



**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

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**SUSANA MARTINEZ**  
Governor

**JOHN A. SANCHEZ**  
Lieutenant Governor

**CERTIFIED MAIL – RETURN RECEIPT REQUEST**

September 4, 2015

Stephen Shepherd, Town Administrator  
Town of Edgewood  
P.O. Box 3610  
Edgewood, NM, 87015

**RE: Discharge Permit Renewal, DP-1654, Town of Edgewood Wastewater Treatment Plant**

Dear Mr. Shepherd:

The New Mexico Environment Department (NMBD) issues the enclosed Discharge Permit Renewal, DP-1654, to Town of Edgewood (permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Regulations, 20.6.2 NMAC.

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

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

Pursuant to Paragraph (4) of Subsection H of 20.6.2.3109 NMAC, the term of the Discharge Permit shall be five years from the effective date. The term of this Discharge Permit will end on September 3, 2020.

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Stephen Shepherd, Town Administrator  
 Town of Edgewood  
 P. O. Box 3610  
 Edgewood, NM 87015

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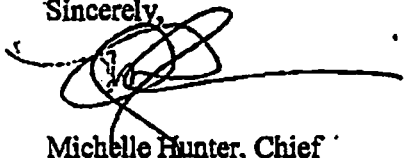
Stephen Shepherd, DP-1654  
September 4, 2015  
Page 2

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

An invoice for the Discharge Permit Fee of \$4,600.00 is being sent under separate cover. Payment of the Discharge Permit Fee must be received by NMED within 30 days of the date the Discharge Permit is issued.

If you have any questions, please contact Alan Garrido at (505) 827-2713. Thank you for your cooperation during this Discharge Permit review.

Sincerely,



Michelle Hunter, Chief  
Ground Water Quality Bureau

MH:AG

encs: Discharge Permit Renewal, DP-1654  
Ground Water Discharge Permit Conditions for Synthetically Lined Lagoons – Liner  
Material and Site Preparation, Revision 0.0, May 2007

cc: Robert Italiano, District Manager, NMED District II (electronic copy)  
NMED Santa Fe Field Office (electronic copy)  
John Romero, Office of the State Engineer (electronic copy)  
Anne Keller, SWQB, UOCP (electronic copy)  
Tom Torres, Operations Manager, EPCOR Water  
P.O. Box 370, 38 Cactus Rd., Edgewood, NM 87015  
Tappan Mahoney, Dennis Engineering Company  
P.O. Box 909, 21 Main Street, Suite 201, Edgewood, NM 875015-0909

**GROUND WATER DISCHARGE PERMIT RENEWAL  
TOWN OF EDGEWOOD WASTEWATER TREATMENT PLANT, DP-1654**

**I. INTRODUCTION**

The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal (Discharge Permit), DP-1654, to the Town of Edgewood (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 Town of Edgewood Wastewater Treatment Plant into ground and surface water, so as to protect ground and surface water for present and potential future use as domestic and agricultural water supply and other uses and protect public health. In issuing this Discharge Permit, NMED has determined that the requirements of Subsection C of 20.6.2.3109 NMAC have been or will be met. Pursuant to Section 20.6.2.3104 NMAC, it is the responsibility of the permittee to comply with the terms and conditions of this Discharge Permit; failure may result in an enforcement action(s) by NMED (20.6.2.1220 NMAC).

The activities that 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 150,000 gallons per day (gpd) of domestic wastewater is received and treated in a wastewater treatment facility (WWTF) consisting of a membrane bio-reactor (MBR) treatment system and an evaporative synthetically lined impoundment system. Reclaimed wastewater is discharged from the treatment system and re-used in the Town of Edgewood for dust control and irrigation of Town-owned properties. When irrigation is not occurring, reclaimed wastewater is discharged to one or multiple 7.5-million gallon capacity synthetically lined impoundment(s) for disposal by evaporation. On-site composting of the sludge removed from the treatment system is authorized by this Discharge Permit.

The discharge contains water contaminants that may be elevated above the standards of Section 20.6.2.3103 NMAC and/or the presence of toxic pollutants as defined in Subsection WW of 20.6.2.7 NMAC. This Discharge Permit contains requirements, actions and/or contingencies intended to control the source(s) of documented ground water contamination.

The facility and re-use areas are located approximately one mile east of the intersection of Church Street and Williams Ranch Road, Edgewood, and in Sections 4, 5, 9, 11, 12, 13, 14, 16, 20, 21, 22, 23, 25, 26, 27, 28, 29, 33, 34, 35 and 36, Township 10 N, Range 07 E, and Section 30, Township 10 N, Range 08 E, Santa Fe County. Ground water most likely to be affected is at a depth of approximately 112 feet and has a total dissolved solids concentration of approximately 600 milligrams per liter.

The original Discharge Permit was issued on June 13, 2008. The application (i.e., discharge plan) consists of the materials submitted by the permittee dated December 26, 2015 and materials contained in the administrative record prior to issuance of this Discharge Permit. The

discharge shall be managed in accordance with all conditions and requirements of this Discharge Permit.

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

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

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

Abbreviation	Explanation	Abbreviation	Explanation
BOD <sub>5</sub>	biochemical oxygen demand (5-day)	NMED	New Mexico Environment Department
CFR	Code of Federal Regulations	NMSA	New Mexico Statutes Annotated
CFU	Colony Forming Unit	NO <sub>3</sub> -N	nitrate-nitrogen
Cl	chloride	NTU	nephelometric turbidity units
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
LADS	land application data sheet(s)	TRC	Total Residual Chlorine
mg/L	milligrams per liter	TSS	total suspended solids
mL	milliliters	WQA	New Mexico Water Quality Act
MPN	Most Probable Number	WQCC	Water Quality Control Commission
NMAC	New Mexico Administrative Code	WWTF	Wastewater Treatment Facility

## 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 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.

3. The discharge from the facility is not subject to any of the exemptions of Section 20.6.2.3105 NMAC.

### III. AUTHORIZATION TO DISCHARGE

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

The permittee is authorized to receive and treat up to 150,000 gpd of domestic wastewater in a WWTF consisting of a MBR treatment system and an evaporative synthetically lined impoundment system. Reclaimed wastewater is discharged from the treatment system and re-used in the Town of Edgewood for dust control and for irrigation of Town-owned properties. When irrigation is not occurring, reclaimed wastewater is discharged to one or multiple 7.5-million gallon capacity synthetically lined impoundment(s) for disposal by evaporation. On-site composting of the sludge removed from the treatment system is authorized by this Discharge Permit.

[20.6.2.3104 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection C 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 permittee shall implement the following operational plan to ensure compliance with Title 20, Chapter 6, Parts 1 and 2 NMAC.  [Subsection C of 20.6.2.3109 NMAC]
2.	The permittee shall operate in a manner such that standards and requirements of Sections 20.6.2.3101 and 20.6.2.3103 NMAC are not violated.  [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.	<p>Prior to discharging reclaimed wastewater to the re-use area, the permittee shall install the infrastructure necessary to transfer, distribute and apply reclaimed wastewater. Documentation confirming installation of the distribution system shall consist of a narrative statement including the system type and location, and the method of backflow prevention employed (if applicable). Documentation shall be submitted to NMED prior to discharging to the re-use area.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
4.	<p>Prior to discharging from the facility, the permittee shall post signs in English and Spanish at all re-use areas. The signs shall be posted at the entrance to re-use areas and at other locations where public exposure to reclaimed wastewater may occur. The signs shall state: <b>NOTICE: THIS AREA IS IRRIGATED WITH RECLAIMED WASTEWATER - DO NOT DRINK. AVISO: ESTA ÁREA ESTÁ REGADA CON AGUAS NEGRAS RECOBRADAS - NO TOMAR.</b> Alternate wording and/or graphics may be submitted to NMED for approval.</p> <p>[Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]</p>
5.	<p>Within 60 days following the effective date of this Discharge Permit (by November 3, 2015), the permittee shall submit a written emergency storage impoundment or alternate disposal method proposal for review and approval by NMED. The WWTF shall divert wastewater to an emergency storage impoundment or alternate disposal method during periods when conditions are unfavorable for approved uses or when the wastewater quality requirements of this discharge permit cannot be met. The proposal shall include, at a minimum, the following information.</p> <ul style="list-style-type: none"> <li>a) A map showing the proposed location of the storage impoundment(s) or alternate disposal area.</li> <li>b) A written description of the specific location and construction material proposed for the storage impoundment(s) or alternate disposal area.</li> </ul> <p>All storage impoundment(s) or alternate disposal methods shall be approved by NMED prior to installation.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>
6.	<p>A minimum of 90 days prior to construction of the emergency storage impoundment(s) or alternate disposal method, the permittee shall submit final construction plans and specifications for the proposed <i>system</i>. The 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) and supporting design calculations, and shall be submitted for review by</p>

#	Terms and Conditions
	<p>NMED. The submitted documentation shall include the following elements.</p> <ul style="list-style-type: none"> <li>a) Details for the construction of the emergency storage impoundment(s) or alternate method using a liner consistent with the attachment titled <i>Ground Water Discharge Permit Conditions for Synthetically Lined Lagoons – Liner Material and Site Preparation</i>, Revision 0.0, May 2007 if applicable.</li> <li>b) Design calculations for the capacity of the emergency storage impoundment(s) or alternative disposal method. The impoundment(s) shall be designed to dispose of the permitted discharge volume such that two feet of freeboard is preserved at all times. Seasonal discharge patterns may be considered in the design calculations.</li> <li>c) Details of all wastewater emergency storage impoundment(s) or alternate disposal system components (e.g., lift stations, valves, transfer lines, process units and associated details).</li> <li>d) Specifications for all equipment, materials and installation procedures to be used in the construction of the wastewater system.</li> <li>e) Fences around the <i>system</i> to control access by the general public and animals. The fences shall consist of a minimum of six-foot chain link or field fencing, and locking gates. Where fences are not appropriate, access controls shall be proposed at the <i>system</i> to prevent access by the general public and animals. The controls shall consist of locking lids and compartments or other controls proposed for approval by NMED.</li> </ul> <p>Prior to constructing the emergency storage impoundment(s) or alternative disposal method and its associated components, the permittee shall obtain written verification from NMED that the plans and specifications meet the requirements of this Discharge Permit.</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>
7.	<p>Within 365 days following the effective date of this Discharge Permit (by September 3, 2016), the permittee shall complete construction of the emergency storage impoundment(s) or alternate disposal method in accordance with the final construction plans and specifications required by this Discharge Permit. The permittee shall notify NMED at least five working days prior to commencement of construction to allow NMED personnel to be onsite for inspection. The permittee shall submit record drawings 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) for the constructed <i>system</i> to NMED within 30 days of completion.</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>
8.	<p>Within 90 days following the effective date of this Discharge Permit (by December 3,</p>

#	Terms and Conditions
	<p>2015), the permittee shall submit to NMED a proposal including construction plans and specifications to construct an impervious surface for composting of the dewatered sludge. The liquid portion shall be contained and evaporated on the impervious surface protecting ground water from contaminants percolating from the compost pile. The 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) and supporting design calculations, and shall be submitted for review by NMED.</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>
9.	<p>Within 180 days following the effective date of this Discharge Permit (by March 2, 2016), the permittee shall complete construction of the impervious surface for composting of the dewatered sludge in accordance with the final construction plans and specifications required by this Discharge Permit. The permittee shall notify NMED at least five working days prior to commencement of construction to allow NMED personnel to be onsite for inspection. The permittee shall submit record drawings 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) for the constructed impervious surface to NMED within 30 days of completion.</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															
10.	<p>Treated wastewater discharged from the UV disinfection system shall not exceed the following limitation.</p> <p><b>Total Nitrogen: 10 mg/L</b></p> <p>[Subsection C of 20.6.2.3109 NMAC]</p>															
11.	<p>Reclaimed wastewater discharged from the UV disinfection system shall not exceed the following limitations:</p> <table border="1" data-bbox="321 1665 1356 1814"> <thead> <tr> <th data-bbox="321 1665 630 1728">Test</th> <th data-bbox="630 1665 914 1728">30-day Geometric Mean</th> <th data-bbox="914 1665 1133 1728">30-day Average</th> <th data-bbox="1133 1665 1356 1728">Maximum</th> </tr> </thead> <tbody> <tr> <td data-bbox="321 1728 630 1770">Fecal coliform bacteria:</td> <td data-bbox="630 1728 914 1770">5 MPN/100 mL</td> <td data-bbox="914 1728 1133 1770">N/A</td> <td data-bbox="1133 1728 1356 1770">23 MPN/100 mL</td> </tr> <tr> <td data-bbox="321 1770 630 1814">BOD<sub>5</sub>:</td> <td data-bbox="630 1770 914 1814">N/A</td> <td data-bbox="914 1770 1133 1814">10 mg/L</td> <td data-bbox="1133 1770 1356 1814">15 mg/L</td> </tr> </tbody> </table>				Test	30-day Geometric Mean	30-day Average	Maximum	Fecal coliform bacteria:	5 MPN/100 mL	N/A	23 MPN/100 mL	BOD <sub>5</sub> :	N/A	10 mg/L	15 mg/L
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Fecal coliform bacteria:	5 MPN/100 mL	N/A	23 MPN/100 mL													
BOD <sub>5</sub> :	N/A	10 mg/L	15 mg/L													



#	Terms and Conditions								
	<table border="1" data-bbox="293 348 1349 426"> <tr> <td data-bbox="293 348 613 384">Turbidity:</td> <td data-bbox="613 348 899 384">N/A</td> <td data-bbox="899 348 1122 384">3 NTU</td> <td data-bbox="1122 348 1349 384">5 NTU</td> </tr> <tr> <td data-bbox="293 384 613 426">UV Transmissivity:</td> <td data-bbox="613 384 899 426">N/A</td> <td data-bbox="899 384 1122 426">Monitor Only</td> <td data-bbox="1122 384 1349 426">Monitor Only</td> </tr> </table> <p data-bbox="293 457 1146 489">[Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]</p>	Turbidity:	N/A	3 NTU	5 NTU	UV Transmissivity:	N/A	Monitor Only	Monitor Only
Turbidity:	N/A	3 NTU	5 NTU						
UV Transmissivity:	N/A	Monitor Only	Monitor Only						
12.	<p data-bbox="293 510 1349 573">The permittee shall meet the following general requirements for above-ground use of reclaimed domestic wastewater.</p> <ol data-bbox="293 573 1349 1602" style="list-style-type: none"> <li>a) The permittee shall maintain signs in English and Spanish at all re-use areas such that they are visible and legible for the term of this Discharge Permit. The signs shall be posted at the entrance to re-use areas and at other locations where public exposure to reclaimed wastewater may occur. The signs shall state: <b>NOTICE: THIS AREA IS IRRIGATED WITH RECLAIMED WASTEWATER - DO NOT DRINK. AVISO: ESTA ÁREA ESTÁ REGADA CON AGUAS NEGRAS RECOBRADAS - NO TOMAR.</b> Alternate wording and/or graphics may be submitted to NMED for approval.</li> <li>b) The reclaimed wastewater systems shall have no direct or indirect cross connections with public water systems or irrigation wells pursuant to the latest revision of the New Mexico Plumbing Code (14.8.2 NMAC) and New Mexico Mechanical Code (14.9.2 NAMC).</li> <li>c) Above-ground use of reclaimed wastewater shall not result in excessive ponding of wastewater, and shall not exceed the water consumptive needs of the crop. Re-use shall not be conducted at times when the re-use area is saturated or frozen.</li> <li>d) The discharge of reclaimed wastewater shall be confined to the re-use area.</li> <li>e) The discharge of reclaimed domestic wastewater to crops for human consumption is prohibited.</li> <li>f) Water supply wells within 200 feet of a re-use area shall have adequate wellhead construction pursuant to 19.27.4 NMAC. Re-use shall be managed to ensure protection of ground water quality.</li> <li>g) Existing and accessible portions of the reclaimed 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 wastewater distribution system. Piping, valves and outlets that are installed during the term of this Discharge Permit shall be colored purple pursuant to the latest revision of the New Mexico Plumbing Code (14.8.2 NMAC) and New Mexico Mechanical Code (14.9.2 NAMC) to differentiate piping or fixtures used to convey reclaimed wastewater from those intended for potable or other uses. Valves, outlets, and sprinkler heads used in reclaimed wastewater systems shall be accessible only to authorized personnel.</li> </ol> <p data-bbox="293 1633 1146 1665">[Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]</p>								
13.	<p data-bbox="293 1686 1349 1808">In the event that a cross-connection with fresh water exists, the permittee shall institute a backflow prevention method to protect wells and public water supply systems from contamination by reclaimed wastewater prior to discharging to the re-use area. Backflow prevention shall be achieved by a total disconnect (physical air gap separation</p>								

#	Terms and Conditions
	<p>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 wastewater delivery system. Backflow prevention shall be maintained at all times.</p> <p>RP devices shall be 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. A malfunctioning RP device shall be repaired or replaced within 30 days of discovery, and use of all supply lines associated with the RP device shall cease until repair or replacement has been completed. Copies of the inspection and maintenance records and test results for each RP device associated with the backflow prevention program shall be maintained at a location available for inspection by NMED.</p> <p>[Subsection C of 20.6.2.3109 NMAC]</p>
14.	<p>The permittee shall maintain fences around the WWTF to control access by the general public and animals. The fences shall consist of a minimum of six-foot chain link or field fencing and locking gates. Fences shall be maintained 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>
15.	<p>The permittee shall maintain signs indicating that the wastewater at the WWTF is not potable. Signs shall be posted at the WWTF entrance and other areas where there is potential for public contact with wastewater. All signs shall be printed in English and Spanish 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>
16.	<p>The permittee shall maintain the impoundment liner(s) in such a manner as to avoid conditions that could affect the structural integrity of the impoundment(s) and/or impoundment liner(s). Such conditions include or may be characterized by 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 five feet of the toe of the outside berm of an above-grade impoundment, or within the impoundment itself;</li> <li>• the presence of large debris or large quantities of debris in the impoundment;</li> </ul>

#	Terms and Conditions
	<ul style="list-style-type: none"> <li>• evidence of seepage; or</li> <li>• evidence of berm subsidence.</li> </ul> <p>Vegetation growing around the impoundment(s) shall be routinely controlled by mechanical removal in a manner that is protective of the impoundment liner.</p> <p>The permittee shall visually inspect the impoundment(s) 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 permittee shall enact 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>
17.	<p>The permittee shall preserve a minimum of two feet of freeboard between the liquid level in the impoundment(s) and the elevation of the top of the impoundment liner(s). In the event that the permittee determines that two feet of freeboard cannot be preserved in the impoundment, the permittee shall enact 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>
18.	<p>The permittee shall meet the following general requirements, setbacks, access restrictions and equipment requirements when operating mechanical evaporators in the storage impoundment(s):</p> <ul style="list-style-type: none"> <li>• prior to discharging from the facility, the permittee shall install a wind gauge and data logger capable of metering wind speed in the location of the storage impoundment(s);</li> <li>• mechanical evaporation is prohibited at times when wind speed equals or exceeds 20 miles per hour (mph) as indicated by the onsite wind gauge;</li> <li>• mechanical evaporation shall be postponed at times when windy conditions may result in drift of reclaimed wastewater outside of the surface area footprint of the storage impoundment;</li> <li>• a minimum 1,000-foot set-back shall be maintained between any dwellings or occupied establishments and the berm of the storage impoundment(s) designed for the evaporation of reclaimed wastewater; and</li> <li>• the mechanical evaporator system shall be operated at the lowest effective trajectory possible to minimize the spread of aerosolized reclaimed wastewater.</li> </ul> <p>[20.6.2.3109 NMAC]</p>
19.	<p>The permittee shall properly manage all solids generated by the treatment system to maintain effective operation by removing solids as necessary in accordance with accepted process control methods. Solids removed from the treatment process shall be</p>

#	Terms and Conditions
	<p>contained, transported, and disposed of in accordance with all local, state, and federal regulations. The permittee shall maintain records of solids disposal.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
20.	<p>The permittee shall submit written notification to NMED within 30 days of the date when the average daily influent volume equals or exceeds 75 percent of the design capacity of phase one of the treatment systems or 37,500 gpd. Within one year of the date when the average daily influent volume equals or exceeds 75 percent of the design capacity of phase one of the treatment system the permittee shall incorporate additional Membrane Bioreactor cassettes and related components into the treatment plant to accommodate phase two.</p> <p>[Subsection C of 20.6.2.3109 NMAC]</p>
21.	<p>The permittee shall submit written notification to NMED within 30 days of the date when the average daily influent volume equals or exceeds 75 percent of the design capacity of phase two of the treatment system, or 75,000 gpd. Within one year of the date when the average daily influent volume equals or exceeds 75 percent of the design capacity of phase two of the treatment system, the permittee shall incorporate additional Membrane Bioreactor cassettes and related components into the treatment plant to accommodate phase three.</p> <p>[Subsection C 20.6.2.3109 NMAC]</p>
22.	<p>Within 90 days of the date when the average daily influent volume equals or exceeds 75% of the available 150-day storage capacity, the permittee shall submit, for NMED approval, construction plans and specifications, and supporting design calculations for an additional synthetically lined storage impoundment(s) for the storage of reclaimed domestic wastewater, certified by a New Mexico registered professional engineer. The plans shall demonstrate that the additional storage impoundment capacity is designed to provide 150 days of storage for the given influent volumes while maintaining two feet of freeboard at all times. The design of the storage impoundments(s) shall conform to the attachment titled, "Ground Water Discharge Permit Conditions for Synthetically Lined Lagoons - Liner Material and Site Preparation, Revision 0.0, May 2007."</p> <p>[Subsection C of 20.6.2.3109 NMAC]</p>
23.	<p>Within one year of the date when the average daily influent volume equals or exceeds 75% of the available 150-day storage capacity. The permittee shall construct additional Synthetically lined impoundment(s) for the storage of reclaimed domestic wastewater. The storage impoundment(s) shall be constructed in accordance with construction plans and specifications submitted to NMED as required by this Discharge Permit. The storage impoundment(s) shall be constructed to maintain two feet of freeboard at all times. The permittee shall notify NMED at least five working days prior to impoundment</p>

#	Terms and Conditions
	<p>construction to allow NMED personnel to be onsite for inspection. Record drawings of the storage impoundment(s) and impoundment liner(s), final impoundment capacity calculations, and results of field compaction and density testing shall be submitted to NMED within 30 days of liner installation. A New Mexico registered professional engineer must certify construction plans and specifications, supporting design calculations, and record drawings of the storage impoundment(s) and liner(s).</p> <p>[Subsection C of 20.6.2.3109 NMAC]</p>
24.	<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. The 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>[Subsection C of 20.6.2.3109 NMAC, 20.7.4 NMAC]</p>

**B. MONITORING AND REPORTING**

#	Terms and Conditions
25.	<p>The permittee shall conduct the following monitoring, reporting, and other requirements listed below in accordance with the monitoring requirements of this Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
26.	<p><b>METHODOLOGY</b> – 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"> <li>a) American Public Health Association, Standard Methods for the Examination of Water and Wastewater (18<sup>th</sup>, 19<sup>th</sup> or current)</li> <li>b) U.S. Environmental Protection Agency, Methods for Chemical Analysis of Water and Waste</li> <li>c) U.S. Geological Survey, Techniques for Water Resources Investigations of the U.S. Geological Survey</li> <li>d) American Society for Testing and Materials, Annual Book of ASTM Standards, Part 31. Water</li> <li>e) U.S. Geological Survey, et al., National Handbook of Recommended Methods for Water Data Acquisition</li> <li>f) Federal Register, latest methods published for monitoring pursuant to Resource Conservation and Recovery Act regulations</li> <li>g) Methods of Soil Analysis: Part 1. Physical and Mineralogical Methods; Part 2. Microbiological and Biochemical Properties; Part 3. Chemical Methods, American Society of Agronomy</li> </ul>

#	Terms and Conditions
	[Subsection B of 20.6.2.3107 NMAC]
27.	<p>The permittee shall submit quarterly monitoring reports to NMED for the most recently completed quarterly period by the 1<sup>st</sup> of February, May, August and November each year.</p> <p>Quarterly monitoring shall be performed during the following periods and submitted as follows:</p> <ul style="list-style-type: none"> <li>a) January 1<sup>st</sup> through March 31<sup>st</sup> (first quarter) – due by May 1<sup>st</sup>;</li> <li>b) April 1<sup>st</sup> through June 30<sup>th</sup> (second quarter) – due by August 1<sup>st</sup>;</li> <li>c) July 1<sup>st</sup> through September 30<sup>th</sup> (third quarter) – due by November 1<sup>st</sup>; and</li> <li>d) October 1<sup>st</sup> through December 31<sup>st</sup> (fourth quarter) – due by February 1<sup>st</sup>.</li> </ul> <p>[Subsection A of 20.6.2.3107 NMAC]</p>

***Facility Monitoring Conditions***

#	Terms and Conditions
28.	<p>The permittee shall measure the totalized volume of wastewater received by the WWTF each month using a totalizing flow meter located prior to the mechanical bar screen. The totalized volumes for each month and average daily shall be submitted 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>
29.	<p>The permittee shall measure the monthly volume of wastewater discharged to the evaporative impoundment system. The permittee shall obtain readings on a monthly basis and calculate the monthly and average daily volume discharged to the impoundment system. The monthly meter readings, and calculated monthly and average daily discharge volumes shall be submitted 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>
30.	<p>The permittee shall measure the monthly volume of wastewater discharged to the re-use irrigation areas. The permittee shall obtain readings on a monthly basis and calculate the monthly and average daily volume discharged to the re-use irrigation areas. The monthly meter readings, and calculated monthly and average daily discharge volumes shall be submitted 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>
31.	<p>All flow meters shall be capable of having their accuracy ascertained under actual working (field) conditions. A field calibration method shall be developed for each flow</p>