duration of the waste stream, including
 - Estimated number of days per year discharge occurred.
 - Average daily volume received by the Facility when discharge occurred.
 - Maximum daily volume received by the Facility each year when discharge occurred.
 - Estimated total volume discharged to the facility each year.

- e. The waste stream characterization (i.e., analytical data or knowledge of process).
- f. The names of the personnel that approved the receipt of the waste at the Facility (e.g., Waste Certifying official, RCRA Reviewer, and Facility Reviewer).

Permittees shall also maintain written or electronic records of the following waste streams conveyed from the Facility: Radioactive Liquid Waste Bottoms, low-level sludge, TRU sludge, and low-level solid waste (PPE, sample bottles, filters, membranes, etc). Records will include date of shipment, quantity shipped, description of waste stream, shipping documentation and disposal location. The Permittees shall allow NMED or an authorized representative to have access to and copy, at reasonable times, records that must be kept under this condition.

The Permittees shall maintain all waste tracking records required by this Condition for five years from the date of the final discharge from the generator of that waste stream. The Permittees shall furnish upon request, and make available at all reasonable times for inspection, the waste tracking records required in this Discharge Permit.

[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A NMAC, 20.6.2.3109.C NMAC]

29. EFFLUENT SAMPLING -The Permittees shall sample and analyze effluent waste streams discharged to Outfall 051, the SET, and the MES.

Treated effluent samples shall be collected once per calendar month for any month in which a discharge occurs to Outfall 051. The Permittees shall collect a grab sample of treated effluent which shall be analyzed for all water contaminants listed in 20.6.2.3103 NMAC, TKN and all toxic pollutants as defined in 20.6.2.7.WW NMAC.

Treated effluent samples shall be collected once per calendar month for any month in which a discharge occurs to the MES or SET. The Permittees shall collect a grab sample of treated effluent which shall be analyzed for TKN, NO₃-N, TDS, Cl, F and perchlorate.

The Permittees shall collect and analyze effluent samples once per quarter for any quarterly period in which a discharge occurs to the MES or SET. The Permittees shall collect a grab sample of treated effluent which shall be analyzed for all water contaminants listed in 20.6.2.3103 NMAC and all toxic pollutants as defined in 20.6.2.7.WW NMAC.

All samples shall be properly prepared, preserved, transported and analyzed in accordance with the parameters and methods authorized in this Discharge Permit and will be submitted to an independent environmental laboratory

accredited under the National Environmental Laboratory Accreditation Program. Analytical results shall be submitted to NMED in the quarterly monitoring reports. For any calendar month during which no discharge occurs, the Permittees shall submit a note in the quarterly report documenting the absence of discharge.

[20.6.2.3107.A NMAC, 20.6.2.3109.C NMAC]

30. SOIL MOISTURE MONITORING SYTEM FOR THE SET-Within 120 days following the effective date of this Discharge Permit (by DATE), the Permittees shall submit to NMED for approval a proposed work plan, design and schedule for the installation of a moisture monitoring system for the detection of unauthorized releases from the SET. The system shall be designed to detect, at a minimum, absolute variations in volumetric soil moisture content below the SET within a precision of 2%. The Permittees shall install the moisture monitoring boreholes in accordance with the final work plan, design and schedule approved by NMED.

The Permittees shall use neutron moisture probes to log the moisture monitoring boreholes following installation to establish baseline conditions and to develop a calibration data set for the probe and a soil moisture action level, to be approved by NMED, which indicates that moisture is being detected below the SET at levels that are above baseline conditions.

Within 90 days following acceptance of the final construction of the moisture monitoring boreholes and prior to discharge to the SET by the Permittees, the Permittees shall submit to NMED for approval the following items.

- a. Confirmation that the moisture monitoring borehole installation has been completed.
- b. Record drawings of the final design of the completed installation.
- c. Reports on the baseline moisture condition and neutron probe calibration.
- d. A proposed action level to be used to indicate that elevated moisture has been detected beneath the SET.

Upon approval or approval with conditions by NMED of the completed installation and soil moisture action level, discharge to the SET can commence. The Permittees shall perform quarterly soil moisture monitoring in the moisture monitoring boreholes, and shall provide this information in the quarterly reports required by Condition VI.B.24 (Monitoring Reports).

The moisture monitoring boreholes and neutron probes shall be maintained so that the boreholes remain accessible for monitoring and the probe remains operational. Should the system or a component of the system fail, it shall be repaired or replaced as soon as possible, but no later than 90 days from the date of the failure. For good cause, NMED may approve a longer period.

The Permittees shall maintain all documents and records pertaining to the quarterly monitoring events and maintenance or repair of the soil moisture monitoring system for a period of five years and shall make such documents and records available to NMED upon request.

[20.6.2.3107.A NMAC, 20.6.2.3109.C NMAC]

31. SOIL MOISTURE MONITORING SYSTEM EXCEEDANCE- In the event that the synthetic liner leak detection system identifies a leak, or the soil moisture detection system for the SET detects a soil moisture increase beneath the SET that exceeds the NMED approved action level the Permittees shall take the following corrective actions.

- a. Notify the NMED Ground Water Quality Bureau within 24 hours of a release detected by the release detection system within the synthetic liner.
- b. Notify the NMED Ground Water Quality Bureau within 15 days following the date when the soil moisture was initially discovered beneath the SET to exceed the action level.
- c. Within 60 days following the date when the soil moisture was initially discovered to exceed the action level, identify the source of the increased soil moisture beneath the SET to NMED and the basis for the identification of the source.

In the event the leak detection system between the primary and secondary liner identifies a leak, or the moisture exceedance in the soil moisture monitoring system is demonstrated to be associated with a leak from or breach of the SET, the Permittees shall cease discharges to the SET, remove all standing liquid from one or both cells (as appropriate), and submit a corrective action plan to NMED, for approval, within 30 days following the date when the Permittees identify the leak. At a minimum, the corrective action plan shall include the following.

- a. A proposal for repairing or replacing the synthetic liners within the SET, if leakage through the synthetic liners is found to be the source, or for other repairs.
- b. A plan for re-instituting soil moisture monitoring following repairs to the SET to demonstrate that the repairs resolved the source of the increased soil moisture beneath the SET.
- c. A schedule for implementation of the corrective action plan elements.

In the event the source of the soil moisture exceedance is demonstrated to be associated with an occurrence other than a failure of the SET, the Permittees shall submit a corrective action plan to NMED, for approval, within 120 days following the date when the soil moisture was initially discovered to exceed the action level. The corrective action plan shall include any actions necessary to ensure the soil moisture detection system is operating within its intended function as required by this Discharge Permit including, but not

limited to, re-calibration.

Upon NMED approval, or approval with conditions, the Permittees shall implement the corrective action plan according to the approved schedule.
[20.6.2.3107.A NMAC, 20.6.2.3109.E NMAC]

- 32. GROUND WATER FLOW**-The Permittees shall submit a ground water flow direction report to NMED in the Annual Report in conjunction with the Quarterly Report due February 1. The report shall contain regional, intermediate and alluvial aquifer ground water depth-to-water measurements, existing interconnections with other aquifers (if any are known), a narrative description of the known characteristics of the ground water elevation and flow direction within each aquifer and, to the extent practicable, ground water elevation contour map(s) for the aquifers underlying Sandia, Pajarito, Ten-Site and Mortandad Canyons.

The ground water elevation contour maps shall depict the ground water flow direction based on the most recent representative ground water elevation data from monitoring wells located in the subject areas. Ground water elevations shall be estimated using common interpolation methods to a contour interval approved by NMED and appropriate to the available data. Ground water elevation contour maps shall depict the water table and potentiometric surfaces, ground water flow directions, and the location and name of each monitoring well and discharge location unit associated with this Discharge Permit.

[20.6.2.3107.A NMAC, 20.6.2.3109.C]

- 33. REPLACEMENT OF TWO EXISTING ALLUVIAL GROUND WATER MONITORING WELLS** – Within 90 days of the effective date of this Discharge Permit (by DATE), the permittees shall submit to NMED a work plan for the installation of two replacement monitoring wells in the alluvial aquifer at a location hydrologically downgradient of Outfall 051. The well installation work plan will include proposed well locations, drilling methods, well specifications, and proposed schedule for construction. Upon NMED approval, the Permittees shall construct the replacement wells in accordance with the Groundwater Quality Bureau, Monitoring Well Construction and Abandonment Guidelines, Revision 1.1, March 2011 and the approved work plan and schedule. A monitoring well completion report documenting the installation will be submitted to NMED within 60 days following completion.

[NMSA 1978, § 74-6-5.D, 20.6.2.3109.B NMAC]

- 34. MONITORING WELL LOCATION** - In the event that ground water flow information obtained pursuant to this Discharge Permit indicates that a monitoring well is not located hydrologically downgradient of the discharge

location it is intended to monitor, NMED may require the Permittees to install a replacement well or wells. Within 90 days following receipt of such notification from NMED, the Permittees shall submit to NMED for approval a well installation work plan, describing each proposed well location, drilling methods and well specifications, and proposing a schedule for construction. Upon NMED approval, the Permittees shall construct the replacement well or wells according to the approved work plan and schedule.

Within 90 days following well completion, the Permittees shall survey the elevation and location of the newly installed replacement monitoring well or wells. Within 120 days following well completion, the Permittees shall submit to NMED a well completion report that will include: construction and lithologic logs, survey data, and a ground water elevation contour map.

Replacement wells shall be located, installed, and completed in accordance with the attachment titled: *Ground Water Quality Bureau Monitoring Well Construction and Abandonment Conditions, Revision 1.1*, March 2011, or according to other specifications as approved by NMED.

[NMSA 1978, § 74-6-5.D, 20.6.2.3109.B NMAC]

35. MONITORING WELL CONSTRUCTION - In the event that information available to NMED indicates that a well is not constructed in a manner consistent with the *Ground Water Quality Bureau Monitoring Well Construction and Abandonment Guidelines, Revision 1.1*, March 2011 or NMED approved specification; contains insufficient water to effectively monitor ground water quality; or is not completed in a manner that is protective of ground water quality, NMED may require the Permittees to install a replacement well or wells. Within 90 days following receipt of such notification from NMED, the Permittees shall submit to NMED for approval a well installation work plan, describing each proposed well location, drilling methods, well specifications, and proposed schedule for construction. Upon NMED approval, the Permittees shall construct the replacement well or wells according to the approved work plan and schedule.

Within 90 days following well completion, the Permittees shall survey the elevation and location of the newly installed replacement monitoring well or wells. Within 120 days of well completion, the Permittees shall submit to NMED construction and lithologic logs, survey data, and a ground water elevation contour map.

Replacement wells shall be located, installed, and completed in accordance with the attachment titled: *Ground Water Quality Bureau Monitoring Well Construction and Abandonment Conditions, Revision 1.1*, March 2011, or according to other specifications as approved by NMED.

Upon completion of the replacement monitoring well, the monitoring well requiring replacement shall be properly plugged and abandoned. Well plugging, and abandonment and documentation of the abandonment procedures shall be completed in accordance with the *Ground Water Quality Bureau Monitoring Well Construction and Abandonment Conditions, Revision 1.1*, March 2011, and all applicable local, state, and federal laws and regulations. The well abandonment documentation shall be submitted to NMED within 60 days of completion of well plugging activities.

[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A NMAC, 20.6.2.3109.B NMAC]

36. GROUND WATER MONITORING - The Permittees shall collect ground water samples from the following ground water monitoring wells on a quarterly basis and analyze the samples for TKN, NO₃-N, TDS, Cl, F and perchlorate.

- a. **Replacement Alluvial Well** – Alluvial aquifer replacement well installed as a condition of this Discharge Permit located hydrologically downgradient of Outfall 051.
- b. **Replacement Alluvial Well** - Alluvial aquifer replacement well installed as a condition of this Discharge Permit located hydrologically downgradient of Outfall 051.
- c. **MCOI-6**-previously constructed and located in the intermediate aquifer hydrologically downgradient of Outfall 051.

The Permittees shall collect ground water samples from the following ground water monitoring wells on an annual basis and analyze the samples for all water contaminants listed in 20.6.2.3103 NMAC and all toxic pollutants listed in 20.6.2.7.WW.

- a. **Replacement Alluvial Well** – Installed as a condition of this Discharge Permit and hydrologically downgradient of Outfall 051.
- b. **Replacement Alluvial Well** - Installed as a condition of this Discharge Permit and hydrologically downgradient of Outfall 051
- c. **MCOI-6** - previously constructed and located in the intermediate aquifer presumed to be hydrologically downgradient of Outfall 051.
- d. **R-46** - previously constructed and located in the regional aquifer, topographically downgradient of the RLWTF.
- e. **R-60** - previously constructed and located in the regional aquifer, topographically downgradient of the RLWTF.
- f. **R-1** - previously constructed and located in the regional aquifer, topographically downgradient of the RLWTF.
- g. **R-14** - previously constructed and located in the regional aquifer, topographically downgradient of the RLWTF.

Sampling shall be done in accordance with the methods authorized in this Discharge Permit and using the following procedure.

- a. Measure the ground-water surface elevation, to the nearest hundredth

- (0.01) of a foot, from the top of the casing, each time ground water is sampled.
- b. Calculate total volume of water within the monitoring well using the most recent total depth measurement.
 - c. For intermediate and regional aquifer wells, purge three well volumes of water from the monitoring well prior to sampling, using an adequate pumping system. For alluvial wells, purge well for a minimum of one well volume.
 - d. Collect samples from the well using appropriate methods to avoid cross-contamination of the samples and sources.
 - e. Prepare the Chain-of-Custody, preserve the sample and transport samples in accordance with methods authorized in this Discharge Permit.
 - f. Samples shall be analyzed by an independent analytical laboratory accredited under the National Environmental Laboratory Accreditation Program (NELAP) using EPA approved test methods.

The Permittees may submit to NMED for approval Standard Operating Procedures developed for the Interim Facility-Wide Groundwater Monitoring Plan that would apply in lieu of the sampling protocols described in this Permit Condition. Upon NMED approval or partial approval of such alternate plan, the approved plan or portion thereof shall apply and be fully enforceable in lieu of this Permit Condition.

The Permittees shall use sampling and analytical methods that ensure the production of accurate and reliable data indicative of ground water quality in all ground water that may be affected by any discharges from the Facility. The Permittees shall prepare ground water monitoring reports describing, in detail, the sampling and analytical methods used. The ground water monitoring reports shall contain, at minimum, the following information.

- a. Date sample was collected.
- b. Time sample was collected.
- c. Individuals collecting sample.
- d. Monitoring well identification.
- e. Physical description of monitoring well location.
- f. Ground-water surface elevation.
- g. Total depth of the well.
- h. Total volume of water in the monitoring well prior to sample collection.
- i. Total volume of water purged prior to sample collection.
- j. Physical parameters including temperature, conductivity, pH, oxidation-reduction potential.
- k. Description of sample methods (i.e., constituent being sampled for, container used, preservation methods).
- l. Chain-of custody.
- m. Map, to scale, identifying monitoring wells and their location.

The ground water monitoring report shall be submitted to NMED with the quarterly monitoring report required in this Discharge Permit.
[20.6.2.3107.A NMAC, 20.6.2.3109.C NMAC]

37. GROUND WATER EXCEEDANCE- NMED reviews ground water data that is generated by the Permittees from samples collected from the monitoring wells identified in this Discharge Permit and other monitoring wells in the vicinity of the Facility. The Permittees report newly detected ground water quality standard exceedances or the newly detected toxic pollutants (as defined in this Discharge Permit and in 20.6.2.7.WW NMAC) in ground water for the entire Laboratory to NMED. If NMED determines that a ground water quality standard is exceeded or that a toxic pollutant is present in ground water, potentially due to a discharge associated with the Facility or defined systems in this Discharge Permit, the Permittees shall submit a ground water investigation/source control work plan to NMED for approval within 60 days following notification to do so by NMED.

At a minimum, the ground water investigation/source control work plan shall include the following elements.

- a. A proposal to investigate the source, nature and extent of the ground water contamination, if unknown, which may utilize existing ground water monitoring wells or may propose the installation of new monitoring wells, as appropriate.
- b. A proposal to mitigate the discharge or mobilization of the water contaminant which might be causing ground water contamination, as appropriate.
- c. A schedule for implementation of the work plan and submittal of a report to NMED.

Upon NMED approval of the ground water investigation/source control work plan, or approval of the plan with conditions, the Permittees shall implement the work plan and submit a written report to NMED in accordance with the approved schedule.

Should the findings of the ground water investigation reveal that a discharge associated with the Facility or defined systems in this Discharge Permit is a source of the ground water contamination, the Permittees shall abate water pollution pursuant to 20.6.2.4000 through 20.6.2.4115 NMAC, following notification from NMED.

This Permit Condition does not apply to an exceedance of ground water quality standard or the presence of a toxic pollutant in ground water unrelated to a discharge associated with the Facility or defined systems in this Discharge Permit, to the extent that abatement of such ground water contamination is occurring, or will occur, pursuant to and in accordance with the June 2016 Compliance Order on Consent (Consent Order) agreed to by NMED, and the

Permittees pursuant to the New Mexico Hazardous Waste Act, NMSA 1978, §74-4-10 and the New Mexico Solid Waste Act, NMSA 1978, §74-9-36(D). [NMSA 1978, § 74-6-5.D, 20.6.2.3109.E NMAC, 20.6.2.3107.A NMAC]

C. Contingency Plans

38. SPILL OR UNAUTHORIZED RELEASE-In the event of a release not authorized in this Discharge Permit, the Permittees shall take measures to mitigate damage from the unauthorized discharge and initiate the notifications and corrective actions required in 20.6.2.1203 NMAC and summarized below.

Within 24 hours following discovery of the unauthorized discharge, the Permittees shall orally notify NMED and provide the following information.

- a. The name, address, and telephone number of the person or persons in charge of the Facility.
- b. The identity and location 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.
- g. Any actions taken to mitigate immediate damage from the unauthorized discharge.

Within one week following discovery of the unauthorized discharge, the Permittees shall submit written notification to NMED with the information listed above and any pertinent updates.

Within 15 days following discovery of the unauthorized discharge, the Permittees shall submit to NMED for approval a corrective action report and plan describing any corrective actions taken and to be taken to address the unauthorized discharge that includes the following.

- 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.
- c. A schedule for completion of proposed actions.

Upon NMED approval of the corrective action report and plan, the Permittees shall implement the approved actions according to the approved schedule.

In the event that the unauthorized discharge causes or may with reasonable probability cause water pollution in excess of the standards and requirements of 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 20.6.2.1203.A(1) NMAC,

the Permittees may be required to abate water pollution pursuant to 20.6.2.4000 through 20.6.2.4115 NMAC.

Nothing in this condition shall be construed as relieving the Permittees of the obligation to comply with all requirements of 20.6.2.1203 NMAC.
[NMSA 1978, § 74-6-5.D, 20.6.2.1203 NMAC, 20.6.2.3109.B NMAC]

- 39. FAILURES IN DISCHARGE PLAN/DISCHARGE PERMIT-**In the event that NMED or the Permittees identify any failure of the discharge plan or this Discharge Permit not specifically set forth herein, NMED may require the Permittees to submit for its approval a corrective action plan and a schedule for completion of corrective actions to address the failure. Additionally, NMED may require a Discharge Permit modification to achieve compliance with Part 20.6.2 NMAC.

[20.6.2.3107.A NMAC, 20.6.2.3109.E NMAC]

D. Closure

- 40. CESSATION OF OPERATION OF SPECIFIC UNITS-** Within 60 days of the effective date of this Discharge Permit (by DATE), the Permittees shall permanently cease operation of the following units.

- a. The 75,000 gallon concrete influent storage tank (75K tank) will be taken out of service as an influent storage tank but remain available for use as emergency storage.
- b. The 100,000 gallon steel influent storage tank (100K tank).
- c. The two 26,000 gallon concrete clarifiers located within Building 1 of TA-50.
- d. The two 25,000 gallon concrete effluent storage tanks (WM2-N, WM2-S).
- e. The gravity filter located within Building 1 of TA-50.

Upon the cessation of operation of these specific units, the Permittees shall initiate the requirements for stabilization (Condition 41) of the individual units, systems and components in accordance with this Discharge Permit.

[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A NMAC, 20.6.2.3109.B NMAC, 20.6.2.3109.E NMAC]

- 41. STABILIZATION OF INDIVIDUAL UNITS AND SYSTEMS -** Within 120 days from the permanent cessation of operation of a unit or system, the Permittees shall submit to NMED for approval a written work plan for the stabilization of the unit or system for which operation has ceased. The work plan shall identify activities to be taken, and steps necessary to ensure that the unit or system can no longer receive a discharge and that no further releases of water contaminants occur as a result of the unit or system. At a minimum, the work plan shall include the following.

- a. Identification of the unit or system in which cessation of use has occurred.

- b. A detailed description of the function of the unit or system.
- c. A detailed description of the historic influent waste streams to the unit or system.
- d. A detailed description of all conveyance lines leading to the unit or system and a description of how the lines will be terminated, plugged, re-routed or bypassed so that a discharge to the unit or system can no longer occur.
- e. Identification of those portions of the approved Closure Plan required in Condition 42 of this Discharge Permit that will be implemented.
- f. A description of all proposed interim measures, actions and controls that will be implemented until such time of final removal of the unit, system or component to prevent the release of water contaminants into the environment; to prevent water contaminants, including storm water run-on and run-off, from moving into ground water; and to prevent water contaminants from posing a threat to human health.
- g. A detailed description of the actions that will be taken under the Consent Order to investigate and characterize the potential impact to soil and groundwater from the facility, system, or individual unit pursuant to Condition 46.
- h. A schedule for implementation.

Upon NMED approval of the work plan, the Permittees shall implement the plan according to the approved schedule.

Within 30 days following the completion of all interim measures, actions and controls as required by this condition, the Permittees shall submit to NMED for approval a final written report on the actions taken to implement the partial closure.

[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A NMAC, 20.6.2.3109.B NMAC, 20.6.2.3109.E NMAC]

- 42. CLOSURE PLAN** - A closure plan is provided as an Attachment to this Discharge Permit. The closure plan includes the following.
- a. A detailed description of how each unit and system at the Facility will be closed.
 - b. A detailed description of the actions to be taken to decommission, demolish, and remove each unit, system, and other structure, including any secondary containment system components.
 - c. A detailed description of the actions and controls that will be implemented during closure to prevent the release of water contaminants into the environment; to prevent water contaminants, including run-on and run-off, from moving into ground water; and to prevent water contaminants from posing a threat to human health.
 - d. A detailed description of the methods to be used for decontamination of the site and decontamination of equipment used during closure.
 - e. A detailed description of the actions that will be taken to reclaim the

site, including placement of clean fill material and re-grading to blend with surrounding surface topography, minimize run-on and run-off, and prevent infiltration of water, and re-vegetation.

- f. A detailed description of all monitoring, maintenance and repair, and controls that will be implemented after closure, and of all actions that will be taken to minimize the need for post-closure monitoring, maintenance and repair, and controls.
- g. A ground water monitoring plan to detect water contaminants that might move directly or indirectly into ground water after closure, which shall provide for, at a minimum, eight consecutive quarters of ground water monitoring after achieving the standards of 20.6.2.3103 NMAC.
- h. A detailed description of the methods that will be used to characterize all wastes generated during closure, including treatment residues, contaminated debris, and contaminated soil, in compliance with all local, state, and federal laws and regulations.
- i. A detailed description of the actions that will be taken to investigate and characterize the potential impact to soil and groundwater from the facility, system, or individual unit, or, pursuant to Condition VI.D.46 (Integration with the Consent Order), if the unit or system will be investigated and characterized under the Consent Order, a description of such activities.
- j. A detailed description of the methods that will be used to remove, transport, treat, recycle, and dispose of all wastes generated during closure in compliance with all applicable local, state, and federal laws and regulations.
- k. A detailed schedule for the closure and removal of each unit and system, which lists each proposed action and the estimated time to complete it.

For changes that would affect the implementation of the attached Closure Plan, the Permittees shall submit to NMED for approval a written notification and an amended Closure Plan. Permittees will provide annual updates to NMED describing modifications to the Closure Plan. Public comments will be accepted by NMED for a period of 30 days after the submittal of a modified or amended closure plan prior to approval.

[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A NMAC, 20.6.2.3109.B NMAC, 20.6.2.3109.E NMAC]

- 43. FINAL CLOSURE - Permittee will notify the NMED a minimum of 120 days prior to initiation of closure activities at the facility.** Once closure begins, and until all closure requirements (excluding post-closure ground water monitoring) are completed, the Permittees shall submit to NMED, with the monitoring reports required in this Discharge Permit, quarterly status reports describing the closure actions taken during the previous reporting period and the actions scheduled for the next reporting period. Within 90 days following the completion of the closure, the Permittees shall submit to NMED for approval a final written report on the actions taken to implement closure.

Upon termination of the RLWTF mission, Permittee will submit to NMED for approval a revised closure plan for the decommissioning of the active facility that incorporates the same criteria as identified in this condition.

[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A NMAC, 20.6.2.3109.B NMAC, 20.6.2.3109.E NMAC]

- 44. POST-CLOSURE GROUND WATER MONITORING -** After closure has been completed and approved by NMED, the Permittees shall continue ground water monitoring of any wells dedicated to the Facility according to the approved Closure Plan to confirm that the standards of 20.6.2.3103 NMAC are not exceeded and toxic pollutants in 20.6.2.7.WW NMAC are not present in ground water. Such monitoring shall continue for a minimum of eight consecutive quarters.

If monitoring results show that a ground water quality standard in 20.6.2.3103 NMAC is exceeded or a toxic pollutant in 20.6.2.7.WW NMAC is present in ground water, the Permittees shall implement the requirements of Condition 37 (Ground Water Exceedance) of this Discharge Permit.

This Permit Condition does not apply to an exceedance of ground water quality standard or the presence of a toxic pollutant in ground water unrelated to a discharge associated with the Facility or defined systems in this Discharge Permit, to the extent that abatement of such ground water contamination is occurring, or will occur, pursuant to and in accordance with the June 2016 Compliance Order on Consent (Consent Order) agreed to by NMED and the DOE.

Upon demonstration confirming ground water quality does not exceed the standards of 20.6.2.3103 NMAC and does not contain a toxic pollutant in 20.6.2.7.WW NMAC, the Permittees may submit a written request to cease ground water monitoring activities.

Following notification from NMED that post-closure monitoring may cease, the Permittees shall plug and abandon the monitoring well in accordance with

the *Ground Water Quality Bureau Monitoring Well Construction and Abandonment Conditions, Revision 1.1*, March 2011.

[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A NMAC, 20.6.2.3109.B NMAC, 20.6.2.3109.F NMAC, 20.6.2.4103.D NMAC]

- 45. TERMINATION-** When all closure and post-closure requirements have been met, the Permittees may submit to NMED a written request for termination of the Discharge Permit.

If the Discharge Permit expires or is terminated for any reason and any standard of 20.6.2.3103 NMAC is or will be exceeded, or a toxic pollutant in 20.6.2.7.WW NMAC is or will be present in ground water, NMED may require the Permittees to submit an abatement plan pursuant to 20.6.2.4104 NMAC.

[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A NMAC, 20.6.2.3109.B NMAC, 20.6.2.3109.F NMAC, 20.6.2.4103.D NMAC]

- 46. INTEGRATION WITH THE CONSENT ORDER --** The investigation, characterization, cleanup and corrective action requirements for potential releases of contaminants into soil, groundwater and other environmental media from “solid waste management units” (SWMUs) and “areas of concern” (AOCs) associated with the Facility and contained within the Compliance Order on Consent (June 2016, Consent Order) entered into between the New Mexico Environment Department and the DOE pursuant to the New Mexico Hazardous Waste Act, NMSA 1978, §74-4-10 and the New Mexico Solid Waste Act, NMSA 1978, §74-9-36(D)(see https://www.env.nm.gov/wp-content/uploads/2015/12/LANL_Consent_Order_FINAL.pdf) shall be governed by the Consent Order. The investigation, characterization, cleanup and corrective action of any future SWMUs and AOCs associated with the Facility shall be conducted solely under the Consent Order and not under this Permit until termination of the Consent Order. No activities required under this Permit shall conflict with or duplicate activities required for SWMUs and AOCs identified under the Consent Order. Permittees shall provide information regarding which units and systems are covered by the Consent Order in the submittals required by Conditions VI.D.41 (Stabilization of Individual Units and Systems) and VI.D.43 (Final Closure) of this permit, along with a description of the investigation and characterization that will occur under the Consent Order for each unit and system.

[NMSA 1978, §74-4-10 NMSA 1978, §74-9-36(D)]

E. General Terms and Conditions

- 47. APPROVALS -** Upon receipt of a work plan, written proposal, report, or other document subject to NMED approval, NMED will review the document

and may either approve the document, approve the document with conditions, or disapprove the document. Upon completing its review, NMED will notify the Permittees in writing of its decision, including the reasons for any conditional approval or disapproval.

[20.6.2.3107.A NMAC, 20.6.2.3109.C NMAC]

48. **RECORD KEEPING** - The Permittees shall maintain a written record of the following information and shall make it available to NMED upon request.
- a. Information and data used to prepare the application for this Discharge Permit.
 - b. Records of any releases or discharges not authorized in this Discharge Permit and reports submitted pursuant to 20.6.2.1203 NMAC.
 - c. Records, including logs, of the operation and maintenance and repair of all Facility and equipment used to treat, store or dispose of waste water.
 - d. Facility record drawings (plans and specifications) showing the actual construction of the Facility and shall comply with the New Mexico Engineering and Surveying Practice Act (Chapter 61, Article 23 NMSA 1978).
 - e. Copies of monitoring reports completed and submitted to NMED pursuant to this Discharge Permit.
 - f. The volume of waste water or other wastes discharged pursuant to this Discharge Permit.
 - g. Ground water quality and waste water quality data collected pursuant to this Discharge Permit.
 - h. Copies of construction records (well logs) for all ground water monitoring wells required to be sampled pursuant to this Discharge Permit.
 - i. Records of the maintenance and repair, replacement, and calibration of any monitoring equipment or flow measurement devices required by this Discharge Permit.
 - j. Data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit.

With respect to sampling and laboratory analysis, the Permittees shall record and maintain following information and shall make it available to NMED upon request.

- a. The dates, location and times of sampling or field measurements.
- b. The name and job title of the individuals who performed each sample collection or field measurement.
- c. The sample analysis date of each sample.
- d. The name and address of the laboratory, and the name of the signatory authority for the laboratory analysis.
- e. The analytical technique or method used to analyze each sample or collect each field measurement.
- f. The results of each analysis or field measurement, including raw data;
- g. The results of any split, spiked, duplicate or repeat sample.

- h. All laboratory analysis chain-of-custody forms and a description of the quality assurance and quality control procedures used.

The written record shall be maintained by the Permittees 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 NMED upon request.

[NMSA 1978, § 74-6-5.D, 20.6.2.3107.D NMAC, 20.6.2.3109.B NMAC]

49. **ELECTRONIC POSTING - MANDATORY** Commencing on the Effective Date of this Discharge Permit the permittees shall, within thirty calendar days of submittal to NMED, post on LANL's Electronic Public Reading Room located at <http://eprr.lanl.gov/oppie/service> (or as updated) the following submittals to NMED.

- Condition VI.A1 – Annual Update Report
- Condition VI.A.3 – Submittal of Plans and Specifications
- Condition VI.A. 9 – Water Tightness Testing Failure
- Condition VI.A.14 – Damage to Structural Integrity
- Condition VI.A.18 – Exceedance of Effluent Standards
- Condition VI.B.31 – Soil Moisture Monitoring System Exceedance
- Condition VI.B.33 – Alluvial Monitoring Well Replacement Installation Report
- Condition VI.B.37 – Exceedance of Groundwater Quality Standard
- Condition VI.C.38 – Spill or Unauthorized Discharge
- Condition VI.C.39 – Failures in Discharge Plan
- Condition VI.D.42 – Closure Plan Amendments or Modifications
- Condition VI.D.43 – Final Closure Report
- Condition VI.D.45 – Termination

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://eprr.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.

- Condition VI.A.2 – Notification of Changes
- Condition VI.A.4 – Construction Report
- Condition VI.A.7 – Verification of Secondary Containment
- Condition VI.A.10 – Summary Report for Settled Solids Removal
- Condition VI.A.15 – Freeboard Exceedance Corrective Action Plan
- Condition VI.A.20 – Emergency Response Procedures

- Condition VI.A.21 – Written Confirmation of Installation of Flow Meters
- Condition VI.A.24 – Monitoring Reports
- Condition VI.B.33 – Work plan for Replacement of Two Existing Ground Water Monitoring Wells
- Condition VI.B.34 – Monitoring Well Location Changes
- Condition VI.B.35 – Monitoring Well Construction Report
- Condition VI.D.41- Stabilization of Individual Units and Systems

[20.6.2.3107.A.8 NMAC]

50. **INSPECTION AND ENTRY** – The Permittees 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 required to be maintained by regulations of the federal government or the WQCC.

The Permittees shall allow NMED to have access to and reproduce 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.

Nothing in this Discharge Permit shall be construed as limiting in any way the inspection and entry authority of NMED in the WQA, the WQCC Regulations, or any other local, state or federal laws and regulations.
[NMSA 1978, §§ 74-6-9.B and 74-6-9.E, 20.6.2.3107.D NMAC]

51. **DUTY TO PROVIDE INFORMATION** - The Permittees shall, upon NMED's request, allow NMED to inspect and duplicate any and all records required by this Discharge Permit and furnish NMED with copies of such records.

Nothing in this Discharge Permit shall be construed as limiting in any way the authority of NMED to gather information as stipulated in the WQA, the WQCC Regulations, or any other local, state or federal laws and regulations.
[NMSA 1978, §§ 74-6-5.D, 74-6-9.B, and 74-6-9.E, 20.6.2.3107.D NMAC, 20.6.2.3109.B NMAC]

52. **MODIFICATIONS AND AMENDMENTS**– In the event the Permittees propose 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 Permittees shall notify NMED prior to implementing such changes. The Permittees shall obtain written approval (which may require modification of this Discharge Permit) from NMED prior to implementing

such changes.

[NMSA 1978, § 74-6-5.D, 20.6.2.3107.C NMAC, 20.6.2.3109.E NMAC,]

53. **EXTENSIONS OF TIME** - The Permittees may seek an extension of time in which to perform an obligation in this Discharge Permit, for good cause, by sending a written request for extension of time that states the length of the requested extension and describes the basis for the request. NMED shall respond in writing, stating the reasons for any denial.

54. **CIVIL PENALTIES** - Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or Facility, or any refusal or failure to provide NMED with records or information, may subject the Permittees 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 Permittees waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit.

[NMSA 1978, §§ 74-6-10 and 74-6-10.1]

55. **CRIMINAL PENALTIES** – The WQA provides that no person shall:

- a. 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 in the WQA;
- b. Falsify, tamper with or render inaccurate any monitoring device, method or record required to be maintained in the WQA; or
- c. Fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation.

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 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.
[NMSA 1978, §§ 74-6-10.2.A through 74-6-10.2.F]

56. **COMPLIANCE WITH OTHER LAWS** - Nothing in this Discharge Permit shall be construed in any way as relieving the Permittees of the obligation to comply with all applicable federal, state, and local laws, regulations, permits or orders.
[20.6.2 NMAC]

57. **LIABILITY**- The Permittees shall be jointly and severally liable for all their obligations in this Discharge Permit.
[NMSA 1978, §§ 74-6-5.A and 74-6-10]

58. **RIGHT TO APPEAL** - The Permittees may file a petition for review before the WQCC on this Discharge Permit. Such petition shall be in writing to the WQCC, shall be filed within thirty days of the receipt 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.
[NMSA 1978, § 74-6-5.O]

59. **TRANSFER OF OWNERSHIP**- Prior to the transfer of any ownership, control, or possession of this Facility or any portion thereof, the Permittees shall.

- a. Notify the proposed transferee in writing of the existence of this Discharge Permit.
- b. Include a copy of this Discharge Permit with the notice.
- c. 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.

Until both ownership and possession of the Facility have been transferred to the transferee, the Permittees shall continue to be responsible for any discharge from the Facility.
[20.6.2.3104 NMAC, 20.6.2.3111 NMAC]

60. **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. Payments shall be remitted to NMED no later than 30 days after the Discharge

Permit effective date.

Permit fees are associated with issuance of this Discharge Permit. Nothing in this Discharge Permit shall be construed as relieving the Permittees of the obligation to pay all permit fees assessed by NMED. If the Permittees cease discharging at or from the Facility during the term of the Discharge Permit, they shall nevertheless pay all permit fees assessed by NMED. An approved Discharge Permit shall be suspended or terminated if the Permittees fail to remit payment when due.

[20.6.2.3114.F NMAC, NMSA 1978, § 74-6-5.K]

VII. Permit Term and Signature

EFFECTIVE DATE: [effective date]

TERM ENDS: [expiration date]

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

MICHELLE HUNTER
Chief, Ground Water Quality Bureau
New Mexico Environment Department