



MICHELLE LUJAN GRISHAM  
GOVERNOR

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CABINET SECRETARY

**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

September 6, 2023

Theodore Wyka, Manager  
National Nuclear Security Administration  
Los Alamos Field Office (NNSA)  
3747 West Jemez Road  
Los Alamos, NM 87544

Steven Coleman, Associate Lab Director  
Triad National Security, LLC  
Los Alamos National Laboratory  
P.O. Box 1663, MS-K491  
Los Alamos, NM 87544

**RE: Draft Discharge Permit Renewal, DP-857, Los Alamos National Laboratory Domestic and Industrial Wastewater Facilities**

Dear Theodore Wyka and Steven Coleman:

The New Mexico Environment Department (NMED) hereby provides notice to you of the proposed approval of Ground Water Discharge Permit Renewal, DP-857, (copy enclosed), pursuant to Subsection H of 20.6.2.3108 NMAC. NMED will publish notice of the availability of the draft Discharge Permit in the near future for public review and comment and will forward a copy of that notice to you.

Prior to making a final ruling on the proposed Discharge Permit, NMED will allow 30 days from the date the public notice is published in the newspaper for any interested party, including the Discharge Permit applicant, i.e., yourself, to submit written comments and/or a request a public hearing. A hearing request shall set forth the reasons why a hearing is requested. NMED will hold a hearing in response to a timely hearing request if the NMED Secretary determines there is substantial public interest in the proposed Discharge Permit.

Please review the enclosed draft Discharge Permit carefully. Please be aware that this Discharge Permit may contain conditions that require the permittee to implement operational, monitoring, or closure actions by a specified deadline.

Please submit written comments or a request for hearing to my attention at the address below, via email to [gerald.knutson@env.nm.gov](mailto:gerald.knutson@env.nm.gov) or to [pps.general@env.nm.gov](mailto:pps.general@env.nm.gov), or directly into the NMED Public Comment Portal at <https://nmed.commentinput.com/comment/search>. If NMED does not receive written comments or a request for hearing during the public comment period, the draft Discharge Permit will become final.

SCIENCE | INNOVATION | COLLABORATION | COMPLIANCE

Ground Water Quality Bureau | 1190 Saint Francis Drive, PO Box 5469, Santa Fe, New Mexico 87502-5469  
Telephone (505) 827-2900 | [www.env.nm.gov/gwqb/](http://www.env.nm.gov/gwqb/)

Theodore Wyka and Michael Hazen

September 6, 2023

Page 2 of 2

Thank you for your cooperation during the review process. Feel free to contact me with any questions at (505) 660-7189.

Sincerely,

Gerald Knutson, Water Resources Professional III

enc: Draft Discharge Permit Renewal, DP-857

cc: Robert Gallegos, NA-LA, robert.gallegos@nnsa.doe.gov  
Sarah S. Holcomb, Triad-EPC-DO, sholcomb@lanl.gov  
Karen Jackson, Triad-EPC-CP, kjackson@lanl.gov



**NEW MEXICO**  
**ENVIRONMENT DEPARTMENT**  
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1190 Saint Francis Drive / PO Box 5469  
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***Draft: September 6, 2023***

**GROUND WATER QUALITY BUREAU**  
**DISCHARGE PERMIT**  
**Issued under 20.6.2 NMAC**

**Facility Name:** Los Alamos National Laboratory Domestic and Industrial Wastewater Facilities

**Discharge Permit Number:** DP-857

**Facilities Locations:** Sanitary Wastewater System (SWWS) located within Los Alamos National Laboratory in Technical Area 46 Section 26, Township 19N, Range 06E  
Sanitary Effluent Reclamation Facility (SERF) located within Los Alamos National Laboratory in Technical Area 3 Section 16, Township 19N, Range 06E  
Sigma Mesa Evaporation Basins (SMEB) located within Los Alamos National Laboratory in Technical Area 60 Section 22, Township 19N, Range 06E

**County:** Los Alamos

**Permittees:** Theodore Wyka, Manager, Los Alamos Field Office, NNSA  
**Mailing Addresses:** National Nuclear Security Administration  
3747 West Jemez Road  
Los Alamos, New Mexico 87544  
  
Steven Coleman, Associate Lab Director, Environment, Safety, Health, Quality, Safeguards, and Security, Triad, LLC  
Triad National Security, LLC  
P.O. Box 1663, MS-K491  
Los Alamos, New Mexico 87545

Los Alamos National Laboratory Domestic and Industrial Wastewater Facilities, **DP-857**  
DRAFT: September 6, 2023

**Facility Contact:** Karen Jackson, Environmental Professional, Environmental Compliance Programs Group, Triad, LLC  
Telephone Number/Email: (505) 487-3496/kjjackson@lanl.gov

**Permitting Action:** Renewal  
**Permit Issuance Date:** DATE  
**Permit Expiration Date:** DATE

**NMED Permit Contact:** Gerald Knutson  
Telephone Number/Email: (505) 660-7189/gerald.knutson@env.nm.gov

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**JUSTIN D. BALL**  
Chief, Ground Water Quality Bureau  
New Mexico Environment Department

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Date

draft

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**ATTACHMENTS**

Groundwater Discharge Permit Guidance for Synthetically Lined Lagoons – Liner Material and Site Preparation, Revision 0.0, May 2007

New Mexico Environment Department Ground Water Quality Bureau Monitoring Well Construction and Abandonment Guidelines, Revision 1.1, March 2011 (Monitoring Well Guidance)

Attachment 1 – Standards for Groundwater

Attachment 2 – NMED SSG Summary Table A-1 October 2022



## **I. INTRODUCTION**

The New Mexico Environment Department (NMED) issues this groundwater discharge permit renewal (Discharge Permit or DP-857) to the U.S. Department of Energy (DOE) National Nuclear Security Administration (NNSA) and the Triad National Security, LLC (Triad) (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) Ground and Surface Water Protection Regulations, 20.6.2 NMAC.

NMED's purpose in issuing this Discharge Permit, and in imposing the requirements and conditions specified herein, is to control the discharge of water contaminants from the Los Alamos National Laboratory (LANL) Domestic and Industrial Facilities (Facilities) in order to protect groundwater and those segments of surface water gaining from groundwater inflow for present and potential future use as domestic and agricultural water supply and other uses, and to protect public health. It is NMED's determination in issuing this Discharge Permit that the Permittees have met the requirements of Subsection C of 20.6.2.3109 NMAC. The Permittees are responsible for complying with the terms and conditions of this Discharge Permit pursuant to Section 20.6.2.3104 NMAC; failure to do so may result in enforcement action by NMED (20.6.2.1220 NMAC).

Described below are the activities that produce the discharges, the locations of the discharges, and the quantity, quality, and flow characteristics.

The SWWS and the SERF receives domestic wastewater, industrial wastewater, and groundwater at a volume of up to 850,000 gallons per day (gpd). Treated wastewater and groundwater from the SWWS discharges to the SERF or to two outfalls. Treated wastewater (reclaimed domestic wastewater) is also used for landscape irrigation at the SWWS. Reclaimed wastewater from the SERF is used as make-up water for cooling towers and a boiler which discharges to an outfall or to the SWWS. Reverse Osmosis (RO) reject wastewater from the SERF discharges to SMEB or to the SWWS. Wastewater discharges to outfalls separately authorized under the National Pollutant Discharge Elimination System (NPDES) Permit NM0028355.

These discharges may contain water contaminants elevated above the standards of Section 20.6.2.3103 NMAC, may contain toxic pollutants as defined in Section 20.6.2.7(T)(2) NMAC, and are not subject to the exemption at Subsection 20.6.2.3105(A) NMAC.

All Facilities are located within LANL boundaries. The SWWS is located in Technical Area (TA) 46, approximately 2.5 miles south of Los Alamos, in Section 26, Township 19N, Range 06E, Los Alamos County. The SERF is located in TA-3, approximately 1.5 miles southwest of Los Alamos, in Section 16, Township 19N, Range 06E, Los Alamos County. The SMEB is located in TA-60, approximately 1.5 miles south of Los Alamos, in Section 22, Township 19N, Range 06E, Los

Alamos County. Outfalls 001 and 03A027 (TA-3) and Outfall 13S (TA-46) are respectively located in Sections 16 and 26, Township 19N, Range 06E, Los Alamos County.

Discharges associated with the Facilities are most likely to affect alluvial groundwater ranging from a depth of 0 to 65 feet, intermediate groundwater ranging from a depth of 330 to 400 feet, and regional groundwater ranging from a depth of 828 to 1,312 feet; and having a total dissolved solids (TDS) concentration ranging from 115 to 3,800 milligrams per liter (mg/L) with an average of 306 mg/L in the alluvial groundwater, approximately 282 mg/L in intermediate groundwater, and approximately 150 mg/L in regional groundwater.

NMED issued the original Discharge Permit to the Permittees on July 20, 1992, and subsequently renewed the Permit on January 7, 1998, modified the Permit on October 1, 2002, and last renewed and modified the Permit on December 16, 2016. The application (i.e., discharge plan) associated with this Discharge Permit consists of the materials submitted by the Permittees dated June 18, 2021, and materials contained in the administrative record prior to issuance of this Discharge Permit.

The Permittees shall manage the discharge in accordance with all conditions and requirements of this Discharge Permit.

With regard to the Permittees' responsibility to fund closure and post-closure requirements of this Discharge Permit and Closure Plan at the Facility, DOE/NNSA is a co-permittee, and owns and co-operates the permitted Domestic and Industrial Facilities, and therefore, closure and post-closure requirements under this Discharge Permit are the legal obligations of the United States Government. Triad, a co-permittee, is the DOE/NNSA Management & Operator Contractor, was formed solely for the purpose of operating LANL, and has no assets other than cost reimbursable contract with DOE/NNSA. Pursuant to its contract, the United States Government through DOE/NNSA funds all closure and post-closure requirements of this Discharge Permit undertaken by Triad, or its successor to this obligation, subject to Congressional appropriations.

NMED reserves the right to require a Discharge Permit modification in the event NMED determines that the Permittees are or may be violating, or is likely to violate in the future, the requirements of 20.6.2 NMAC or the standards of Section 20.6.2.3103 NMAC. NMED reserves this right pursuant to Section 20.6.2.3109 NMAC. An NMED requirement to modify the Discharge Permit may result from a determination by the department that structural controls and/or management practices approved under this Discharge Permit are insufficiently protective of groundwater quality and human health. NMED reserves the right to require the Permittees to implement abatement of water pollution and remediate groundwater quality.

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



This Discharge Permit may use the following acronyms and abbreviations.

Abbreviation	Explanation	Abbreviation	Explanation
BOD <sub>5</sub>	biochemical oxygen demand (5-day)	NMED	New Mexico Environment Department
CAP	Corrective Action Plan	NMSA	New Mexico Statutes Annotated
CFR	Code of Federal Regulations	NO <sub>3</sub> -N	nitrate-nitrogen
CFU	colony forming unit	NPDES	National Pollutant Discharge Elimination System
Cl	chloride	QA/QC	Quality Assurance/Quality Control
EPA	United States Environmental Protection Agency	TDS	total dissolved solids
gpd	gallons per day	TKN	total Kjeldahl nitrogen
LAA	land application area	total nitrogen	= TKN + NO <sub>3</sub> -N
mg/L	milligrams per liter	TRC	total residual chlorine
mL	milliliters	TSS	total suspended solids
MPN	most probable number	WQA	New Mexico Water Quality Act
NMAC	New Mexico Administrative Code	WQCC	Water Quality Control Commission

This Discharge Permit may use the following LANL acronyms.

Abbreviation	Explanation
DWWHTs	Domestic Wastewater from Holding Tanks
LANL	Los Alamos National Laboratory
SCC	Strategic Computing Complex located at TA-3
SERF	Sanitary Effluent Reclamation Facility located at TA-3
SMEB	Sigma Mesa Evaporative Basins located at TA-60
SWWS	Sanitary Wastewater System located at TA-46
TA	Technical Area as designated by LANL

## II. FINDINGS

In issuing this Discharge Permit, NMED finds the following.

1. The Permittees are discharging effluent or leachate from the Facilities so that such effluent or leachate may move into groundwater of the State of New Mexico that has an existing concentration of 10,000 mg/L or less of TDS, within the meaning of Subsection A of 20.6.2.3101 NMAC, without exceeding standards of 20.6.2.3103 NMAC for any water contaminant.

2. The Permittees are discharging effluent or leachate from the Facilities directly or indirectly into groundwater pursuant to this Discharge Permit and Sections 20.6.2.3000 through 20.6.2.3114 NMAC.
3. The discharges from the Facilities are not subject to any of the exemptions of Section 20.6.2.3105 NMAC.

### **III. AUTHORIZATION TO DISCHARGE**

The Permittees are responsible for ensuring that discharges authorized by this Discharge Permit are consistent with the terms and conditions herein pursuant to 20.6.2.3104 NMAC.

This Discharge Permit authorizes the Permittees to receive and treat up to 850,000 gpd of domestic wastewater, industrial wastewater, and groundwater. The Permittees are authorized to discharge and transfer treated wastewater and groundwater to and from various facilities located throughout LANL as described below:

- Transfer from the SWWS to the SERF and discharge to NPDES Outfalls 001 and 13S under NPDES Permit NM0028355;
- Transfer from the SERF to the SCC Cooling Towers and to the Power Plant Boiler, and discharge to the SMEB, the SWWS, and NPDES Outfall 001;
- Discharge from the SMEB via evaporation;
- Discharge from the SCC Cooling Towers to NPDES Outfall 001 and Outfall 03A027 under NPDES Permit NM0028355, the SWWS, and the SERF; and
- Discharge from the Power Plant Boiler to the SWWS and NPDES Outfall 001.

This Discharge Permit further describes the Facilities and authorized transfers and discharges as follows:

#### **TA-46 SWWS**

The SWWS treats up to 600,000 gpd of domestic wastewater, industrial wastewater, and groundwater. The Permittees convey domestic wastewater, industrial wastewater, and groundwater to the treatment plant via a collection system or transported to the collection system by truck and discharged at locations approved by NMED. The treatment system consists of screening, grit removal, flow equalization basins, activated sludge biological treatment, gravity solids separation (clarification), mixed oxidant (MIOX) disinfection, and chemical dichlorination. Treated wastewater stores in a synthetically lined effluent storage impoundment(s). The SWWS synthetically lined effluent storage impoundment(s) is authorized to receive treated groundwater from remediation sites via pipeline or truck. Wastewater from the storage impoundment(s) discharges or transfers to various locations. This Discharge Permit authorizes the Permittees to install a second synthetically lined storage impoundment at the SWWS.

This Discharge Permit requires domestic wastewater, industrial wastewater, domestic septage, and groundwater discharged to the SWWS to conform to the most current version of LANL's internal waste acceptance criteria. This Discharge Permit requires treated groundwater from remediation sites discharged to the SWWS synthetically lined impoundment(s) to meet all applicable groundwater standards. This Discharge Permit authorizes the Permittees to discharge the following sources of wastewater and groundwater to the SWWS:

- Domestic and industrial wastewater from buildings located in various LANL technical areas that are connected to the SWWS collection system;
- Domestic wastewater from Los Alamos County connected to the SWWS collection system including the Elk Ridge Mobile Home Park;
- DWWHTs, domestic waste from portable toilets, and septage from septic tanks, located throughout LANL, that are connected to the SWWS collection system via truck hauling at locations approved by NMED;
- Water from the drilling, development, rehabilitation, pump testing, and sampling of groundwater wells that does not meet on-site land application criteria and that NMED has individually authorized for discharge to the SWWS or the SWWS collection system;
- Treated groundwater from remediation system(s) discharging to the SWWS synthetically lined effluent storage impoundment(s) that meet all applicable groundwater standards and with NMED written approval;
- Industrial wastewater from the SCC Cooling Tower and Power Plant Boiler; and
- Other LANL-related domestic and industrial sources of wastewater that meet LANL's internal waste acceptance criteria and with NMED written approval.

This Discharge Permit authorizes the Permittees to discharge treated wastewater and groundwater from the SWWS synthetically lined effluent impoundment(s) to the following locations:

- TA-3-336 (Reuse Tank), a 500,000-gallon treated wastewater and groundwater storage tank that transfers to the SERF or discharges to NPDES Outfall 001 into Sandia Canyon;
- NPDES Outfall 13S into Cañada Del Buey; and
- SWWS landscape irrigation area (Reuse Area).

This Discharge Permit authorizes the Permittees to dewater solids/sludge generated at the SWWS in synthetically lined drying beds and compost them for beneficial use within LANL or transport the solids/sludge off-site for disposal.

### **TA-3 SERF**

This Discharge Permit authorizes the Permittees to transfer or discharge treated wastewater and groundwater from the SWWS and wastewater from authorized industrial sources listed below to the SERF for additional treatment. The SERF is currently designed to treat up to 600,000 gpd of

wastewater using chemical precipitation, microfiltration, and reverse osmosis (RO). The sources of wastewater transferred or discharged to the SERF include the following:

- Treated wastewater and groundwater transferred from the SWWS;
- Industrial wastewater discharged from the SCC Cooling Tower(s) blow-down activities; and
- Discharges from other LANL-related industrial sources with NMED written approval.

This Discharge Permit authorizes the Permittees to transfer or discharge blended wastewater (combination of RO product water from the SERF and potable water and/or treated wastewater and groundwater from the SWWS to the following locations:

- Transferred to the SCC for Cooling Tower(s) make-up water;
- Transferred to the Power Plant Boiler; and
- Discharge to NPDES Outfall 001 into Sandia Canyon.

RO reject wastewater from SERF discharges to the SMEB or to the SWWS. The Permittees may discharge RO product water from the SERF to the SMEB for disposal as part of testing or maintenance activities. The Permittees dewater solids generated from the microfiltration process at the SERF in a plate press(s) and transport the solids off-site for disposal.

#### **TA-60 SMEB**

This Discharge Permit authorizes the Permittees to discharge industrial wastewater to the SMEB from the SERF via pipeline for disposal by evaporation or hauled from the impoundments for off-site disposal. The Permittees may transport wastewater, as listed below, and other LANL-related sources of wastewater by truck and discharge to the SMEB with NMED written approval. The SMEB consists of five double synthetically lined evaporative impoundments each with a leak detection system. This Discharge Permit authorizes the Permittees to install a sixth double synthetically lined evaporative storage impoundment with a leak detection system at the SMEB. The Permittees use mechanical evaporators to supplement the evaporation of wastewater. The following sources of wastewater discharge to the SMEB:

- RO reject water from the SERF;
- RO product water from the SERF (as necessary for testing and maintenance of the SERF);
- Wastewater from the drilling, development, rehabilitation, pump testing, and sampling of groundwater wells that does not meet on-site land application criteria but NMED has authorized for discharge to the SMEB; and
- Other LANL-related industrial and groundwater sources with NMED written approval.

#### **TA-3 SCC Cooling Towers and TA-3 Power Plant Boiler Blow-Down**

This Discharge Permit authorizes the Permittees to transfer blended wastewater from the SERF and/or potable water for use as make-up water for the SCC Cooling Towers blow-down and Power Plant Boiler blow-down. Concentrated wastewater from the SCC Cooling Towers and the

Power Plant Boiler is routinely “blown-down” by discharging spent water to the following locations:

- Wastewater discharges from the SCC Cooling Towers to NPDES Outfalls 001 and/or 03A027 into Sandia Canyon;
- Wastewater discharges from the SCC Cooling Towers to the SWWS and the SERF;
- Wastewater discharges from Power Plant Boiler blow-down to NPDES Outfall 001 into Sandia Canyon; and
- Wastewater discharges from Power Plant Boiler blow-down to SWWS.

The Permittees discharge wastewater to surface water outfalls from these Facilities pursuant to NPDES Permit NM0028355.

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

**IV. CONDITIONS**

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

**A. OPERATIONAL PLAN**

#	Terms and Conditions
1.	The Permittees shall implement the following operational plan to ensure compliance with Title 20, Chapter 6, Parts 2 and 4 NMAC.  [Subsection C of 20.6.2.3109 NMAC]
2.	The Permittees shall operate in a manner that does not violate standards and requirements of Sections 20.6.2.3101 and 20.6.2.3103 NMAC.  [20.6.2.3101 NMAC, 20.6.2.3103 NMAC, Subsection C of 20.6.2.3109 NMAC]

***Operational Actions with Implementation Deadlines***

#	Terms and Conditions
3.	Prior to construction, modification, expansion, decommissioning, or alteration of the Facilities authorized to treat, reuse, and discharge by this Discharge Permit, the Permittees shall submit to NMED a written notification detailing the proposed change. Such proposed changes include the following (without limitation):

#	Terms and Conditions
	<ul style="list-style-type: none"> <li>• construction of an additional double synthetically lined evaporative impoundment with leak detection at the SMEB;</li> <li>• construction of an additional synthetically lined storage impoundment at the SWWS; and</li> <li>• significant alterations to the treatment processes at the SWWS and the SERF that could affect treated wastewater quality.</li> </ul> <p>Written notification shall include a draft (60% complete drawings) or final construction plans and specifications, of the proposed change for NMED’s approval. The 60% complete drawings and the final construction plans and specifications shall bear the seal and signature of a licensed New Mexico professional engineer (pursuant to New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority) as well as applicable DOE and LANL Engineering Standards and shall include the supporting design calculations.</p> <p>Prior to any proposed changes to the Facilities and its associated components, the Permittees shall obtain written verification from NMED that the plans and specifications meet the requirements of this Discharge Permit. Should NMED determine that the proposed changes do not conform with the requirements of this Discharge Permit and/or constitutes a modification of the Permittees’ Discharge Plan, NMED will inform the Permittees of the requirement of a discharge permit modification to proceed with the proposed change(s).</p> <p>[Subsections A and C 20.6.2.1202 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection C of 20.6.2.3107 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]</p>
4.	<p>Within 30 days of completing any NMED approved change(s) to the Facilities and its associated components, the Permittees shall submit record drawings to NMED that bear the seal and signature of a licensed New Mexico professional engineer (pursuant to the New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority) as well as applicable DOE and LANL Engineering Standards for the NMED approved change(s).</p> <p>[Subsections A and C of 20.6.2.1202 NMAC, Subsection C of 20.6.2.3109 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]</p>

**Operating Conditions**

#	Terms and Conditions															
5.	<p>The Permittees shall ensure that treated wastewater discharged after the chlorine contact chamber at SWWS does not exceed the following discharge limit.</p> <p><b>Total Nitrogen: 10 mg/L</b></p> <p>[Subsection C of 20.6.2.3109 NMAC]</p>															
6.	<p>The Permittees shall ensure that Class 1B reclaimed domestic wastewater discharged after the SWWS chlorine contact chamber does not exceed the following discharge limits.</p> <table border="1" data-bbox="293 804 1421 1016"> <thead> <tr> <th data-bbox="293 804 591 842"><u>Test</u></th> <th data-bbox="591 804 997 842"><u>30-day Average</u></th> <th data-bbox="997 804 1421 842"><u>Maximum</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="293 842 591 884">E. coli bacteria</td> <td data-bbox="591 842 997 884"><b>63 CFU or MPN/100 mL</b></td> <td data-bbox="997 842 1421 884"><b>126 CFU or MPN/100 mL</b></td> </tr> <tr> <td data-bbox="293 884 591 932">BOD<sub>5</sub></td> <td data-bbox="591 884 997 932"><b>30 mg/L</b></td> <td data-bbox="997 884 1421 932"><b>45 mg/L</b></td> </tr> <tr> <td data-bbox="293 932 591 974">TSS</td> <td data-bbox="591 932 997 974"><b>30 mg/L</b></td> <td data-bbox="997 932 1421 974"><b>45 mg/L</b></td> </tr> <tr> <td data-bbox="293 974 591 1016">TRC</td> <td data-bbox="591 974 997 1016"><b>Monitor Only</b></td> <td data-bbox="997 974 1421 1016"><b>Monitor Only</b></td> </tr> </tbody> </table> <p>[Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]</p>	<u>Test</u>	<u>30-day Average</u>	<u>Maximum</u>	E. coli bacteria	<b>63 CFU or MPN/100 mL</b>	<b>126 CFU or MPN/100 mL</b>	BOD <sub>5</sub>	<b>30 mg/L</b>	<b>45 mg/L</b>	TSS	<b>30 mg/L</b>	<b>45 mg/L</b>	TRC	<b>Monitor Only</b>	<b>Monitor Only</b>
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TSS	<b>30 mg/L</b>	<b>45 mg/L</b>														
TRC	<b>Monitor Only</b>	<b>Monitor Only</b>														
7.	<p>The Permittees shall apply reclaimed domestic wastewater evenly throughout the entire reuse area such that the amount of total nitrogen applied does not exceed 200 pounds per acre in any 12-month period. The Permittees shall not adjust nitrogen content to account for volatilization or mineralization processes.</p> <p>[Subsection C of 20.6.2.3109 NMAC]</p>															
8.	<p>The Permittees shall ensure adherence to the following general requirements for above-ground use of reclaimed domestic wastewater.</p> <p>a) The Permittees shall install and maintain signs in English and Spanish at all reuse areas such that they are visible and legible for the term of this Discharge Permit. The Permittees shall post signs at the entrance to reuse areas and at other locations where public exposure to reclaimed domestic wastewater may occur. The signs shall state: NOTICE: THIS AREA IS IRRIGATED WITH RECLAIMED WASTEWATER - DO NOT DRINK. AVISO: ESTA ÁREA ESTÁ REGADA CON AGUAS NEGRAS RECOBRADAS - NO TOMAR. The Permittees may submit alternate wording and/or graphics to NMED for approval.</p> <p>b) Reclaimed domestic wastewater systems shall have no direct or indirect cross connections with public water systems or irrigation wells pursuant to the latest</p>															

#	Terms and Conditions
	<p>revision of the New Mexico Plumbing Code (14.8.2 NMAC) and New Mexico Mechanical Code (14.9.2 NMAC).</p> <ul style="list-style-type: none"> <li>c) Above-ground use of reclaimed domestic wastewater shall not result in excessive ponding of wastewater. The Permittees shall not discharge reclaimed domestic wastewater at times when the reuse area is saturated or frozen.</li> <li>d) The Permittees shall confine discharge of reclaimed domestic wastewater to the reuse area.</li> <li>e) Existing and accessible portions of the reclaimed domestic wastewater distribution system (with the exception of application equipment such as sprinklers or pivots) shall be colored purple or clearly labeled as being part of a reclaimed domestic wastewater distribution system. Piping, valves, outlets, and other plumbing fixtures shall be purple pursuant to the latest revision of the New Mexico Plumbing Code (14.8.2 NMAC) and New Mexico Mechanical Code (14.9.2 NMAC) to differentiate piping or fixtures used to convey reclaimed wastewater from those intended for potable or other uses.</li> <li>f) Valves, outlets, and sprinkler heads used in reclaimed wastewater systems shall be accessible only to authorized personnel.</li> </ul> <p>The Permittees shall demonstrate adherence to these requirements by submitting documentation consisting of narrative statements and date-stamped photographs as appropriate. The Permittees shall submit the documentation to NMED once during the term of this Discharge Permit in the next required periodic monitoring report after the issuance of the Discharge Permit.</p> <p>[Subsections B and C of 20.6.2.3109 NMAC, NMSA 1–78, § 74-6–5.D]</p>
9.	<p>The Permittees shall meet the following setbacks, access restrictions and equipment requirements for spray irrigation using Class 1B reclaimed domestic wastewater.</p> <ul style="list-style-type: none"> <li>a) Maintain a minimum 100-foot setback between any dwellings or occupied establishments and the edge of the reuse area.</li> <li>b) Postpone irrigation using reclaimed domestic wastewater at times when windy conditions may result in drift of reclaimed wastewater outside the reuse area.</li> <li>c) Apply reclaimed domestic wastewater at times and in a manner that minimizes public contact.</li> <li>d) Limit spray irrigation system to low trajectory spray nozzles.</li> </ul> <p>[Subsections B and C of 20.6.2.3109 NMAC, NMSA 1–78, § 74–5.D]</p>
10.	<p>The Permittees shall institute a backflow prevention method to protect wells and public water supply systems from contamination by reclaimed domestic wastewater prior to discharging to the reuse area. Backflow prevention shall be achieved by a total</p>



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	<p>disconnect (physical air gap separation between the discharge pipe and the liquid surface at least twice the diameter of the discharge pipe), or by a reduced pressure principal backflow prevention assembly (RP) installed on the line between the fresh water supply wells or public water supply and the reclaimed domestic wastewater delivery system. The Permittees shall maintain backflow prevention at all times.</p> <p>The Permittees shall have RP devices inspected and tested by a certified backflow prevention assembly tester at the time of installation, repair, or relocation and at least on an annual basis thereafter. The backflow prevention assembly tester shall have successfully completed a 40-hour backflow prevention course based on the University of Southern California’s Backflow Prevention Standards and Test Procedures and obtained certification demonstrating completion. The Permittees shall have all malfunctioning RP devices repaired or replaced within 30 days of discovery. The Permittees shall cease using supply lines associated with the RP device until repair or replacement is complete.</p> <p>The Permittees shall maintain copies of the inspection and maintenance records and test results for each RP device associated with the backflow prevention program at a location available for inspection by NMED.</p> <p>[Subsection C of 20.6.2.3109 NMAC]</p>
11.	<p>The Permittees shall maintain adequate access controls around the SWWS, the SERF and the SMEB to restrict unauthorized access by the general public and animals throughout the term of this Discharge Permit.</p> <p>[Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]</p>
12.	<p>The Permittees shall maintain signs indicating that the wastewater at the SWWS, the SMEB, and at NPDES Outfalls 001, 13S, and 03A027 is not potable. The Permittee shall post signs at the SWWS impoundment, the two entrance gates at the SMEB, and the entrances to the NPDES Outfalls. The Permittees shall print signs in English and Spanish and shall ensure the signs remain visible and legible for the term of this Discharge Permit.</p> <p>[Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]</p>
13.	<p>The Permittees shall maintain the impoundment liners at the SWWS and the SMEB to avoid conditions that could affect the liner or the structural integrity of the impoundments. Characterization of such conditions may include the following:</p> <ul style="list-style-type: none"> <li>• erosion damage;</li> <li>• animal burrows or other damage;</li> <li>• the presence of vegetation including aquatic plants, weeds, woody shrubs, or trees growing within five feet of the top inside edge of a sub-grade impoundment, within</li> </ul>

#	Terms and Conditions
	<p>five feet of the toe of the outside berm of an above-grade impoundment, or within the impoundment itself;</p> <ul style="list-style-type: none"> <li>• the presence of large debris or large quantities of debris in the impoundment;</li> <li>• evidence of seepage; or</li> <li>• evidence of berm subsidence.</li> </ul> <p>The Permittees shall routinely control vegetation growing around the impoundments by mechanical removal that is protective of the impoundment liner.</p> <p>The Permittees shall visually inspect all impoundments and surrounding berms on a monthly basis to ensure proper maintenance. In the event that inspection reveals any evidence of damage that threatens the structural integrity of an impoundment berm or liner, or that may result in an unauthorized discharge, the Permittees shall implement the Contingency Plan set forth in this Discharge Permit.</p> <p>The Permittees shall create and maintain a log of all impoundment inspections which describes the date of the inspection, any findings and repairs, and the name of the person responsible for the inspection. The Permittees shall make the log available to NMED upon request.</p> <p>The Permittees shall inspect all leak collection sumps for all double synthetically lined impoundments at the SMEB for the presence of any collected liquid on a monthly basis. In the event that standing liquid is detected in any sump(s) at an elevation above the four-inch horizontal drain line(s), the Permittees shall implement the contingency plan set forth in this Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
14.	<p>The Permittees shall preserve a minimum of two feet of freeboard, i.e., the liquid level in the SWWS impoundment(s) and the elevation of the lowest-most top of the impoundment liner.</p> <p>In the event that the Permittees determines that they cannot preserve two feet of freeboard in the impoundment(s), the Permittees shall implement the Contingency Plan set forth in this Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
15.	<p>The Permittees shall preserve a minimum of one foot of freeboard, i.e., the liquid level in the SMEB impoundments and the elevation of the lowest-most top of the impoundment liner.</p>

#	Terms and Conditions
	<p>In the event that the Permittees determines that they cannot preserve one foot of freeboard in the impoundment(s), the Permittees shall implement the Contingency Plan set forth in this Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
16.	<p>The Permittees shall maintain all evaporative impoundment leak detection and collection systems. The leak detection and collection systems consist of a four-inch drain line and collection sump.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>
17.	<p>The Permittees shall properly manage all solids generated by the SWWS treatment system to maintain effective operation of the system by removing solids as necessary and in accordance with associated equipment manufacturer’s specifications. The Permittees shall contain, transport, and dispose of solids removed from the treatment process in accordance with all local, state, and federal regulations. The Permittees are authorized to beneficially reuse sludge within LANL in accordance with all local, state, and federal regulations. The Permittees shall maintain records of off-site solids/sludge disposal at a location accessible for review and inspection by NMED upon request.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
18.	<p>The Permittees shall properly manage all solids generated by the SERF treatment system to maintain effective operation of the system by removing solids as necessary and in accordance with associated equipment manufacturer’s specifications. The Permittees shall contain, transport, and dispose of solids removed from the treatment process in accordance with all local, state, and federal regulations. The Permittees shall maintain records of off-site solids disposal at a location accessible for review and inspection by NMED upon request.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
19.	<p>The Permittees shall utilize operators, certified by the State of New Mexico at the appropriate level pursuant to 20.7.4 NMAC, to operate the SWWS wastewater collection, treatment, and disposal systems. A certified operator or a direct supervisee of a certified operator shall perform the operations and maintenance of all or any part of the wastewater system.</p> <p>The Permittees shall notify the NMED within 24 hours if at any time the Permittees no longer has a certified operator maintaining the system.</p>

#	Terms and Conditions
	[Subsection C of 20.6.2.3109 NMAC, 20.7.4 NMAC]

**B. MONITORING AND REPORTING**

#	Terms and Conditions
20.	The Permittees shall conduct the monitoring, reporting, and other requirements listed below in accordance with the monitoring requirements of this Discharge Permit.  [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
21.	METHODOLOGY - Unless otherwise specified by this Discharge Permit, or approved in writing by NMED, the Permittees shall use sampling and analytical techniques that conform with the references listed in Subsection B of 20.6.2.3107 NMAC.  [Subsection B of 20.6.2.3107 NMAC]

***Due Dates for Monitoring Reports***

22.	Quarterly monitoring - The Permittees shall perform monitoring and other Permit required actions during the following periods and shall submit quarterly reports to NMED by the following due dates: <ul style="list-style-type: none"> <li>• January 1<sup>st</sup> through March 31<sup>st</sup> – <b>due by May 1<sup>st</sup></b>;</li> <li>• April 1<sup>st</sup> through June 30<sup>th</sup> – <b>due by August 1<sup>st</sup></b>;</li> <li>• July 1<sup>st</sup> through September 30<sup>th</sup> – <b>due by November 1<sup>st</sup></b>; and</li> <li>• October 1<sup>st</sup> through December 31<sup>st</sup> – <b>due by February 1<sup>st</sup></b>.</li> </ul> [Subsection A of 20.6.2.3107 NMAC]
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***Monitoring Actions with Implementation Deadlines***

#	Terms and Conditions
23.	Within 90 days following the issuance date of this Discharge Permit ( <b>by DATE</b> ), the Permittees shall install the following flow meter: <p style="margin-left: 40px;">One totalizing flow meter installed on the discharge line from the treatment system to the reuse area to measure the volume of reclaimed domestic wastewater discharged to the SWWS landscape irrigation reuse areas.</p>

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	<p>The Permittees shall submit confirmation of meter installation, type, calibration, and locations within 30 days of completed installation.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
24.	<p>The Permittees shall sample treated wastewater discharged after the SWWS chlorine contact chamber and wastewater discharged after the Parshall Flume at NPDES Outfall 001 for the presence of perfluorinated chemicals (PFCs).</p> <p>Within 180 days of the issuance date of this Discharge Permit (by <b>DATE</b>), the Permittees shall collect a single grab sample after the SWWS chlorine contact chamber and after the Parshall Flume at NPDES Outfall 001. The Permittees shall analyze the samples for the following PFCs:</p> <ul style="list-style-type: none"> <li>• perfluorohexane sulfonic acid (PFHxS) (CAS 355-46-4)</li> <li>• perfluorooctane sulfonate (PFOS) (CAS 1763-23-1)</li> <li>• perfluorooctanoic acid (PFOA) (CAS 335-67-1)</li> </ul> <p>The Permittees shall properly collect, prepare, preserve, transport, and analyze the samples in accordance with ASTM D7979-17, or an equivalent method that uses liquid chromatography and tandem mass spectrometry (LC/MS/MS). The reporting limit shall be low enough to identify whether the combined concentration of the perfluorinated chemicals is less than the Tap Water Screening Level identified in the <i>NMED Risk Assessment Guidance for Site Assessments and Investigations</i>, Table A-1 (Document #2) available on the NMED Hazardous Waste Bureau’s website under Guidance Documents. The Permittees shall take appropriate measures to avoid cross contamination while collecting and transporting the samples. The selected laboratory should be able to provide guidance that ensures sample integrity. The Permittees shall submit a copy of the laboratory report, including analytical results, the QA/QC summary, and the Chain of Custody to NMED within 30 days of laboratory report receipt.</p> <p>[Subsection H of 20.6.2.3109 NMAC, Subsection A of 20.6.2.3107 NMAC]</p>

**Groundwater Monitoring Conditions**

#	Terms and Conditions
25.	<p>The Permittees shall perform quarterly groundwater sampling in the following groundwater monitoring well(s) and analyze the samples for total Kjeldahl nitrogen (TKN), nitrate-nitrogen (NO<sub>3</sub>-N), TDS, chloride (Cl), and bromodichloromethane.</p>

#	Terms and Conditions
	<p>SCA-3, an alluvial groundwater monitoring well located hydrologically downgradient of NPDES Outfalls 001 and 03A027.</p> <p>If SCA-3 contains insufficient water to effectively monitor groundwater quality, the Permittees shall perform quarterly groundwater sampling in the following groundwater monitoring well.</p> <p>SCI-1, an intermediate groundwater monitoring well located hydrologically downgradient of NPDES Outfalls 001 and 03A027.</p> <p>The Permittees shall perform groundwater sample collection, preservation, transportation, and analysis according to the following procedures.</p> <ol style="list-style-type: none"> <li>a) Measure the depth-to-most-shallow groundwater from the top of the well casing to the nearest one-hundredth of a foot.</li> <li>b) Purge three well volumes of water, when appropriate, from the well prior to sample collection.</li> <li>c) Obtain samples from the well for analysis.</li> <li>d) Properly prepare, preserve, and transport samples.</li> <li>e) Analyze samples in accordance with the methods authorized in this Discharge Permit.</li> </ol> <p>The Permittees shall submit the depth-to-most-shallow groundwater measurements and the laboratory analytical data results including the laboratory QA/QC summary report for each well, and a Facility layout map showing the location and number of each well to NMED in the quarterly monitoring reports.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>

**Facility Monitoring Conditions**

#	Terms and Conditions
26.	<p>The Permittees shall measure the total monthly volume, calculate the daily average volume, and record the daily peak volume of wastewater received by the SWWS each month using a primary measuring device (equipped with head sensing, totalizing and chart recording/data logging mechanisms) located prior to the entrance works. The Permittees shall submit the totalized, average daily, and peak daily influent volumes for each month to NMED in the quarterly monitoring reports.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>

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27.	<p>The Permittees shall measure the total monthly volume, calculate the daily average volume, and record the daily peak volume of treated wastewater and industrial wastewater discharged from NPDES Outfalls 001 and 13S each month using a primary measuring device (equipped with head sensing, totalizing and chart recording/data logging mechanisms). The Permittees shall submit the totalized, average daily, and peak daily discharge volumes for each month to NMED in the quarterly monitoring reports.</p> <p>For any flow measurement location where no discharge occurs for a complete calendar month, the Permittees shall report “no discharge”.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>
28.	<p>The Permittees shall on a monthly basis measure the volume of treated wastewater or reclaimed domestic wastewater discharged or transferred to the following locations:</p> <ul style="list-style-type: none"> <li>• Treated wastewater and treated groundwater discharged from the SWWS synthetically lined storage impoundment(s) to the Reuse Tank;</li> <li>• Reclaimed domestic wastewater used for the SWWS landscape irrigation;</li> <li>• Treated wastewater from the Reuse Tank and industrial wastewater from industrial sources transferred and discharged to the SERF;</li> <li>• Blended wastewater transferred from the SERF to the SCC Cooling Towers;</li> <li>• Blended wastewater transferred from the SERF to the Power Plant Boiler;</li> <li>• RO reject and process wastewater discharged from the SERF to the SMEB; and</li> <li>• SCC Cooling Tower(s) blow-down wastewater discharged to NPDES Outfall 03A027.</li> </ul> <p>To determine the discharge volume, the Permittees shall obtain readings from a totalizing flow meter, located in the transfer/discharge lines associated with the above Facilities/locations, on a monthly basis and calculate the monthly and average daily discharge volume.</p> <p>The Permittees shall submit the monthly meter readings, calculated monthly discharge volumes, and average daily discharge volumes to NMED in the quarterly monitoring reports.</p> <p>For any Facility/location where no transfer/discharge occurs for a complete calendar month, the Permittees shall report “no discharge”.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>
29.	<p>All flow meters, identified by this Discharge Permit, shall be capable of having their accuracy verified under working (i.e., real-time in-the-field) conditions. The Permittees shall develop a field verification method for each flow meter and shall utilize that method</p>

#	Terms and Conditions
	<p>to check the accuracy of each respective meter. The Permittees shall perform field calibrations, at a minimum, on an annual basis. The Permittees shall also perform field calibrations upon repair or replacement of a flow measurement device.</p> <p>The Permittees shall calibrate each flow meter to its manufacturer's recommended specification which shall be no less accurate than plus or minus 10 percent of actual flow, as measured under field conditions. An individual knowledgeable in flow measurement shall perform field calibration and the installation/operation of the device in use. The Permittees shall prepare a flow meter calibration report for each flow measurement device calibration event. The flow meter calibration report shall include the following information.</p> <ul style="list-style-type: none"><li>a) The location and meter identification.</li><li>b) The method of flow meter field calibration employed.</li><li>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.</li><li>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.</li><li>e) Any flow meter repairs made during the previous year or during field calibration.</li><li>f) The name of the individual performing the calibration and the date of the calibration.</li></ul> <p>The Permittees shall maintain records of flow meter calibration(s) at a location accessible for review by NMED during Facility inspections.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>
30.	<p>The Permittees shall visually inspect flow meters on a monthly basis for evidence of malfunction. The Permittees shall maintain a log of the inspections that includes a date of the inspection, findings, repairs, and the name of the inspector. The Permittees shall make the log available to NMED upon request.</p> <p>If a visual inspection indicates a flow meter is not functioning as required by this Discharge Permit, the Permittees shall repair or replace the meter within 30 days of discovery. For <i>repaired</i> meters, the Permittees shall submit a report to NMED with the next monitoring report following the repair that includes a description of the malfunction; a statement verifying the repair; and a flow meter field calibration report completed in accordance with the requirements of this Discharge Permit. For <i>replacement</i> meters, the Permittees shall submit a report to NMED with the next monitoring report following the replacement that includes a design schematic for the device and a flow meter field calibration report completed in accordance with the requirements of this Discharge Permit.</p>



#	Terms and Conditions
	<p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
<p>31.</p>	<p>The Permittees shall create and maintain a log that includes all domestic wastewater and septage loads hauled and disposed of at the SWWS collection system. The log shall record the following information:</p> <ul style="list-style-type: none"> <li>• type of waste (DWWHT designation, septic tank designation, or portable toilet);</li> <li>• volume of wastewater or septage discharged; and</li> <li>• location of discharge (within the SWWS collection system).</li> </ul> <p>The Permittees shall maintain the log at a location accessible for review by NMED upon request.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>
<p>32.</p>	<p>The Permittees shall create and maintain a log that includes all wastewater loads discharged to the SWWS, the SERF, and the SMEB from the following sources:</p> <ul style="list-style-type: none"> <li>• groundwater well drilling, development, and rehabilitation wastewater;</li> <li>• groundwater water well sampling purge wastewater;</li> <li>• groundwater well pump test wastewater;</li> <li>• treated groundwater from remediation system(s) as approved by NMED; and</li> <li>• other LANL related sources as approved by NMED.</li> </ul> <p>The log shall record the following information:</p> <ul style="list-style-type: none"> <li>• date(s) of discharge if discharged by truck;</li> <li>• location of discharge (SWWS, SERF, or SMEB);</li> <li>• manner of discharge (hauled and discharged by truck or discharged by pipeline);</li> <li>• type of waste (drilling, development, rehabilitation, pump testing, purge, or treated groundwater);</li> <li>• summary of wastewater characteristics, noting parameters that exceed the limits listed in Attachments 1 and 2 of this Discharge Permit; and</li> <li>• estimated or metered volume of wastewater discharged.</li> </ul> <p>The Permittees shall submit copies of the log for the reporting period to NMED in the quarterly monitoring reports.</p> <p>When no discharges occur for a complete calendar month, the Permittees shall report “no discharge”.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>

#	Terms and Conditions										
33.	<p>The Permittees shall sample discharges from the SWWS and NPDES Outfalls and SMEB at the following sample collection points and points of compliance.</p> <table border="1" data-bbox="293 432 1435 751"> <tr> <td data-bbox="293 432 621 512">SWWS</td> <td data-bbox="621 432 1435 512">Treated/reclaimed domestic wastewater discharged after the SWWS chlorine contact chamber.</td> </tr> <tr> <td data-bbox="293 512 621 552">NPDES Outfall 13S</td> <td data-bbox="621 512 1435 552">Wastewater discharged after the Parshall Flume.</td> </tr> <tr> <td data-bbox="293 552 621 592">NPDES Outfall 001</td> <td data-bbox="621 552 1435 592">Wastewater discharged after the Parshall Flume.</td> </tr> <tr> <td data-bbox="293 592 621 632">NPDES Outfall 03A027</td> <td data-bbox="621 592 1435 632">Wastewater discharged after the outfall pipe.</td> </tr> <tr> <td data-bbox="293 632 621 751">SMEB</td> <td data-bbox="621 632 1435 751">Composite samples of wastewater consisting of a minimum of six equal aliquots collected around the entire perimeter of <i>each</i> impoundment and thoroughly mixed.</td> </tr> </table> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>	SWWS	Treated/reclaimed domestic wastewater discharged after the SWWS chlorine contact chamber.	NPDES Outfall 13S	Wastewater discharged after the Parshall Flume.	NPDES Outfall 001	Wastewater discharged after the Parshall Flume.	NPDES Outfall 03A027	Wastewater discharged after the outfall pipe.	SMEB	Composite samples of wastewater consisting of a minimum of six equal aliquots collected around the entire perimeter of <i>each</i> impoundment and thoroughly mixed.
SWWS	Treated/reclaimed domestic wastewater discharged after the SWWS chlorine contact chamber.										
NPDES Outfall 13S	Wastewater discharged after the Parshall Flume.										
NPDES Outfall 001	Wastewater discharged after the Parshall Flume.										
NPDES Outfall 03A027	Wastewater discharged after the outfall pipe.										
SMEB	Composite samples of wastewater consisting of a minimum of six equal aliquots collected around the entire perimeter of <i>each</i> impoundment and thoroughly mixed.										
34.	<p>The Permittees shall collect grab samples of treated wastewater from the SWWS and wastewater from NPDES Outfall 001, NPDES Outfall 13S, and NPDES Outfall 03A027 on a quarterly basis and analyze the samples for:</p> <ul style="list-style-type: none"> <li>• TKN;</li> <li>• NO<sub>3</sub>-N;</li> <li>• TDS; and</li> <li>• Cl; and</li> <li>• bromodichloromethane.</li> </ul> <p>The Permittees shall ensure the samples are properly prepared, preserved, transported, and analyzed in accordance with the methods authorized in this Discharge Permit. The Permittees shall submit the laboratory analytical data results, including the QA/QC summary and Chain of Custody, to NMED in the subsequent quarterly monitoring report.</p> <p>For sampling locations where no discharge occurs for a complete quarter, the Permittees shall report “no discharge”.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>										
35.	<p>The Permittees shall collect a composite wastewater sample on a semi-annual basis (once every six months) from each evaporative impoundment located at the SMEB. The Permittees shall analyze each composite sample for:</p> <ul style="list-style-type: none"> <li>• TKN;</li> <li>• NO<sub>3</sub>-N;</li> <li>• TDS; and</li> <li>• Cl.</li> </ul>										

#	Terms and Conditions		
	<p>The Permittees shall ensure the samples are properly prepared, preserved, transported, and analyzed in accordance with the methods authorized in this Discharge Permit. The Permittees shall submit the laboratory analytical data results, including the QA/QC summary and Chain of Custody, to NMED in the monitoring reports due by February 1<sup>st</sup> and August 1<sup>st</sup> of each year.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>		
36.	<p>During any two-week period that the discharge of reclaimed domestic wastewater occurs, the Permittees shall perform the following analyses on the wastewater samples collected from the SWWS using the following sampling method and frequency:</p> <ul style="list-style-type: none"> <li>• E. coli bacteria: grab sample at peak daily flow once per week;</li> <li>• BOD<sub>5</sub>: six-hour composite sample once per two weeks;</li> <li>• TSS: six-hour composite sample once per two weeks; and</li> <li>• TRC concentrations: record whenever collecting bacteria samples.</li> </ul> <p>The Permittees shall ensure the samples are properly prepared, preserved, transported, and analyzed in accordance with the methods authorized in this Discharge Permit. The Permittees shall submit the laboratory analytical data results, including the QA/QC summary and Chain of Custody, and a copy of the log of TRC concentrations to NMED in the subsequent quarterly monitoring report.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections B, C and H of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]</p>		
37.	<p>On an annual basis, the Permittees shall collect 24-hour flow weighted composite samples (except as noted for pH) of treated wastewater from the SWWS and wastewater from NPDES Outfall 001, NPDES Outfall 13S, and NPDES Outfall 03A027 and analyze the samples for the following inorganic contaminants (dissolved fraction, except as noted):</p> <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>• aluminum (CAS 7429-90-5)</li> <li>• antimony (CAS 7440-36-0)</li> <li>• arsenic (CAS 7440-38-2)</li> <li>• barium CAS 7440-39-3)</li> <li>• beryllium (CAS 7440-41-7)</li> <li>• boron (CAS 7440-42-8)</li> <li>• cadmium (CAS 7440-43-9)</li> <li>• chromium (CAS 7440-47-3)</li> <li>• cobalt (CAS 7440-48-4)</li> <li>• copper (CAS 7440-50-8)</li> <li>• cyanide (CAS 57-12-5)</li> </ul> </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>• molybdenum (CAS 7439-98-7)</li> <li>• total mercury (nonfiltered) (CAS 7439-97-6)</li> <li>• pH (instantaneous)</li> <li>• nickel (CAS 7440-02-0)</li> <li>• radioactivity: combined radium-226 &amp; radium-228 (CAS 15262-20-1)</li> <li>• selenium (CAS 7782-49-2)</li> <li>• silver (CAS 7440-224)</li> <li>• sulfate (CAS 14808-79-8)</li> <li>• thallium (CAS 7440-28-0)</li> </ul> </td> </tr> </table>	<ul style="list-style-type: none"> <li>• aluminum (CAS 7429-90-5)</li> <li>• antimony (CAS 7440-36-0)</li> <li>• arsenic (CAS 7440-38-2)</li> <li>• barium CAS 7440-39-3)</li> <li>• beryllium (CAS 7440-41-7)</li> <li>• boron (CAS 7440-42-8)</li> <li>• cadmium (CAS 7440-43-9)</li> <li>• chromium (CAS 7440-47-3)</li> <li>• cobalt (CAS 7440-48-4)</li> <li>• copper (CAS 7440-50-8)</li> <li>• cyanide (CAS 57-12-5)</li> </ul>	<ul style="list-style-type: none"> <li>• molybdenum (CAS 7439-98-7)</li> <li>• total mercury (nonfiltered) (CAS 7439-97-6)</li> <li>• pH (instantaneous)</li> <li>• nickel (CAS 7440-02-0)</li> <li>• radioactivity: combined radium-226 &amp; radium-228 (CAS 15262-20-1)</li> <li>• selenium (CAS 7782-49-2)</li> <li>• silver (CAS 7440-224)</li> <li>• sulfate (CAS 14808-79-8)</li> <li>• thallium (CAS 7440-28-0)</li> </ul>
<ul style="list-style-type: none"> <li>• aluminum (CAS 7429-90-5)</li> <li>• antimony (CAS 7440-36-0)</li> <li>• arsenic (CAS 7440-38-2)</li> <li>• barium CAS 7440-39-3)</li> <li>• beryllium (CAS 7440-41-7)</li> <li>• boron (CAS 7440-42-8)</li> <li>• cadmium (CAS 7440-43-9)</li> <li>• chromium (CAS 7440-47-3)</li> <li>• cobalt (CAS 7440-48-4)</li> <li>• copper (CAS 7440-50-8)</li> <li>• cyanide (CAS 57-12-5)</li> </ul>	<ul style="list-style-type: none"> <li>• molybdenum (CAS 7439-98-7)</li> <li>• total mercury (nonfiltered) (CAS 7439-97-6)</li> <li>• pH (instantaneous)</li> <li>• nickel (CAS 7440-02-0)</li> <li>• radioactivity: combined radium-226 &amp; radium-228 (CAS 15262-20-1)</li> <li>• selenium (CAS 7782-49-2)</li> <li>• silver (CAS 7440-224)</li> <li>• sulfate (CAS 14808-79-8)</li> <li>• thallium (CAS 7440-28-0)</li> </ul>		

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	<ul style="list-style-type: none"> <li>• fluoride (CAS 16984-48-8)</li> <li>• iron (CAS 7439-89-6)</li> <li>• lead (CAS 7439-92-1)</li> <li>• manganese (CAS 7439-96-5)</li> <li>• uranium (CAS 7440-61-1)</li> <li>• zinc (CAS 7440-66-6)</li> </ul> <p>The Permittees shall ensure the samples are properly prepared, preserved, transported, and analyzed in accordance with the methods authorized in this Discharge Permit. The Permittees shall analyze the samples using methods with reporting limits that are less than the corresponding numerical groundwater standards identified in 20.6.2.3103 NMAC.</p> <p>The Permittees shall submit a summary of measured concentrations compared with the corresponding groundwater standards, a copy of the laboratory report including the laboratory analytical data results, the QA/QC summary, and the Chain of Custody to NMED in the monitoring reports due by February 1<sup>st</sup> of each year.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>
38.	<p>During the third and fifth years of this Discharge Permit, the Permittees shall collect a composite wastewater sample from each evaporative impoundment located at the SMEB and analyze each composite sample for the following inorganic contaminants (dissolved fraction, except as noted):</p> <ul style="list-style-type: none"> <li>• aluminum (CAS 7429-90-5)</li> <li>• antimony (CAS 7440-36-0)</li> <li>• arsenic (CAS 7440-38-2)</li> <li>• barium CAS 7440-39-3)</li> <li>• beryllium (CAS 7440-41-7)</li> <li>• boron (CAS 7440-42-8)</li> <li>• cadmium (CAS 7440-43-9)</li> <li>• chromium (CAS 7440-47-3)</li> <li>• cobalt (CAS 7440-48-4)</li> <li>• copper (CAS 7440-50-8)</li> <li>• cyanide CAS 57-12-5)</li> <li>• fluoride (CAS 16984-48-8)</li> <li>• iron (CAS 7439-89-6)</li> <li>• lead (CAS 7439-92-1)</li> <li>• manganese (CAS 7439-96-5)</li> <li>• molybdenum (CAS 7439-98-7)</li> <li>• total mercury (nonfiltered) (CAS 7439-97-6)</li> <li>• pH (instantaneous)</li> <li>• nickel (CAS 7440-02-0)</li> <li>• radioactivity: combined radium-226 &amp; radium-228 (CAS 15262-20-1)</li> <li>• selenium (CAS 7782-49-2)</li> <li>• silver (CAS 7440-224)</li> <li>• sulfate (CAS 14808-79-8)</li> <li>• thallium (CAS 7440-28-0)</li> <li>• uranium (CAS 7440-61-1)</li> <li>• zinc (CAS 7440-66-6)</li> </ul>

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	<p>The Permittees shall ensure the samples are properly prepared, preserved, transported, and analyzed in accordance with the methods authorized in this Discharge Permit. The Permittees shall analyze the sample using methods with reporting limits that are less than the corresponding numerical groundwater standards identified in 20.6.2.3103 NMAC.</p> <p>The Permittees shall submit a summary of measured concentrations compared with the corresponding groundwater standards, a copy of the laboratory report including the laboratory analytical data results, the QA/QC summary, and the Chain of Custody to NMED in the subsequent quarterly monitoring report.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>
39.	<p>On an annual basis, the Permittees shall collect a grab sample of treated wastewater from the SWWS and wastewater from NPDES Outfall 001, NPDES Outfall 13S, and NPDES Outfall 03A027 and analyze the non-filtered samples for the following organic contaminants:</p> <ul style="list-style-type: none"> <li>• atrazine (CAS 1912-24-9)</li> <li>• benzene (CAS 71-43-2)</li> <li>• benzo-a-pyrene (CAS 50-32-8)</li> <li>• carbon tetrachloride (CAS 56-23-5)</li> <li>• chloroform (CAS 67-66-3)</li> <li>• 1,2-dichlorobenzene (CAS 95-50-1)</li> <li>• 1,4-dichlorobenzene (CAS 106-46-7)</li> <li>• 1,1-dichloroethane (CAS 75-34-3)</li> <li>• 1,2-dichloroethane (EDC, CAS 107-06-2)</li> <li>• 1,1-dichloroethene (1,1-DCE, CAS 75-35-4)</li> <li>• cis-1,2-dichloroethene (CAS 156-59-2)</li> <li>• trans-1,2-dichloroethene (CAS 156-60-5)</li> <li>• 1,2-dichloropropane (PDC, CAS 78-87-5)</li> <li>• 1,4-dioxane (CAS 123-91-1) (using EPA Method 8720E- SIM)</li> <li>• ethylbenzene (CAS 100-41-4)</li> <li>• ethylene dibromide (EDB, CAS 106-93-4)</li> <li>• methylene chloride (CAS 75-09-2)</li> <li>• PAHs: total naphthalene (CAS 91-20-3) plus monomethylnaphthalenes</li> <li>• phenols</li> <li>• polychlorinated biphenyls (PCBs, CAS 1336-36-3)</li> <li>• pentachlorophenol (PCP, CAS 87-86-5)</li> <li>• toluene (CAS 108-88-3)</li> <li>• styrene (CAS 100-42-5)</li> <li>• 1,1,2,2-tetrachloroethane (CAS 79-34-5)</li> <li>• tetrachloroethene (PCE, CAS 127-18-4)</li> <li>• 1,2,4-trichlorobenzene (CAS 120-82-1)</li> <li>• 1,1,1-trichloroethane (1,1,1-TCA, CAS 71-55-6)</li> <li>• 1,1,2-trichloroethane (CAS 79-00-5)</li> <li>• trichloroethene (TCE, CAS 79-01-6)</li> <li>• vinyl chloride (CAS 75-01-4)</li> <li>• total xylenes (CAS 1330-20-7)</li> </ul>

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	<p>The Permittees shall ensure the samples are properly prepared, preserved, transported, and analyzed in accordance with the methods authorized in this Discharge Permit. The Permittees shall analyze samples using methods with reporting limits that are less than the corresponding numerical groundwater standards identified in 20.6.2.3103 NMAC. The reporting limit for 1,4-dioxane shall be less than the Tap Water Screening Level for 1,4-dioxane identified in Document #2.</p> <p>The Permittees shall submit a summary of measured concentrations compared with the corresponding groundwater standards, and a copy of the laboratory report including the laboratory analytical data results, the QA/QC summary, and the Chain of Custody to NMED in the monitoring reports due by February 1<sup>st</sup> of each year.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>
40.	<p>During the third and fifth years of this Discharge Permit, the Permittees shall collect a composite wastewater sample from each evaporative impoundment located at the SMEB and analyze each non-filtered composite sample for the following organic contaminants:</p> <ul style="list-style-type: none"> <li>• atrazine (CAS 1912-24-9)</li> <li>• benzene (CAS 71-43-2)</li> <li>• benzo-a-pyrene (CAS 50-32-8)</li> <li>• carbon tetrachloride (CAS 56-23-5)</li> <li>• chloroform (CAS 67-66-3)</li> <li>• 1,2-dichlorobenzene (CAS 95-50-1)</li> <li>• 1,4-dichlorobenzene (CAS 106-46-7)</li> <li>• 1,1-dichloroethane (CAS 75-34-3)</li> <li>• 1,2-dichloroethane (EDC, CAS 107-06-2)</li> <li>• 1,1-dichloroethene (1,1-DCE, CAS 75-35-4)</li> <li>• cis-1,2-dichloroethene (CAS 156-59-2)</li> <li>• trans-1,2-dichloroethene (CAS 156-60-5)</li> <li>• 1,2-dichloropropane (PDC, CAS 78-87-5)</li> <li>• ethylbenzene (CAS 100-41-4)</li> <li>• ethylene dibromide (EDB, CAS 106-93-4)</li> <li>• methylene chloride (CAS 75-09-2)</li> <li>• PAHs: total naphthalene (CAS 91-20-3) plus monomethylnaphthalenes</li> <li>• phenols</li> <li>• polychlorinated biphenyls (PCBs, CAS 1336-36-3)</li> <li>• pentachlorophenol (PCP, CAS 87-86-5)</li> <li>• toluene (CAS 108-88-3)</li> <li>• styrene (CAS 100-42-5)</li> <li>• 1,1,2,2-tetrachloroethane (CAS 79-34-5)</li> <li>• tetrachloroethene (PCE, CAS 127-18-4)</li> <li>• 1,2,4-trichlorobenzene (CAS 120-82-1)</li> <li>• 1,1,1-trichloroethane (1,1,1-TCA, CAS 71-55-6)</li> <li>• 1,1,2-trichloroethane (CAS 79-00-5)</li> <li>• trichloroethene (TCE, CAS 79-01-6)</li> <li>• vinyl chloride (CAS 75-01-4)</li> <li>• total xylenes (CAS 1330-20-7)</li> </ul>

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	<p>The Permittees shall ensure the samples are properly prepared, preserved, transported, and analyzed in accordance with the methods authorized in this Discharge Permit. The Permittees shall analyze samples using methods with reporting limits that are less than the corresponding numerical groundwater standards identified in 20.6.2.3103 NMAC.</p> <p>The Permittees shall submit a summary of measured concentrations compared with the corresponding groundwater standards, and a copy of the laboratory report including the laboratory analytical data results, the QA/QC summary and the Chain of Custody to NMED in the subsequent quarterly monitoring report.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>
41.	<p>During the third and fifth years of this Discharge Permit, the Permittees shall collect grab samples of treated wastewater discharged from the SWWS and wastewater discharged from NPDES outfall 001, NPDES outfall 13S, and NPDES outfall 03A027 to characterize the wastewater discharged from each outfall. The samples shall be analyzed for the following toxic pollutants:</p> <ul style="list-style-type: none"> <li>• acrolein (CAS 107-02-8)</li> <li>• acrylonitrile (CAS 107-13-1)</li> <li>• aldrin (CAS 309-00-2)</li> <li>• benzidine (CAS 92-87-5)</li> <li>• chlordane (CAS 57-74-9)</li> <li>• chlorinated benzenes                         <ul style="list-style-type: none"> <li>monochlorobenzene (CAS 108-90-7)</li> <li>hexachlorobenzene (CAS 118-74-1)</li> <li>pentachlorobenzene (CAS 608-93-5)</li> <li>1,2,4,5-tetrachlorobenzene (CAS 95-94-3)</li> </ul> </li> <li>• chlorinated phenols                         <ul style="list-style-type: none"> <li>2,4-dichlorophenol (CAS 120-83-2)</li> <li>2,4,5-trichlorophenol (CAS 95-95-4)</li> <li>2,4,6-trichlorophenol (CAS 88-06-2)</li> </ul> </li> <li>• chloroalkyl ethers                         <ul style="list-style-type: none"> <li>bis (2-chloroethyl) ether CAS 111-44-4)</li> <li>bis (2-chloroisopropyl) ether (CAS 108-60-1)</li> </ul> </li> <li>• hexachlorocyclopentadiene (CAS 77-47-4)</li> <li>• hexachloroethane (CAS 67-72-1)</li> <li>• isophorone (CAS 78-59-1)</li> <li>• methyl tertiary-butyl-ether (MTBE, CAS 1634-04-4)</li> <li>• nitroaromatics and high explosives (HE)                         <ul style="list-style-type: none"> <li>nitrobenzene (CAS 98-85-3)</li> <li>2,4-dinitrotoluene (2,4-DNT, CAS-121-14-2)</li> <li>2,6-dinitrotoluene (2,6-DNT, CAS 606-20-2)</li> <li>octrahydro-1,3,5,7-tetranitro-1,3,5,7 tetrazocine (HMX, CAS 2691-41-0)</li> <li>hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX, CAS 121-82-4)</li> <li>2,4,6-trinitrotoluene (TNT, CAS 118-96-7)</li> <li>2,4-dinitro-o-cresol (CAS 534-52-1)</li> <li>dinitrophenols (CAS 51-28-5)</li> </ul> </li> <li>• nitrosamines                         <ul style="list-style-type: none"> <li>N-nitrosodiethylamine (CAS 55-18-5)</li> <li>N-nitrosodimethylamine (CAS 62-75-</li> </ul> </li> </ul>

#	Terms and Conditions
	<p>                     bis (chloromethyl) ether (CAS 542-88-1)                 </p> <ul style="list-style-type: none"> <li>• DDT (CAS 50-29-3)</li> <li>• dichlorobenzidine (CAS 91-94-1)</li> <li>• dichloropropenes (CAS 542-75-6)</li> <li>• dieldrin (CAS 60-57-1)</li> <li>• diphenylhydrazine (CAS 122-66-7)</li> <li>• endosulfan (CAS 115-29-8)</li> <li>• endrin (CAS 72-20-8)</li> <li>• halomethanes                             <ul style="list-style-type: none"> <li>bromomethane (CAS 74-83-9)</li> <li>chloromethane (CAS 74-87-3)</li> <li>dichlorodifluoromethane (fluorocarbon, CAS 75-71-8)</li> <li>dichloromethane (methylene chloride, CAS 75-09-2)</li> <li>tribromomethane (bromoform, (CAS 75-25-2)</li> <li>trichlorofluoromethane (fluorocarabon-11, CAS 75-69-4)</li> <li>heptachlor (CAS 76-44-8)</li> <li>hexachlorobutadiene (CAS 87-68-3)</li> </ul> </li> <li>• hexachlorocyclohexane (HCH)                             <ul style="list-style-type: none"> <li>alpha-HCH (CAS 319-84-6)</li> <li>beta-HCH (CAS 319-85-7)</li> <li>gamma-HCH (CAS 58-89-9)</li> <li>technical HCH (CAS 608-73-1)</li> </ul> </li> </ul> <p>                     9)                      N-nitrosodibutylamine (CAS 924-16-3)                      N-nitrosodiphenylamine (CAS 86-30-6)                      N-nitrosopyrrolidine (CAS 930-55-2)                 </p> <ul style="list-style-type: none"> <li>• perchlorate (CAS 14797-73-0)</li> <li>• phthalate esters                             <ul style="list-style-type: none"> <li>dibutyl phthalate (CAS 84-74-2)</li> <li>di-2-ethylhexyl phthalate (DEHP, CAS 117-81-7)</li> <li>diethyl phthalate (DEP, CAS 84-66-2)</li> <li>dimethyl phthalate (DMP, CAS 131-11-3)</li> </ul> </li> <li>• polynuclear aromatic hydrocarbons (PAHs)                             <ul style="list-style-type: none"> <li>anthracene (CAS 120-12-7)</li> <li>3,4-benzofluoranthene (CAS 205-99-2)</li> <li>benzo(k)fluoranthene (CAS 207-08-9)</li> <li>fluoranthene (CAS 206-44-0)</li> <li>fluorene (CAS 86-73-7)</li> <li>naphthalene (CAS 91-20-3)</li> <li>1-methylnaphthalene (CAS 90-12-0)</li> <li>2-methylnaphthalene (CAS 91-57-6)</li> <li>phenanthrene (CAS 85-01-8)</li> <li>pyrene (CAS 129-00-0)</li> </ul> </li> <li>• prometon (CAS 1610-18-0)</li> <li>• toxaphene (CAS 8001-35-2)</li> <li>• thiolane 1,1 dioxide (sulfolane, CAS 126-33-1)</li> </ul> <p>                     The Permittees shall ensure the samples are properly prepared, preserved, and transported to an independent environmental laboratory accredited under the National Environmental Laboratory Accreditation Program, and analyze the samples in accordance with the methods authorized in this Discharge Permit. The Permittees shall submit the laboratory analytical data results, including the QA/QC summary and Chain of Custody, to NMED in the subsequent quarterly monitoring report.                 </p> <p>                     [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]                 </p>



#	Terms and Conditions
42.	<p>During the third year of this Discharge Permit, the Permittees shall collect a composite wastewater sample from each evaporative impoundment located at the SMEB to characterize the wastewater in each impoundment. Each composite sample shall be analyzed for the following toxic pollutants:</p> <ul style="list-style-type: none"> <li>• acrolein (CAS 107-02-8)</li> <li>• acrylonitrile (CAS 107-13-1)</li> <li>• aldrin (CAS 309-00-2)</li> <li>• benzidine (CAS 92-87-5)</li> <li>• chlordane (CAS 57-74-9)</li> <li>• chlorinated benzenes             <ul style="list-style-type: none"> <li>monochlorobenzene (CAS 108-90-7)</li> <li>hexachlorobenzene (CAS 118-74-1)</li> <li>pentachlorobenzene (CAS 608-93-5)</li> <li>1,2,4,5-tetrachlorobenzene (CAS 95-94-3)</li> </ul> </li> <li>• chlorinated phenols             <ul style="list-style-type: none"> <li>2,4-dichlorophenol (CAS 120-83-2)</li> <li>2,4,5-trichlorophenol (CAS 95-95-4)</li> <li>2,4,6-trichlorophenol (CAS 88-06-2)</li> </ul> </li> <li>• chloroalkyl ethers             <ul style="list-style-type: none"> <li>bis (2-chloroethyl) ether CAS 111-44-4)</li> <li>bis (2-chloroisopropyl) ether (CAS 108-60-1)</li> <li>bis (chloromethyl) ether (CAS 542-88-1)</li> </ul> </li> <li>• DDT (CAS 50-29-3)</li> <li>• dichlorobenzidine (CAS 91-94-1)</li> <li>• dichloropropenes (CAS 542-75-6)</li> <li>• dieldrin (CAS 60-57-1)</li> <li>• diphenylhydrazine (CAS 122-66-7)</li> <li>• endosulfan (CAS 115-29-8)</li> <li>• endrin (CAS 72-20-8)</li> <li>• halomethanes             <ul style="list-style-type: none"> <li>bromodichloromethane (CAS-75-27-4)</li> <li>bromomethane (CAS 74-83-9)</li> </ul> </li> <li>• hexachlorocyclopentadiene (CAS 77-47-4)</li> <li>• hexachloroethane (CAS 67-72-1)</li> <li>• isophorone (CAS 78-59-1)</li> <li>• methyl tertiary-butyl-ether (MTBE, CAS 1634-04-4)</li> <li>• nitroaromatics and high explosives (HE)             <ul style="list-style-type: none"> <li>nitrobenzene (CAS 98-85-3)</li> <li>2,4-dinitrotoluene (2,4-DNT, CAS-121-14-2)</li> <li>2,6-dinitrotoluene (2,6-DNT, CAS 606-20-2)</li> <li>octrahydro-1,3,5,7-tetranitro-1,3,5,7 tetrazocine (HMX, CAS 2691-41-0)</li> <li>hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX, CAS 121-82-4)</li> <li>2,4,6-trinitrotoluene (TNT, CAS 118-96-7)</li> <li>2,4-dinitro-o-cresol (CAS 534-52-1)</li> <li>dinitrophenols (CAS 51-28-5)</li> </ul> </li> <li>• nitrosamines             <ul style="list-style-type: none"> <li>N-nitrosodiethylamine (CAS 55-18-5)</li> <li>N-nitrosodimethylamine (CAS 62-75-9)</li> <li>N-nitrosodibutylamine (CAS 924-16-3)</li> <li>N-nitrosodiphenylamine (CAS 86-30-6)</li> <li>N-nitrosopyrrolidine (CAS 930-55-2)</li> </ul> </li> <li>• perchlorate (CAS 14797-73-0)</li> <li>• phthalate esters             <ul style="list-style-type: none"> <li>dibutyl phthalate (CAS 84-74-2)</li> <li>di-2-ethylhexyl phthalate (DEHP, CAS 117-81-7)</li> <li>diethyl phthalate (DEP, CAS 84-66-2)</li> <li>dimethyl phthalate (DMP, CAS 131-11-3)</li> </ul> </li> </ul>

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	<p>chloromethane (CAS 74-87-3)                      dichlorodifluoromethane (fluorocarbon, CAS 75-71-8)                      dichloromethane (methylene chloride, CAS 75-09-2)                      tribromomethane (bromoform, (CAS 75-25-2)                      trichlorofluoromethane (fluorocarabon-11, CAS 75-69-4)                      heptachlor (CAS 76-44-8)                      hexachlorobutadiene (CAS 87-68-3)</p> <ul style="list-style-type: none"> <li>• hexachlorocyclohexane (HCH)                             <ul style="list-style-type: none"> <li>alpha-HCH (CAS 319-84-6)</li> <li>beta-HCH (CAS 319-85-7)</li> <li>gamma-HCH (CAS 58-89-9)</li> <li>technical HCH (CAS 608-73-1)</li> </ul> </li> <li>• polynuclear aromatic hydrocarbons (PAHs)                             <ul style="list-style-type: none"> <li>anthracene (CAS 120-12-7)</li> <li>3,4-benzofluoranthene (CAS 205-99-2)</li> <li>benzo(k)fluoranthene (CAS 207-08-9)</li> <li>fluoranthene (CAS 206-44-0)</li> <li>fluorene (CAS 86-73-7)</li> <li>naphthalene (CAS 91-20-3)</li> <li>1-methylnaphthalene (CAS 90-12-0)</li> <li>2-methylnaphthalene (CAS 91-57-6)</li> <li>phenanthrene (CAS 85-01-8)</li> <li>pyrene (CAS 129-00-0)</li> </ul> </li> <li>• prometon (CAS 1610-18-0)</li> <li>• toxaphene (CAS 8001-35-2)</li> <li>• thiolane 1,1 dioxide (sulfolane, CAS 126-33-1)</li> </ul> <p>The Permittees shall ensure the samples are properly prepared, preserved, and transported to an independent environmental laboratory accredited under the National Environmental Laboratory Accreditation Program, and analyze the samples in accordance with the methods authorized in this Discharge Permit. The Permittees shall submit the laboratory analytical data results, including the QA/QC summary and Chain of Custody, to NMED in the subsequent quarterly monitoring report.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>
43.	<p>The Permittees shall conduct monthly inspections of leak detection systems (collection sumps) for each double synthetically lined evaporation impoundment. If the Permittees detects liquid in any collection sump above the 4-inch drain line, the Permittees shall collect a sample and analyze it for TDS within 30 days of discovery.</p> <p>The Permittees shall keep and submit inspections records and findings, repairs made, and analytical reports to NMED in the quarterly monitoring reports.</p> <p>In the event that liquid present in the collection sump(s) are consistent with the contents of the associated evaporation impoundment and/or that standing liquid in any of the collection sumps is at an elevation above the four-inch drain line, the Permittees shall follow the contingency plan set forth in this Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC, 20.6.2.3109 NMAC]</p>

**D. CONTINGENCY PLAN**

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44.	<p>In the event that groundwater monitoring downgradient of NPDES Outfall 001 indicates that groundwater exceeds a standard identified in Section 20.6.2.3103 NMAC or a toxic pollutant limit (defined in Subsection 20.6.2.7 (T)(2) NMAC), the Permittees shall collect a confirmatory sample from the monitoring well within 15 days of receipt of the initial sampling results to confirm the initial sampling results.</p> <p>Within 60 days of confirmation of groundwater contamination, the Permittees shall submit to NMED a Corrective Action Plan (CAP) that proposes, at a minimum, contaminant source control measures and an implementation schedule. The Permittees shall implement the CAP as approved by NMED.</p> <p>Once this groundwater exceedance response condition is invoked whether during the term of this Discharge Permit or after the term of this Discharge Permit and prior to the completion of the Discharge Permit closure plan requirements, this condition shall apply until the Permittees have fulfilled the requirements of this condition and groundwater monitoring confirms for a minimum of eight (8) consecutive quarterly samples that groundwater does not exceed the standards of Section 20.6.2.3103 NMAC or a toxic pollutant limit in Document 2.</p> <p>Violation of the groundwater standard/limit beyond 180 days after the confirmation of groundwater contamination may cause NMED to require the Permittees to abate water pollution consistent with the requirements and provisions of Section 20.6.2.4101, Section 20.6.2.4103, Subsections C and E of 20.6.2.4106, Section 20.6.2.4107, Section 20.6.2.4108, and Section 20.6.2.4112 NMAC.</p> <p>This Contingency Condition does not apply to an exceedance of groundwater standard or the presence of a toxic pollutant in groundwater unrelated to a discharge associated with the Facilities defined in this Discharge Permit, to the extent that abatement of such groundwater contamination is occurring, or will occur, pursuant to and in accordance with the June 2016 Compliance Order (Consent Order) agreed to by NMED and the DOE.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]</p>
45.	<p>In the event that groundwater exceeds a groundwater protection standard identified in Section 20.6.2.3103 NMAC or a toxic pollutant limit (defined in 20.6.2.7 (T)(2) NMAC) associated with the Facilities during the term of this Discharge Permit, upon closure of the Facility(s) or during the implementation of post-closure requirements, the Permittees shall submit to NMED a CAP that proposes, at a minimum, contaminant</p>

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	<p>source control measures and an implementation schedule. The Permittees shall implement the CAP as approved by NMED.</p> <p>The NMED may require the Permittees to abate water pollution consistent with the requirements and provisions of Section 20.6.2.4101, Section 20.6.2.4103, Subsections C and E of 20.6.2.4106, Section 20.6.2.4107, Section 20.6.2.4108, and Section 20.6.2.4112 NMAC.</p> <p>This Contingency Condition does not apply to an exceedance of a groundwater standard or the presence of a toxic pollutant in groundwater unrelated to a discharge associated with the Facilities defined in this Discharge Permit, to the extent that abatement of such groundwater contamination is occurring, or will occur, pursuant to and in accordance with the June 2016 Compliance Order (Consent Order) agreed to by NMED and the DOE.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]</p>
46.	<p>In the event that analytical results of a treated wastewater sample indicate an exceedance of the total nitrogen discharge limit set in this Discharge Permit, the Permittees shall collect and submit for analysis a second sample within 48 hours of the receipt of the initial sampling results. In the event the second sample results indicate an exceedance of the discharge limit, the Permittees shall implement the following contingencies.</p> <ol style="list-style-type: none"><li>a) Within 7 days of the second sample analysis date indicating exceedance of the discharge limit, the Permittee shall:<ol style="list-style-type: none"><li>i. notify NMED that the Permittees are implementing the Contingency Plan; and</li><li>ii. submit a copy of the first and second analytical results indicating an exceedance to NMED.</li></ol></li><li>b) The Permittees shall increase the frequency of total nitrogen wastewater sampling and analysis of treated wastewater to once per month.</li><li>c) The Permittees shall examine the operation and maintenance log, required by the Record Keeping conditions of this Discharge Permit, for improper operational procedures.</li><li>d) The Permittees shall conduct a physical inspection of the treatment system to detect abnormalities. The Permittees shall correct any abnormalities discovered. The Permittees shall submit a report to NMED detailing the corrections within 30 days of correction.</li><li>e) In the event that any analytical results from monthly wastewater sampling indicate an exceedance of the total nitrogen discharge limit, the Permittees shall submit a CAP to NMED for approval proposing to modify operational procedures and/or upgrade the treatment process to achieve the total nitrogen limit. The Permittees shall submit the CAP including a schedule for completion of corrective actions and</li></ol>

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	<p>within 90 days of receipt of the analytical results of the second sample indicating that the discharge limit is continuing to be exceeded. The Permittees shall initiate implementation of the CAP following approval by NMED.</p> <p>When analytical results from three consecutive months of wastewater sampling do not exceed the discharge limit, the Permittees may request NMED to authorize a return to a quarterly monitoring frequency.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
47.	<p>In the event that analytical results of a wastewater sample from the discharge(s) at the SWWS and NPDES Outfalls 001, 13S, and 03A027 indicate an exceedance of any standard for groundwater listed in Attachment 1 in this Discharge Permit, the Permittees shall collect and submit for analysis a second sample within 15 days of the receipt of the initial sampling results. In the event the second sample results indicate an exceedance of any standard for groundwater listed in Attachment 1, the Permittees shall implement the following contingencies.</p> <ol style="list-style-type: none"><li>a) Within 7 days of the second sample analysis date indicating exceedance of the discharge limit, the Permittee shall:<ol style="list-style-type: none"><li>i. notify NMED that the Permittees are implementing a Contingency Plan; and</li><li>ii. submit a copy of the first and second analytical results indicating an exceedance to NMED.</li></ol></li><li>b) The Permittees shall increase the frequency of total wastewater sampling and analysis for each contaminant that exceeds the standards listed in Attachment 1 to once per quarter.</li><li>c) The Permittees shall investigate all suspected sources that could be contributing elevated levels of the contaminant(s). The investigation shall include an evaluation of LANL's internal waste acceptance criteria for SWWS.</li><li>d) The Permittees shall sample the downgradient monitoring well SCA-3/SCI-1 for NPDES Outfalls 001 and 03A027 and/or a downgradient monitoring well approved by NMED for NPDES Outfall 13S and analyze the samples for the exceeded contaminant(s) on an ongoing quarterly basis. The analytical results from the monitoring well(s) for the exceeded contaminant(s) shall be submitted to NMED with the quarterly monitoring reports.</li><li>e) In the event that any analytical results from sampling of monitoring well SCA-3/SCI-1 and/or an NMED approved downgradient monitoring well indicate an exceedance of a contaminant(s), which has been determined to be potentially due to discharges authorized by this Discharge Permit, the Permittees shall submit a CAP to NMED as required by Condition #44.</li></ol>

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	<p>When analytical results from two consecutive quarters of wastewater sampling do not exceed any of the standards for groundwater listed in Attachment 1, the Permittees may request NMED to authorize a return to the permitted sampling frequency for the contaminant(s) and to cease sampling for the contaminant(s) in monitoring well SCA-3/SCI-1 and/or an NMED approved downgradient monitoring well.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
48.	<p>In the event that analytical results of a wastewater sample from the discharge(s) at the SWWS and NPDES Outfalls 001, 13S, and 03A027 indicate an exceedance of any tap water screening levels listed in Attachment 2 in this Discharge Permit, the Permittees shall collect and submit for analysis a second sample within 15 days of the receipt of the initial sampling results. In the event the second sample results indicate an exceedance of any tap water screening levels listed in Attachment 2, the Permittees shall implement the following contingencies.</p> <ol style="list-style-type: none"> <li>a) Within 7 days of the second sample analysis date indicating exceedance of the discharge limit, the Permittee shall:                         <ol style="list-style-type: none"> <li>i. notify NMED that the Permittees are implementing a Contingency Plan; and</li> <li>ii. submit a copy of the first and second analytical results indicating an exceedance to NMED.</li> </ol> </li> <li>b) The Permittees shall increase the frequency of total wastewater sampling and analysis for each contaminant that exceeds the screening levels listed in Attachment 2 to once per quarter.</li> <li>c) The Permittees shall investigate all suspected sources that could be contributing elevated levels of the contaminant(s). The investigation shall include an evaluation of LANL's internal waste acceptance criteria for SWWS.</li> <li>d) The Permittees shall sample the downgradient monitoring well SCA-3/SCI-1 for NPDES Outfalls 001 and 03A027 and/or a downgradient monitoring well approved by NMED for NPDES Outfall 13S and analyze the samples for the exceeded contaminant(s) on an ongoing quarterly basis. The analytical results from the monitoring well(s) for the exceeded contaminant(s) shall be submitted to NMED with the quarterly monitoring reports.</li> <li>e) In the event that any analytical results from sampling of monitoring well SCA-3/SCI-1 and/or an NMED approved downgradient monitoring well indicate an exceedance of a contaminant(s), which has been determined to be potentially due to discharges authorized by this Discharge Permit, the Permittees shall submit a CAP to NMED as required by Condition #44.</li> </ol> <p>When analytical results from two consecutive quarters of wastewater sampling do not exceed any of the tap water screening levels listed in Attachment 2, the Permittees may request NMED to authorize a return to the permitted sampling frequency for the</p>

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	<p>contaminant(s) and to cease sampling for the contaminant(s) in monitoring well SCA-3/SCI-1 and/or an NMED approved downgradient monitoring well.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
49.	<p>In the event that standing liquid is present at an elevation above the four-inch drain line in any of the double synthetically lined evaporative impoundment collection sumps at the SMEB, the Permittees shall initiate pumping of the collection sump(s). The volume of liquid removed from the collection sump shall be measured and then the liquid shall be discharged to the associate evaporative impoundment. If more than 80 gallons of liquid can be removed from any single leak collection sump within a 24-hour period, the Permittees shall implement the following contingency plan:</p> <ul style="list-style-type: none"> <li>a) Within 24 hours of discovering the standing liquid, the Permittees shall orally notify NMED that the contingency plan is being implemented.</li> <li>b) If analytical results show the presence of elevated levels of TDS in the liquid from the collection sump(s) consistent with the concentration of TDS in the impoundment, the primary synthetic liner of the impoundment will be assumed to be compromised and the Permittees shall submit a CAP for inspection and repair or replacement of the primary synthetic liner. The Permittees shall submit the CAP to NMED for approval within 30 days of receipt of the analytical results indicating that the primary liner has been compromised. The CAP shall include a schedule for completion.</li> </ul> <p>The Permittees shall initiate implementation of the CAP following approval by NMED.</p> <p>If analytical results do not show the presence of elevated levels of TDS in the liquid from the collection sump, the Permittees shall continue to remove liquid from the sump when it exceeds the elevation of the four-inch drain line and monitor the volume of liquid that is removed from the sump. The Permittees shall consult with NMED regarding additional appropriate corrective actions.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
50.	<p>In the event that an inspection of the SWWS and the SMEB reveals significant damage has occurred or is likely to affect the structural integrity of an impoundment or liner or their ability to contain contaminants, the Permittees shall propose the repair or replacement by submitting a CAP to NMED for approval. The Permittees shall submit the CAP to NMED within 30 days after discovery of the damage or following notification from NMED that significant damage is evident. The Permittees shall ensure the CAP includes a schedule for completion of corrective actions. The Permittees shall initiate implementation of the CAP following approval by NMED.</p>

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	[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
51.	<p>In the event that an impoundment cannot preserve a minimum of two feet of freeboard at the SWWS impoundment(s) or a minimum of one foot of freeboard at an SMEB impoundment, the Permittees shall take actions to restore the required freeboard as authorized by this Discharge Permit and all applicable local, state, and federal regulations.</p> <p>In the event that the required freeboard cannot be restored within a period of 72 hours following discovery, the Permittees shall propose actions to restore the required freeboard by submitting a short-term CAP to NMED for approval. Examples of short-term corrective actions include the pumping and hauling of excess wastewater from the impoundment or reducing the volume of wastewater discharged to the impoundment. The Permittees shall ensure the CAP includes a schedule for completion of corrective actions. The Permittees shall submit the CAP within 15 days following the date the Permittees or the NMED discover the exceedance. The Permittees shall implement the CAP following NMED approval.</p> <p>In the event that the short-term corrective actions fail to restore the required freeboard, the Permittees shall submit to NMED a proposal for permanent corrective actions in a long-term CAP. The Permittees shall submit the long-term CAP within 90 days following failure of the short-term CAP. Examples corrective actions include the installation of an additional storage impoundment or a significant and permanent reduction in the volume of wastewater discharged to the impoundment. The Permittees shall ensure the long-term CAP includes a schedule for completion of corrective actions. The Permittees shall implement the CAP following NMED approval.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>
52.	<p>In the event that a release occurs that is not authorized under this Discharge Permit (commonly known as a “spill”), the Permittees shall take measures to mitigate damage from the unauthorized discharge and initiate the notifications and corrective actions required in Section 20.6.2.1203 NMAC and summarized below.</p> <p>Within <u>24 hours</u> following discovery of the unauthorized discharge, the Permittees shall verbally notify NMED and provide the following information.</p> <ol style="list-style-type: none"> <li>a) The name, address, and telephone number of the person or persons in charge of the Facility, as well as of the owner and/or operator of the Facility.</li> <li>b) The name and address of the Facility.</li> <li>c) The date, time, location, and duration of the unauthorized discharge.</li> </ol>



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	<p>d) The source and cause of unauthorized discharge.</p> <p>e) A description of the unauthorized discharge, including its estimated chemical composition.</p> <p>f) The estimated volume of the unauthorized discharge.</p> <p>g) Any actions taken to mitigate immediate damage from the unauthorized discharge.</p> <p>Within <u>one week</u> following discovery of the unauthorized discharge, the Permittees shall submit written notification to NMED providing the information listed above and any pertinent updates.</p> <p>Within <u>15 days</u> following discovery of the unauthorized discharge, the Permittees shall submit a CAP to NMED describing any corrective actions previously taken and corrective actions to be taken relative to the unauthorized discharge. The CAP shall include the following information.</p> <p>a) A description of proposed actions to mitigate damage from the unauthorized discharge.</p> <p>b) A description of proposed actions to prevent future unauthorized discharges of this nature.</p> <p>c) A schedule for completion of proposed actions.</p> <p>In the event that the unauthorized discharge causes or may with reasonable probability cause water pollution in excess of the standards and requirements of Section 20.6.2.4103 NMAC, and the water pollution will not be abated within 180 days after notice is required to be given pursuant to Paragraph (1) of Subsection A of 20.6.2.1203 NMAC, NMED may require the Permittees to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC.</p> <p>The Permittees shall not construe anything in this condition as relieving them of the obligation to comply with all requirements of Section 20.6.2.1203 NMAC.</p> <p>[20.6.2.1203 NMAC]</p>
53.	<p>In the event that NMED or the Permittees identifies any failures of the discharge plan, i.e., the application, or this Discharge Permit not specifically noted herein, NMED may require the Permittees to submit a CAP and a schedule for completion of corrective actions to address the failure(s). Additionally, NMED may require a discharge permit modification to achieve compliance with 20.6.2 NMAC.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]</p>

**E. CLOSURE PLAN**

***Financial Assurance associated with Closure Requirements***

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54.	<p>Within 180 days following the issuance date of this Discharge Permit (<b>by DATE</b>), the Permittees shall submit to NMED a Closure Plan. The Closure Plan shall include the following.</p> <ul style="list-style-type: none"> <li>a) A detailed description of how each discharge unit and system at the Facility will be closed.</li> <li>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.</li> <li>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 groundwater; and to prevent water contaminants from posing a threat to human health.</li> <li>d) 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.</li> <li>e) 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.</li> <li>f) A groundwater monitoring plan to detect water contaminants that might move directly or indirectly into groundwater after closure, which shall provide for, at a minimum, eight consecutive quarters of groundwater monitoring after achieving the standards of 20.6.2.3103 NMAC.</li> <li>g) 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.</li> <li>h) A detailed schedule for the closure and removal of each discharge unit and system, which lists each proposed action and the estimated time to complete it.</li> </ul> <p>[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A]</p>
55.	<p><b>FINANCIAL RESPONSIBILITY</b> - The Permittees shall request sufficient funding such that the costs of closure and post-closure required under this Discharge Permit and Closure Plan are adequately funded as necessary to ensure the timely completion of required activities in all applicable budget DOE/NNSA requests. For purposes of this condition,</p>

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	<p>financial responsibility requirements apply to all closure and post-closure requirements under the Closure Plan required under Condition 54. Nothing in this condition shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. § 1341.</p> <p>The following requirements will provide a basis for DOE/NNSA to develop appropriate and timely annual budgetary requests for adequate federal funding.</p> <ul style="list-style-type: none"> <li>a) All closure and post-closure requirements, including groundwater monitoring under this Discharge Permit shall be timely and subject to enforceable milestones (Conditions 54).</li> <li>b) DOE/NNSA shall evaluate compliance with this Discharge Permit as part of the annual process to develop the President’s Budget Request. Budget requests for DOE/NNSA must be timely submitted to seek adequate funding to execute closure and post-closure requirements under this Discharge Permit. The Permittee shall notify NMED regarding these activities through closure and post-closure quarterly status reports (Condition 54).</li> <li>c) Annually, within fourteen business days after the President submits the Fiscal Year Budget Request to Congress, DOE/NNSA shall provide to NMED the relevant portion of the annual Budget Request along with detailed information regarding how DOE/NNSA calculated the request, e.g., the cost estimate, that is part of the public record. DOE/NNSA will provide an opportunity for NMED to discuss the budget request with DOE/NNSA upon request by NMED and through closure and post-closure quarterly status reports (Condition 54).</li> </ul> <p>The Permittee shall submit a cost estimate to NMED at least 120 days prior to permanent cessation of operations for a treatment/storage unit(s) or system(s). This cost estimate shall include all activities related to closure of the discharge unit(s) or system(s) outlined in the Closure Plan. This cost estimate shall also include costs associated with the balance of facility systems for the treatment/storage unit(s) or system(s) not closing in the foreseeable future as identified in Closure Plan.</p> <p>[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A(11) NMAC]</p>
56.	<p><b>CLOSURE SCHEDULE</b> - The Permittees shall notify NMED at least 120 days prior to initiation of closure activities of any treatment/storage unit or system under this Discharge Permit. The closure period shall commence upon the date of permanent cessation of wastewater management at a unit or system and shall end upon NMED’s approval of a final closure. Once closure activities commence, the Permittees shall provide NMED quarterly progress reports describing closure activities and Congressional budgetary requests for each quarter in accordance with the time periods required for monitoring reports in Condition 22.</p>

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	[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A]
57.	<p><b>CLOSURE PLAN REVIEW AND CHANGES</b> - A Closure Plan is required as an Attachment to this Discharge Permit. NMED will review any proposed changes to the Closure Plan for approval. The Closure Plan includes the following.</p> <ul style="list-style-type: none"><li>a) A detailed description of how each treatment/storage unit and system at the Facility will be closed.</li><li>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.</li><li>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 groundwater; and to prevent water contaminants from posing a threat to human health.</li><li>d) 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.</li><li>e) 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.</li><li>f) A groundwater monitoring plan to detect water contaminants that might move directly or indirectly into groundwater after closure, which shall provide for, at a minimum, eight consecutive quarters of groundwater monitoring after achieving the standards of 20.6.2.3103 NMAC.</li><li>g) 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 applicable local, state, and federal laws and regulations.</li><li>h) A detailed description of the methods that will be used to remove, transport, and dispose of all wastes generated during closure in compliance with all applicable local, state, and federal laws and regulations.</li><li>i) 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.</li></ul> <p>The Permittees shall review the Closure Plan and Closure Schedule every five (5) years with each Permit renewal to determine if any changes are needed. For any changes that may impact closure of a unit and/or system under the Discharge Permit identified at any</p>

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	<p>time, or during the five (5) year review (except changes regarding Condition 54.h), the Permittees shall submit to NMED for approval a written notification and an amended Closure Plan. The Permittees shall: (1) public notice any change to the Closure Plan for public comment for a period of ninety (90) days after submittal of a modification request; and (2) provide NMED annual updates describing proposed or approved Closure Plan and/or schedule changes.</p> <p>[NMSA 1978, § 74-6-5.D, 20.6.2.3107.A]</p>

**Permanent Facility Closure Conditions**

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58.	<p>The Permittees shall perform the following closure measures in the event the SWWS and or the SERF (Facilities) is proposed to be permanently closed.</p> <p>Within <u>90 days</u> of ceasing to discharge to the Facility(s), the Permittees shall complete the following closure measures.</p> <ul style="list-style-type: none"> <li>a) Plug the line(s) leading to the Facility(s) so that a discharge can no longer occur.</li> <li>b) Evaporate wastewater in the Facility(s) components and storage impoundment(s), or drain and dispose of in accordance with all local, state, and federal regulations.</li> <li>c) Contain, transport, and dispose of solids removed from the Facility(s) in accordance with all local, state, and federal regulations, including 40 CFR Part 503. The Permittees shall maintain a record of all solids transported for off-site disposal.</li> </ul> <p>Within <u>180 days</u> of ceasing to discharge to the Facility(s), the Permittees shall complete the following closure measures.</p> <ul style="list-style-type: none"> <li>a) Remove all lines leading to and from the Facility(s), or permanently plug and abandon them in place.</li> <li>b) Remove or demolish all Facility(s) components, and re-grade the area with suitable fill to blend with surface topography, promote positive drainage, and prevent ponding.</li> <li>c) Perforate or remove the storage impoundment liner(s); fill the impoundment(s) with suitable fill; and re-grade the impoundment site(s) to blend with surface topography, promote positive drainage, and prevent ponding.</li> <li>d) Remove or demolish the SWWS sludge drying beds, and re-grade the area with suitable fill to blend with surface topography, promote positive drainage, and prevent ponding.</li> </ul>

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	<p>The Permittees shall continue groundwater monitoring until the Permittees meets the requirements of this condition and groundwater monitoring confirms for a minimum of eight consecutive quarterly groundwater sampling events that groundwater does not exceed the standards of Section 20.6.2.3103 NMAC. This period is referred to as “post-closure.”</p> <p>If at any time monitoring results show an exceedance of a groundwater quality standard in Section 20.6.2.3103 NMAC, the Permittees shall implement the Contingency Plan required by this Discharge Permit.</p> <p>Following notification from NMED that the Permittees may cease post-closure monitoring.</p> <p>When the Permittees have met all closure requirements and verified appropriate actions with date stamped photographic evidence or an associated NMED inspection, the Permittees may submit to NMED a written request, including photographic evidence, for the removal of SWWS and/or SERF from the Discharge Permit or termination of the Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection D of 20.6.2.4103 NMAC, 40 CFR Part 503]</p>
59.	<p>The Permittees shall perform the following closure measures in the event the SMEB, or a double synthetically lined impoundment at the SMEB, is proposed to be permanently closed.</p> <p>Within <u>60 days</u> of ceasing to discharge to the impoundment(s), the Permittees shall plug the impoundment influent lines so that a discharge can no longer occur.</p> <p>Within <u>90 days</u> of ceasing to discharge to the impoundment(s), the Permittees shall evaporate or drain all wastewater from the impoundment and disposed of it in accordance with all local, state, and federal regulations.</p> <p>Within <u>180 days</u> of ceasing to discharge to the impoundment(s), the Permittees shall submit a solids removal and disposal plan to NMED for approval. The Permittees shall implement the plan within 30 days following approval by NMED. The solids removal and disposal plan shall include the following information.</p> <ol style="list-style-type: none"> <li>a) The estimated volume and dry weight of solids planned for removal and disposal, including measurements and calculations.</li> <li>b) Analytical results for samples of the solids taken from the impoundment for all constituents listed in Attachment 1 of this Discharge Permit (reported in mg/kg, dry weight basis).</li> </ol>

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	<p>c) The method of solids <i>removal</i> from the impoundment(s).</p> <p>d) The method of <i>disposal</i> for all solids removed from the impoundment(s). The method shall comply with all local, state, and federal regulations, including 40 CFR Part 503. <i>Note: A proposal that includes the surface disposal of solids may be subject to Groundwater Discharge Permitting requirements pursuant to 20.6.2.3104 NMAC that are separate from the requirements of this Discharge Permit.</i></p> <p>e) A schedule for completion of solids removal and disposal not to exceed two years from the date discharge to the impoundment(s) ceased.</p> <p>f) Maintain a record of solids transported for off-site disposal, including the volume of solids transported and the disposal location.</p> <p>Within <u>one year</u> following completion of solids removal and disposal, the Permittees shall complete the following closure measures.</p> <p>a) Remove all lines leading to and from the impoundment(s), or permanently plug and abandon the lines in place.</p> <p>b) Remove and dispose of the impoundment liners at a solid waste facility. If there is evidence of contaminated soil below the liners, assess the impact, report that assessment to NMED, and mitigate the impacts following NMED approval.</p> <p>c) Fill the impoundment(s) with suitable fill.</p> <p>d) Re-grade the impoundment site(s) and the locations of ancillary equipment, e.g., influent piping, to blend with surface topography, promote positive drainage, and prevent ponding.</p> <p>When the Permittees have met all closure and verified appropriate actions with date stamped photographic evidence or an associated NMED inspection, the Permittees may submit to NMED a written request, including photographic evidence, for removal of the double synthetically lined impoundment(s) or SMEB from the Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection D of 20.6.2.4103 NMAC, 40 CFR Part 503]</p>
60.	<p>In the event that the discharge or transfer of treated wastewater or reclaimed domestic wastewater from SWWS and SERF to any of the locations authorized under this Discharge Permit (e.g., NPEDS Outfalls 001, 13S, or 03A027, SCC Cooling Towers, SWWS reuse area, and Power Plant Operations/Cooling Tower) is proposed to permanently cease, the Permittees shall perform the following closure measure:</p> <p>Within <u>90 days</u> of ceasing the discharge and/or transfer to the closed location(s):</p> <p>Plug or remove the line(s) leading to the closed location(s) so that a discharge can no longer occur.</p>

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	When all closure requirements have been met, the Permittees may submit a written request for the removal of the proposed location(s) from this Discharge Permit to NMED.  [Subsection A of 20.6.2.3107 NMAC, Subsection D of 20.6.2.4103 NMAC, 40 CFR Part 503]

**F. GENERAL TERMS AND CONDITIONS**

#	Terms and Conditions
61.	<p>RECORD KEEPING - The Permittees shall maintain a written record of the following:</p> <ul style="list-style-type: none"> <li>• Information and data used to complete the application for this Discharge Permit;</li> <li>• Information, data, and documents demonstrating completion of closure activities;</li> <li>• Any releases (commonly known as “spills”) not authorized under this Discharge Permit and reports submitted pursuant to 20.6.2.1203 NMAC;</li> <li>• The operation, maintenance, and repair of all facilities/equipment used to treat, store, or dispose of wastewater;</li> <li>• Facility record drawings (plans and specifications) showing the actual construction of the Facility and bear the seal and signature of a licensed New Mexico or DOE professional engineer;</li> <li>• Copies of logs, inspection reports, and monitoring reports completed and/or submitted to NMED pursuant to this Discharge Permit;</li> <li>• The volume of wastewater or other wastes discharged pursuant to this Discharge Permit;</li> <li>• Groundwater quality and wastewater quality data collected pursuant to this Discharge Permit;</li> <li>• Copies of construction records (well logs) for all sampled groundwater monitoring wells pursuant to this Discharge Permit;</li> <li>• The maintenance, repair, replacement, or calibration of any monitoring equipment or flow measurement devices required by this Discharge Permit; and</li> <li>• Data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit, including the following:                         <ul style="list-style-type: none"> <li>○ the dates, locations, and times of sampling or field measurements;</li> <li>○ the name and job title of the individuals who performed each sample collection or field measurement;</li> <li>○ the sample analysis date of each sample;</li> <li>○ the name and address of the laboratory, and the name of the signatory authority for the laboratory analysis;</li> <li>○ the analytical technique or method used to analyze each sample or collect each field measurement;</li> <li>○ the results of each analysis or field measurement, including raw data;</li> </ul> </li> </ul>



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	<ul style="list-style-type: none"> <li>○ the results of any split, spiked, duplicate, or repeat sample; and</li> <li>○ a copy of the laboratory analysis chain-of-custody as well as a description of the quality assurance and quality control procedures used.</li> </ul> <p>The Permittees shall maintain the written record at a location accessible to NMED during a Facility(s) inspection for the lifetime of the Discharge Permit. The Permittees shall make the record available to the department upon request.</p> <p>[Subsections A and D of 20.6.2.3107 NMAC]</p>
62.	<p><b>SUBMITTALS</b> - The Permittees shall submit both a paper copy and an electronic copy of all notification and reporting documents required by this Discharge Permit, e.g., monitoring reports. The Permittees shall submit paper and electronic documents to the NMED Permit Contact identified on the Permit cover page.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>
63.	<p><b>INSPECTION and ENTRY</b> - The Permittees shall allow NMED to inspect the Facility(s) and its operations that 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 any maintained records required by this Discharge Permit, the regulations of the federal government, or the WQCC are located.</p> <p>The Permittees shall allow NMED to have access to and reproduce for their use any copy of the records, and to perform assessments, sampling, or monitoring during an inspection for the purpose of evaluating compliance with this Discharge Permit and the WQCC regulations.</p> <p>No person shall construe anything in this Discharge Permit as limiting in any way the inspection and entry authority of NMED under the WQA, the WQCC Regulations, or any other local, state, or federal regulations.</p> <p>[Subsection D of 20.6.2.3107 NMAC, NMSA 1978, §§ 74-6-9.B and 74-6-9.E]</p>
64.	<p><b>DUTY to PROVIDE INFORMATION</b> - The Permittees shall, upon NMED’s request, allow for NMED’s inspection/duplication of records required by this Discharge Permit and/or furnish to NMED copies of such records.</p> <p>[Subsection D of 20.6.2.3107 NMAC]</p>

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65.	<p>MODIFICATIONS and/or AMENDMENTS - In the event the Permittees proposes a change to the Facilities or the Facilities' discharge that would result in a change in the volume discharged; the location of the discharge(s); or in the amount or character of water contaminants received, treated, or discharged by the Facilities, the Permittees shall notify NMED prior to implementing such changes. The Permittees shall obtain NMED's approval (which may require modification of this Discharge Permit) prior to implementing such changes.</p> <p>[Subsection C of 20.6.2.3107 NMAC, Subsections E and G of 20.6.2.3109 NMAC]</p>
66.	<p>PLANS and SPECIFICATIONS - In the event the Permittees proposes to construct a wastewater system or change a process unit of an existing system such that the quantity or quality of the discharge will change substantially from that authorized by this Discharge Permit, the Permittees shall submit construction plans and specifications of the proposed system or process unit to NMED for approval prior to the commencement of construction.</p> <p>In the event the Permittees implements changes to the wastewater system authorized by this Discharge Permit that result in only a minor effect on the character of the discharge, the Permittees shall report such changes (including the submission of record drawings where applicable) to NMED prior to implementation.</p> <p>[Subsections A and C of 20.6.2.1202 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]</p>
67.	<p>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 facilities, 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.</p> <p>[20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10 and 74-6-10.1]</p>

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68.	<p>CRIMINAL PENALTIES - No person shall:</p> <ul style="list-style-type: none"> <li>• Make any false material statement, representation, certification, or omission of material fact in an application, record, report, plan, or other document filed, submitted, or maintained under the WQA;</li> <li>• Falsify, tamper with, or render inaccurate any monitoring device, method, or record maintained under the WQA; or</li> <li>• Fail to monitor, sample, or report as required by a permit issued pursuant to a state or federal law or regulation.</li> </ul> <p>Any person who knowingly violates or knowingly causes or allows another person to violate the requirements of this condition is guilty of a fourth-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who is convicted of a second or subsequent violation of the requirements of this condition is 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/she is creating a substantial danger of death or serious bodily injury to any other person is guilty of a second degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15.</p> <p>[20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10.2.A through 74-6-10.2.F]</p>
69.	<p>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 any other applicable federal, state, and/or local laws, regulations, zoning requirements, nuisance ordinances, permits, or orders.</p> <p>[NMSA 1978, § 74-6-5.L]</p>
70.	<p>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 within thirty days of the receipt of postal notice of this Discharge Permit and shall include a statement of the issues raised and the relief sought. Unless the Permittees files a timely petition for review, the decision of NMED shall be final and not subject to judicial review.</p> <p>[20.6.2.3112 NMAC, NMSA 1978, § 74-6-5.O]</p>
71.	<p>TRANSFER of DISCHARGE PERMIT - Prior to the transfer of any ownership, control, or possession of these Facilities or any portion thereof, the Permittees shall:</p>

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	<ul style="list-style-type: none"><li>• Notify the proposed transferee in writing of the existence of this Discharge Permit;</li><li>• Include a copy of this Discharge Permit with the notice; and</li><li>• Deliver or send by certified mail to NMED a copy of the notification and proof that the proposed transferee has received such notification.</li></ul> <p>The Permittees shall continue to be responsible for any discharge from the Facilities, until both ownership and possession of the Facilities have been transferred to the transferee.</p> <p>[20.6.2.3111 NMAC]</p>
72.	<p>PERMIT FEES - The Permittees shall be aware that the payment of permit fees is due at the time of Discharge Permit approval. The Permittee may pay the permit fees in a single payment or they may pay the fee in equal installments on a yearly basis over the term of the Discharge Permit. The Permittees shall remit single payments to NMED no later than 30 days after the Discharge Permit issuance date. The Permittees shall remit initial installment payments to NMED no later than 30 days after the Discharge Permit issuance date; with subsequent installment payments remitted to NMED no later than the anniversary of the Discharge Permit issuance date.</p> <p>Permit fees are associated with <u>issuance</u> of this Discharge Permit. No person shall construe anything in this Discharge Permit as relieving the Permittees of the obligation to pay all permit fees assessed by NMED. A Permittee that ceases discharging or does not commence discharging from the Facility during the term of the Discharge Permit shall pay all permit fees assessed by NMED. NMED shall suspend or terminate an approved Discharge Permit if the Permittees fails to remit an installment payment by its due date.</p> <p>[Subsection F of 20.6.2.3114 NMAC, NMSA 1978, § 74-6-5.K]</p>