

GROUND WATER DISCHARGE PERMIT RENEWAL AND MODIFICATION
City of Las Cruces-West Mesa Industrial Park Wastewater Treatment Facility, DP-1174

I. INTRODUCTION

The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal and Modification (Discharge Permit), DP-1174, to the City of Las Cruces (permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Regulations, 20.6.2 NMAC.

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 City of Las Cruces-West Mesa Industrial Park Wastewater Treatment Facility (facility) into ground and surface water, so as to protect ground and surface water for present and potential future use as domestic and agricultural water supply and other uses and protect public health. In issuing this Discharge Permit, NMED has determined that the requirements of Subsection C of 20.6.2.3109 NMAC have been met.

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

Up to 400,000 gallons per day of wastewater from the West Mesa Industrial Park is discharged to the City of Las Cruces's West Mesa Industrial Park Wastewater Treatment Facility. Wastewater flows through the headworks which consist of a manual bar screen and sewage grinder. The wastewater is then conveyed to four complete mix aerated synthetically lined lagoons operating in parallel/series. Reclaimed wastewater is discharged to a synthetically lined holding lagoon and land applied to 90 acres. Up to 6 metric tons (dry weight) per day, on an annual average, of municipal biosolids from the City's treatment facilities are discharged to a concrete pad located at the facility for composting. The modification consists of the inclusion of the compost facility. The discharges contains water contaminants or toxic pollutants which may be elevated above the standards of Section 20.6.2.3103 NMAC. The facility is located at 999 Crawford Road, approximately 7 miles west of Las Cruces, in Section 35, T23S, R01W, Doña Ana County. Ground water most likely to be affected is at a depth of approximately 331 feet and has a total dissolved solids concentration of approximately 687 value milligrams per liter.

The original Discharge Permit was issued on January 2, 1998 and subsequently renewed and/or modified on April 28, 2000 and June 1, 2003. The permittee's application consists of the materials submitted by Dr. Jorge Garcia on behalf of the permittee received May 8, 2008 and previously submitted materials as applicable. The discharge shall be managed in accordance with all conditions and requirements of this Discharge Permit.

Pursuant to Section 20.6.2.3109 NMAC, NMED reserves the right to require a Discharge Permit Modification in the event NMED determines that the requirements of 20.6.2 NMAC are being or may be violated or the standards of Section 20.6.2.3103 NMAC are being or may be violated. This may include a determination that structural controls and/or management practices approved under this Discharge Permit are not protective of ground water quality, and that more stringent requirements to protect and/or remediate ground water quality may be required by NMED. These requirements may include: lining/relining lagoons; expanding land application areas; changing

waste management practices; expanding monitoring requirements; installing an advanced treatment system; and/or implementing abatement of water pollution.

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

The following abbreviations may be used in this Discharge Permit:

Abbreviation	Explanation	Abbreviation	Explanation
BOD ₅	biochemical oxygen demand (5-day)	NTU	nephelometric turbidity units
CFR	Code of Federal Regulations	Org	organisms
Cl	chloride	TDS	total dissolved solids
LADS	land application data sheet(s)	TKN	total Kjeldahl nitrogen
mg/L	milligrams per liter	TN (total nitrogen)	TKN+NO ₃ -N
mL	milliliters	TRC	Total Residual Chlorine
NMAC	New Mexico Administrative Code	TSS	total suspended solids
NMED	New Mexico Environment Department	WQA	New Mexico Water Quality Act
NMSA	New Mexico Statutes Annotated	WQCC	Water Quality Control Commission
NO ₃ -N	nitrate-nitrogen		

II. FINDINGS

In issuing this Discharge Permit, NMED finds:

1. The permittee is discharging effluent or leachate from the facility so that such effluent or leachate may move directly or indirectly into ground water within the meaning of Section 20.6.2.3104 NMAC.
2. The permittee is discharging effluent or leachate from the facility so that such effluent or leachate may move into ground water of the State of New Mexico which has an existing concentration of 10,000 milligrams per liter or less of total dissolved solids within the meaning of Subsection A of 20.6.2.3101 NMAC.
3. The discharge from the facility is not subject to any of the exemptions of Section 20.6.2.3105 NMAC.

III. CONDITIONS

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

OPERATIONAL PLAN

#	Terms and Conditions																								
1.	The permittee shall implement the following operational plan to ensure compliance with Title 20, Chapter 6, Parts 1 and 2 NMAC. [20.6.2.3106.C NMAC, 20.6.2.3107 NMAC]																								
2.	The permittee shall operate in a manner such that standards and requirements of Sections 20.6.2.3101 and 20.6.2.3103 NMAC are not violated. [20.6.2.3101 NMAC, 20.6.2.3103 NMAC]																								
3.	The permittee is authorized to treat up to 400,000 gallons per day of wastewater at the City of Las Cruces's West Mesa Industrial Park Wastewater Treatment Facility. Wastewater flows through the headworks which consist of a manual bar screen and sewage grinder. The wastewater is then conveyed to four complete mix aerated synthetically lined lagoons operating in parallel/series. Reclaimed wastewater is discharged to a synthetically lined holding lagoon and is land applied to 90 acres by spray irrigation. The facility is authorized to receive up to 6 metric tons (dry weight) per day, on an annual average, of municipal biosolids from the City's treatment facilities. The dewatered biosolids are discharged to a concrete pad, with berms, for composting. [20.6.2.3104 NMAC, 20.6.2.3106 NMAC]																								
4.	Reclaimed wastewater discharged from the holding lagoon shall not exceed the following limitations: <table border="1" data-bbox="228 1087 1398 1354"> <thead> <tr> <th>Test</th> <th>30-day geometric mean</th> <th>30-day average</th> <th>maximum</th> </tr> </thead> <tbody> <tr> <td>Fecal coliform bacteria:</td> <td>1,000 Org/100 mL</td> <td>N/A</td> <td>5,000 Org/100 mL</td> </tr> <tr> <td>BOD₅:</td> <td>N/A</td> <td>30 mg/L</td> <td>45 mg/L</td> </tr> <tr> <td>TSS:</td> <td>N/A</td> <td>75 mg/L</td> <td>90 mg/L</td> </tr> <tr> <td>TRC (if required):</td> <td>N/A</td> <td>Monitor Only</td> <td>Monitor Only</td> </tr> <tr> <td>TN</td> <td>N/A</td> <td>N/A</td> <td>30 mg/L</td> </tr> </tbody> </table> [20.6.2.3109 NMAC]	Test	30-day geometric mean	30-day average	maximum	Fecal coliform bacteria:	1,000 Org/100 mL	N/A	5,000 Org/100 mL	BOD ₅ :	N/A	30 mg/L	45 mg/L	TSS:	N/A	75 mg/L	90 mg/L	TRC (if required):	N/A	Monitor Only	Monitor Only	TN	N/A	N/A	30 mg/L
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5.	The permittee shall apply reclaimed wastewater to up to 90 acres of rangeland. The amount of total nitrogen applied in the wastewater shall not exceed 200 pounds per acre per year. Nitrogen content shall not be adjusted to account for volatilization or mineralization processes. Wastewater shall be distributed evenly over the entire area of application. Excessive ponding shall be prevented. [20.6.2.3109 NMAC]																								
6.	Prior to the facility receiving dewatered biosolids from the City's treatment facilities, the permittee shall construct the proposed concrete composting pad according to the final construction plans and specifications submitted to NMED on May 8, 2008. Record drawings of the finished biosolids composting pad shall be submitted to NMED within 30 days of completion. A licensed New Mexico professional engineer shall certify all construction plans and specifications, supporting design calculations, and record drawings of the wastewater treatment system. [20.6.2.3109 NMAC]																								

7.	The permittee shall install fences around the biosolids composting pad to control public access. The fences shall be constructed in a manner which prevents access by the general public and animals such as dogs (e.g., chain link, field fencing) and shall be maintained throughout the term of this Discharge Permit. [20.6.2.3109 NMAC]
8.	The permittee shall maintain fences around the wastewater treatment facility to control public access. The fences shall be constructed in a manner which prevents access by the general public and animals such as dogs (e.g., chain link, field fencing) and shall be maintained throughout the term of this Discharge Permit. [20.6.2.3109 NMAC]
9.	The permittee shall maintain signs at the facility entrance and other areas where public contact is possible indicating that the water is not potable. All signs shall remain visible and legible for the term of this Discharge Permit. [20.6.2.3109 NMAC]
10.	Within 30 days of the effective date of this Discharge Permit (by DATE), the permittee shall post signs in English and Spanish at above ground areas receiving reclaimed wastewater. The signs shall be posted at the entrance and/or at other locations where public access may occur and shall state: NOTICE: THIS AREA IS IRRIGATED WITH RECLAIMED WASTEWATER - DO NOT DRINK. AVISO: ESTA ÁREA ESTÁ REGADA CON AGUAS NEGRAS RECOBRADAS - NO TOMAR. Alternate wording and/or graphics may be submitted for NMED approval. [20.6.2.3107 NMAC, 20.6.2.3109 NMAC]
11.	Within 60 days of the effective date of this Discharge Permit (by DATE), the permittee shall measure the thickness of the sludge blanket in all lagoons. If sludge accumulation exceeds one-third of the maximum liquid depth of a lagoon at any location within the lagoon, the permittee shall remove the sludge to a depth of less than six inches throughout the lagoon in a manner that is protective of the lagoon liner. Removed sludge shall be contained, transported, and disposed of in accordance with all local, state, and federal (40 CFR Part 503) regulations. A report detailing the sludge depth measurement and disposal of excess accumulated solids (if any disposal occurs) shall be submitted to NMED within 180 days of the effective date of this Discharge Permit (by DATE). [20.6.2.3109 NMAC]
12.	The lagoon liners shall be maintained in such a manner as to avoid conditions which could affect the structural integrity of the lagoons and/or lagoon liners. Such conditions include, but are not limited to: <ul style="list-style-type: none"> • Erosion damage; • Animal activity/damage; • The presence of vegetation, such as; aquatic plants, weeds, woody shrubs or trees growing within five feet of the lagoon edge or within the lagoon itself; • Evidence of seepage; • Evidence of berm subsidence; and/or • The presence of large pieces or large quantities of debris in the lagoon. The permittee shall visually inspect the lagoons and surrounding berms on a monthly basis to ensure proper maintenance. Vegetation growing around the lagoons shall be routinely controlled by mechanical removal in a manner that is protective of the lagoon liner. Any evidence of damage to the lagoon berm or liner shall be reported to NMED immediately upon discovery. [20.6.2.3107 NMAC]
13.	The permittee shall maintain a minimum of two feet of freeboard between the liquid level in the lagoons and the top elevation of the lagoon liners at all times. [20.6.2.3107 NMAC, 20.6.2.3109 NMAC]

14.	<p>The permittee shall utilize operators, certified by the State of New Mexico at the appropriate level, to operate the wastewater collection, treatment and disposal systems. All operations and maintenance of all or any part of the wastewater system shall be performed by, or under the direct supervision of, a certified operator.</p> <p>[20.7.4 NMAC]</p>
15.	<p>The permittee shall meet the following general requirements for above ground use of reclaimed domestic wastewater:</p> <ul style="list-style-type: none">a) The permittee shall maintain signs in English and Spanish at above ground areas receiving reclaimed wastewater. All signs shall remain visible and legible for the term of this Discharge Permit.b) The reclaimed wastewater systems shall have no direct or indirect cross connections with potable water systems pursuant to the latest revision of the New Mexico Plumbing and Mechanical Code.c) Above ground use of reclaimed wastewater shall not result in excessive standing or pooling of wastewater, and shall be applied at the appropriate consumptive water use rate. Irrigation shall not be conducted at times when the receiving area is saturated or frozen.d) The discharge of reclaimed wastewater shall be confined to the area designated and approved for receiving the wastewater.e) All water supply wells within 200 feet of a wetted irrigation area shall have adequate well head construction and irrigation shall be managed to ensure protection of ground water quality.f) All existing accessible portions of the reclaimed wastewater system shall be colored purple or clearly labeled as being part of a reclaimed wastewater distribution system. All piping, valves and outlets that are installed during the term of this Discharge Permit shall be color-coded in purple pursuant to the latest revision of the New Mexico Plumbing and Mechanical Code to differentiate piping or fixtures used to convey reclaimed wastewater from piping or fixtures used for potable or other water. All valves, outlets, and sprinkler heads used in reclaimed wastewater systems shall be of a type that can only be operated by authorized personnel. <p>[20.6.2.3109 NMAC]</p>
16.	<p>The permittee shall meet the following setbacks, access restrictions and equipment requirements for spray irrigation using Class 3 reclaimed domestic wastewater:</p> <ul style="list-style-type: none">a) A minimum 500-foot set-back shall be maintained between any dwellings or occupied establishments and the edge of any area receiving reclaimed wastewater.b) Irrigation shall be postponed at times when windy conditions may result in drift of reclaimed wastewater outside the designated area of application.c) Access to the irrigated area shall be restricted by perimeter fencing using 4-strand barbed wire and locking gate or other NMED approved access controls.d) The public shall be excluded from entering the area during times when the reclaimed wastewater is being applied.e) The spray irrigation system shall utilize only low trajectory spray nozzles. <p>[20.6.2.3109 NMAC]</p>

MONITORING, REPORTING, AND OTHER REQUIREMENTS

#	Terms and Conditions
17.	The permittee shall conduct the following monitoring, reporting, and other requirements listed below. [20.6.2.3107 NMAC]
18.	<p>METHODOLOGY - Unless otherwise approved in writing by NMED, the permittee shall conduct sampling and analysis in accordance with the most recent edition of the following documents:</p> <ul style="list-style-type: none"> a) American Public Health Association, Standard Methods for the Examination of Water and Wastewater (18th, 19th or current); b) U.S. Environmental Protection Agency, Methods for Chemical Analysis of Water and Waste; c) U.S. Geological Survey, Techniques for Water Resources Investigations of the U.S. Geological Survey; d) American Society for Testing and Materials, Annual Book of ASTM Standards, Part 31.Water; e) U.S. Geological Survey, et al., National Handbook of Recommended Methods for Water Data Acquisition; or f) Methods of Soil Analysis: Part 1. Physical and Mineralogical Methods and Part 2. Chemical and Microbiological Properties, American Society of Agronomy. <p>[20.6.2.3107.B NMAC]</p>
19.	<p>The permittee shall submit quarterly monitoring reports to NMED for the most recently completed quarterly period by the 1st of February, May, August and November of each year.</p> <p>Quarterly monitoring shall be performed during the following periods:</p> <ul style="list-style-type: none"> • January 1st through March 31st (first quarter) – due by May 1st; • April 1st through June 30th (second quarter) – due by August 1st; • July 1st through September 30th (third quarter) – due by November 1st; and • October 1st through December 31st (fourth quarter) – due by February 1st. <p>Monitoring requirements detailed in this Discharge Permit are summarized on the sheet titled <i>Summary of Required Actions, Monitoring and Reporting</i>.</p> <p>[20.6.2.3107 NMAC]</p>
20.	<p>The permittee shall measure the monthly volume of wastewater discharged to the treatment system using a totalizing flow meter. The monthly meter readings and monthly discharge volumes shall be submitted to NMED in the quarterly monitoring reports. The flow meter shall be calibrated to within +/- 10% of actual flow and kept operational at all times.</p> <p>[20.6.2.3107 NMAC, 20.6.2.3109 NMAC]</p>
21.	<p>The permittee shall measure the monthly volume of reclaimed wastewater discharged to the land application area using a totalizing flow meter. The monthly meter readings and monthly discharge volumes shall be submitted to NMED in the quarterly monitoring reports. The flow meter shall be calibrated to within +/- 10% of actual flow and kept operational at all times.</p> <p>[20.6.2.3107 NMAC, 20.6.2.3109 NMAC]</p>
22.	<p>At the times when spray irrigation is occurring, the permittee shall sample reclaimed wastewater from the spigot between the holding lagoon and the land application area on a</p>

	<p>quarterly basis and analyze the samples for TKN, NO₃-N, TDS and Cl. Analytical results shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107 NMAC]</p>
23.	<p>At the times when spray irrigation is occurring, the permittee shall sample reclaimed wastewater from the spigot between the holding lagoon and the land application area on an annual basis by collecting a grab sample and analyzing it for all contaminants listed under Section 20.6.2.3103 NMAC. Analytical results shall be submitted to NMED in the monitoring report due by February 1st of each year. [20.6.2.3107 NMAC]</p>
24.	<p>At the times when spray irrigation is occurring, the permittee shall perform the following analyses on reclaimed wastewater samples collected from the spigot between the holding lagoon and the land application area using the sampling method and frequency indicated:</p> <ul style="list-style-type: none"> • Fecal coliform bacteria: grab sample at peak daily flow once per month; • BOD₅: grab sample once per month; • TSS: grab sample once per month; • The permittee shall record TRC concentrations, if required, whenever fecal coliform samples are collected. <p>Analytical results and a copy of the log of TRC concentrations, if required, shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107 NMAC]</p>
25.	<p>The permittee shall complete the Discharge Monitoring Report (DMR) required under 40 CFR 503 pertaining to biosolids generation, preparation and disposal. Copies shall be submitted to NMED in the monitoring report due by August 1st of each year. [40.503.17 CFR, 74-6-5.E.1 Water Quality Act, 74-6-5.K Water Quality Act]</p>
26.	<p>The permittee shall complete land application data sheets (LADS) quarterly that document the amount of nitrogen applied to the land application area. The LADS (copy enclosed) shall reflect the nitrogen concentration from the most recent wastewater analysis and the measured discharge volumes for each month. The LADS or a statement that no land application occurred shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107 NMAC]</p>
27.	<p>The permittee shall perform annual soil sampling of the permitted land application area. One composite surface (1st-foot) soil sample and one composite sub-surface (3rd-foot) soil sample shall be collected throughout the land application area between December 1st and May 31st. Composite soil samples shall be collected according to the following procedure:</p> <ul style="list-style-type: none"> • Each surface sample shall consist of a single composite of 15 soil cores collected from a depth of 0 to 12 inches. • Each 3rd-foot sub-surface soil sample shall consist of a single composite of six soil cores collected from a depth of 24 to 36 inches. <p>Soil samples shall be analyzed for TKN and NO₃-N. Soil NO₃-N shall be analyzed by a 2 molar KCl extract, as described in Methods of Soil Analysis: Part 2, Chemical and Microbiological Properties, Agronomy Monograph no.9 (2nd edition), pp 643-698, American Society of Agronomy. The analytical results and a map showing the sampling locations for each sample of the composites shall be submitted to NMED in the monitoring report due November 1st of each year. [20.6.2.3107 NMAC]</p>

CONTINGENCY PLAN

#	Terms and Conditions
28.	<p>In the event that ground water standards are violated during the term of this Discharge Permit, upon closure of the facility or during the implementation of post-closure requirements, the permittee shall submit to NMED a corrective action plan that proposes measures to mitigate damage from the discharge including, at a minimum, source control measures and an implementation schedule. The permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC, if the corrective action plan will not result in compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC within 180 days of confirmation of ground water contamination. [20.6.2.1203 NMAC, 20.6.2.4105.A(8) NMAC]</p>
29.	<p>In the event of a spill or release that is not authorized under this Discharge Permit, the permittee shall initiate the notifications and corrective actions as required in Section 20.6.2.1203 NMAC. The permittee shall take immediate corrective action to contain and remove or mitigate the damage caused by the discharge. Within 24 hours after discovery of the discharge, the permittee shall verbally notify NMED and provide the information required by Paragraph (1) of Subsection A of 20.6.2.1203 NMAC. Within 7 days of discovering the discharge, the permittee shall submit a written report to NMED verifying the oral notification and providing any additional information or changes. The permittee shall submit a corrective action report within 15 days after discovery of the discharge. [20.6.2.1203 NMAC]</p>
30.	<p>In the event that analytical results of a quarterly reclaimed wastewater sample exceed the total nitrogen limitation set in this Discharge Permit, the permittee shall analyze another sample within 15 days to confirm the initial results. Upon confirmation that the limitation is being exceeded, the permittee shall enact the following contingency plan:</p> <ul style="list-style-type: none"> a) NMED shall be notified immediately that the contingency plan is being enacted. b) Wastewater sampling and analysis shall be done on a monthly basis. c) The permittee shall examine the operation and maintenance log, required under the Record Keeping section of this permit, for improper operational procedures. The permittee shall also conduct a physical inspection of the treatment system to detect abnormalities. Any abnormalities discovered shall be corrected. d) If analytical results from wastewater sampling continue to exceed the limitation, the permittee shall submit a corrective action plan for NMED approval to modify operational procedures and/or upgrade the treatment process to achieve the effluent limit. The plan shall be submitted within 90 days of the original confirmation of exceedance of the effluent limitation. The corrective action plan shall be implemented immediately upon NMED approval. <p>When analytical results from three consecutive months of wastewater sampling do not exceed the limitation, the permittee shall return to quarterly monitoring. [20.6.2.3107.A(10) NMAC]</p>
31.	<p>In the event that analytical results of a reclaimed domestic wastewater sample exceed any of the maximum limitations for BOD₅, TSS, or fecal coliform bacteria set by this Discharge Permit, the permittee shall re-sample within 24 hours of becoming aware of the exceedance to confirm the initial results. If the exceedance of any of the maximum limitations is confirmed, or if any of the 30-day average limitations is exceeded, the permittee shall enact the following contingency plan:</p>

	<p>a) NMED shall be notified immediately that the contingency plan is being enacted.</p> <p>b) The permittee shall examine the operation and maintenance log, required under the Record Keeping section of this Discharge Permit, for improper operational procedures. The permittee shall also conduct a physical inspection of the treatment system to detect abnormalities. Any abnormalities discovered shall be corrected.</p> <p>If a facility is required to enact the contingency plan more than two times in a calendar year, the permittee shall submit a corrective action plan for NMED approval to modify operational procedures and/or upgrade the treatment process to achieve consistent compliance with the maximum and 30-day average limitations. The plan shall be submitted within 60 days of the second occurrence and shall be implemented immediately upon NMED approval. Additional sampling of stored reclaimed wastewater prior to discharge to the land application area may be required as part of the corrective action plan. [20.6.2.3107.A(10) NMAC]</p>
32.	<p>In the event that LADS show that the amount of nitrogen in wastewater applied exceeds 200 pounds per acre per year, the permittee shall submit a corrective action plan for the reduction of nitrogen loading to the land application area. The plan shall be submitted to NMED for approval within 90 days of the end of the monitoring period in which the exceedance occurred. The corrective action plan shall be implemented within 30 days of NMED approval. [20.6.2.3107.A(10) NMAC]</p>
33.	<p>In the event that a minimum of two feet of freeboard cannot be maintained in the lagoons at all times, the permittee shall submit a corrective action plan for NMED approval within 30 days of the date when the two feet of freeboard limit was initially exceeded. [20.6.2.3107 NMAC, 20.6.2.3109 NMAC]</p>
34.	<p>In the event that inspection findings reveal significant damage likely to affect the ability of the lined lagoons to contain contaminants, the permittee shall submit a corrective action plan for the repair or replacement of the lagoon liners to NMED for approval within 30 days of discovery by the permittee or following notification from NMED that significant liner damage is evident. [20.6.2.3107 NMAC, 20.6.2.3109 NMAC]</p>
35.	<p>In the event NMED determines, upon review of analytical results from surface and sub-surface soil sampling, that nitrogen may be migrating vertically, the permittee shall, within 30 days of notification, submit for NMED approval a corrective action plan to reduce nitrogen concentrations in the soil. The plan shall include source control measures, such as a reduction in the amount of wastewater or solids applied to the land and/or expansion of the land application area.</p> <p>The permittee shall also implement the following deep soil sampling. From each field, the permittee shall collect composite soil samples at depths of 2, 4, 6, 8 and 10 feet from three separate soil cores. Composite samples for each depth shall be assembled from the three cores and analyzed for NO₃-N and TKN. Soil NO₃-N shall be analyzed by a 2 molar KCl extract, as described in Methods of Soil Analysis: Part 2, Chemical and Microbiological Properties, Agronomy Monograph no.9 (2nd edition), pp 643-698, American Society of Agronomy. The analytical results and a map showing the sampling locations within each field shall be submitted to NMED within 30 days of the sampling date. If initial deep soil sampling results indicate the presence of excessive nitrogen at depths below 36 inches, NMED may require deep soil sampling on an annual basis to verify success of the corrective actions. [20.6.2.3107.A(10) NMAC, 20.6.2.3109 NMAC]</p>

36.	In the event NMED or the permittee identifies any other failures of the Discharge Permit or system not specifically noted herein, NMED may require the permittee to develop for NMED approval contingency plans and schedules to cope with the failures. [20.6.2.3107.A(10) NMAC]
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CLOSURE PLAN

#	Terms and Conditions
37.	<p>Upon closure of the facility, the permittee shall perform the following closure measures:</p> <ul style="list-style-type: none"> a) Remove or plug all lines leading to the lagoons and land application area so that a discharge can no longer occur. b) Drain and/or evaporate all liquids from the lagoons and dispose of all sludge in accordance with all local, state, and federal (40 CFR Part 503) regulations. c) Perforate or remove the lagoon liners and re-grade the lagoons with clean fill to blend with surface topography and prevent ponding. <p>When all post-closure requirements have been met, the permittee may request to terminate the Discharge Permit. [20.6.2.3107.A(11) NMAC]</p>

GENERAL TERMS AND CONDITIONS

#	Terms and Conditions
38.	<p>RECORD KEEPING - The permittee shall maintain at its facility a written record of all data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit. The following information shall be recorded and shall be made available to NMED upon request:</p> <ul style="list-style-type: none"> a) The dates, exact place and times of sampling or field measurements; b) The name and job title of the individuals who performed each sample collection or field measurement; c) The date of the analysis of each sample; d) The name and address of the laboratory and the name and job title of the person that performed the analysis of each sample; e) The analytical technique or method used to analyze each sample or take each field measurement; f) The results of each analysis or field measurement, including raw data; g) The results of any split sampling, spikes or repeat sampling; and h) A description of the quality assurance and quality control procedures used. <p>[20.6.2.3107.A NMAC]</p>
39.	<p>RECORD KEEPING - The permittee shall maintain a written record of any spills, seeps, and/or leaks of effluent, and of leachate and/or process fluids not authorized by this Discharge Permit. [20.6.2.3107.A NMAC]</p>
40.	<p>RECORD KEEPING - The permittee shall maintain a written record of the operation, maintenance, and repair of all facilities/equipment used to treat, store or dispose of wastewater; to measure flow rates, to monitor water quality, or to collect other data required by this Discharge Permit. This record shall include repair, replacement or calibration of any</p>

	<p>monitoring equipment and repair or replacement of any equipment used in the permittee's waste or wastewater treatment and disposal system. [20.6.2.3107.A NMAC]</p>
41.	<p>RECORD KEEPING - The permittee shall maintain a written record of the amount of wastewater, effluent, leachate or other wastes discharged pursuant to this Discharge Permit. [20.6.2.3107.A NMAC]</p>
42.	<p>RECORD KEEPING - The permittee shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this Discharge Permit, and records of all data used to complete the application for this Discharge Permit for a period of at least five years from the date of the sample collection, measurement, report or application. This period may be extended by request of the Secretary at any time. [20.6.2.3107.A NMAC]</p>
43.	<p>INSPECTION and ENTRY - The permittee shall allow the Secretary or an authorized representative, upon the presentation of credentials, to:</p> <ol style="list-style-type: none"> a) Enter at regular business hours or at other reasonable times upon the permittee's premises or other location where records must be kept under the conditions of this Discharge Permit, or under any federal or WQCC regulation. b) Inspect and copy, during regular business hours or at other reasonable times, any records required to be kept under the conditions of this Discharge Permit, or under any federal or WQCC regulation. c) Inspect, at regular business hours or at other reasonable times, any facility, equipment (including monitoring and control equipment or treatment works), practices or operations regulated or required under this Discharge Permit, or under any federal or WQCC regulation. d) Sample or monitor, at reasonable times for the purpose of assuring compliance with this Discharge Permit or as otherwise authorized by the WQA, any effluent, water contaminant, or receiving water at any location before or after discharge. [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]
44.	<p>INSPECTION and ENTRY - Nothing in this Discharge Permit shall be construed as limiting in any way the inspection and entry authority of NMED under the WQA, the WQCC Regulations, or any other applicable law or regulation. [20.6.2.3107 NMAC, 74-6-9(B) & (E) WQA]</p>
45.	<p>DUTY to PROVIDE INFORMATION - The permittee shall furnish to NMED, within a reasonable time, any documents or other information which it may request to determine whether cause exists for modifying, terminating and/or renewing this Discharge Permit or to determine compliance with this Discharge Permit. The permittee shall also furnish to NMED, upon request, copies of documents required to be kept by this Discharge Permit. [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]</p>
46.	<p>SPILLS, LEAKS, and OTHER UNAUTHORIZED DISCHARGES - This Discharge Permit authorizes only those discharges specified herein. Any unauthorized discharges violate Section 20.6.2.3104 NMAC and must be reported to NMED and remediated as required by Section 20.6.2.1203 NMAC. [20.6.2.1203 NMAC]</p>
47.	<p>MODIFICATIONS and/or AMENDMENTS - The permittee shall notify NMED of any changes to the permittee's wastewater treatment and disposal system, including any changes in the wastewater flow rate or the volume of wastewater storage, or of any other changes to</p>

	<p>operations or processes that would result in any significant change in the discharge of water contaminants. The permittee shall obtain NMED's approval, as a modification to this Discharge Permit pursuant to Subsections E, F, or G of 20.6.2.3109 NMAC, prior to any increase in the quantity discharged, or any increase in the concentration of water contaminants discharged, above those levels approved in this Discharge Permit.</p> <p>[20.6.2.3107.C NMAC]</p>
48.	<p>PLANS and SPECIFICATIONS - The permittee shall file plans and specifications with NMED for the construction of a wastewater system and for proposed changes that will change substantially the quantity or quality of the discharge from the system. The permittee shall file plans and specifications prior to the commencement of construction. Changes to the wastewater system having a minor effect on the character of the discharge shall be reported as of January 1 and June 30 of each year to NMED.</p> <p>[20.6.2.1202 NMAC]</p>
49.	<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 permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the WQCC Regulations, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. [74-6-10 WQA, 74-6-10.1 WQA]</p>
50.	<p>CRIMINAL PENALTIES – Any person who knowingly violates or knowingly causes or allows another person to:</p> <ol style="list-style-type: none"> 1) make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or required to be maintained under the WQA; 2) falsify, tamper with or render inaccurate any monitoring device, method or record required to be maintained under the WQA; or 3) fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation, is subject to felony charges and shall be sentenced in accordance with the provisions of Section 31-18-15 NMSA 1978. <p>[74-6-10.2(A-F) WQA]</p>
51.	<p>COMPLIANCE WITH OTHER LAWS - Nothing in this Discharge Permit shall be construed in any way as relieving the permittee of the obligation to comply with all applicable federal, state, and local laws, regulations, permits or orders. [20.6.2 NMAC]</p>
52.	<p>RIGHT to APPEAL - The permittee may file a petition for review before the WQCC on this Discharge Permit. Such petition shall be in writing to the WQCC within thirty (30) days of the receipt of this Discharge Permit. Unless a timely petition for review is made, the decision of NMED shall be final and not subject to judicial review. [74-6-5(O) WQA]</p>

53.	TRANSFER of DISCHARGE PERMIT - Prior to the transfer of any ownership, control, or possession of this permitted facility or any portion thereof, the permittee shall notify the proposed transferee in writing of the existence of this Discharge Permit and include a copy of this Discharge Permit with the notice. The permittee shall deliver or send by certified mail to NMED a copy of the notification and proof that such notification has been received by the proposed transferee. [20.6.2.3111 NMAC]
54.	TERM - Pursuant to WQA 74-6-5(I) and Subsection H of 20.6.2.3109 NMAC, the term of this Discharge Permit is five years from its effective date. To renew this Discharge Permit, the permittee must submit an application for renewal at least 180 days before the termination date. [20.6.2.3109.H NMAC, 74-6-5(I) WQA]
55.	Payment of permit fees is due at the time of Discharge Permit approval. Permit fees shall be paid in a single payment or shall be paid in equal installments on a yearly basis over the term of the Discharge Permit. Single payments shall be remitted to NMED no later than 30 days after the Discharge Permit effective date. Initial installment payments shall be remitted to NMED no later than 30 days after the Discharge Permit effective date; subsequent installment payments shall be remitted to NMED no later than the anniversary of the Discharge Permit effective date. An approved Discharge Permit shall be suspended or terminated if the facility fails to remit an installment payment by its due date. [20.6.2.3114.F NMAC, 74-6-5(K) WQA]

EFFECTIVE DATE: effective date
EXPIRATION DATE: expiration date

WILLIAM C. OLSON
Chief, Ground Water Quality Bureau
New Mexico Environment Department