

GROUND WATER DISCHARGE PERMIT
The Village at Galisteo Basin Preserve, DP-1583

I. INTRODUCTION

The New Mexico Environment Department (NMED) issues this Discharge Permit (Discharge Permit), DP-1583, to Commonweal Conservancy (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 Village at Galisteo Basin Preserve (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 30,000 gallons per day (gpd) of domestic wastewater from a community development consisting of residential and commercial facilities is discharged through individual residential pretreatment septic tanks and commercial grease interceptors followed by centralized large capacity septic tanks before being conveyed to a constructed wetlands recirculating sand filter system for treatment. Treated wastewater is filtered, disinfected by ultraviolet radiation and stored in four-25,000 gallon reclaimed wastewater storage tanks. Reclaimed wastewater is pumped from the tanks and discharged to a 130,435 square foot subsurface drip irrigation field, a synthetically lined storage lagoon or land applied to 18 acres of land application area (community common area landscaping) by spray irrigation. The discharge contains water contaminants or toxic pollutants which may be elevated above the standards of Section 20.6.2.3103 NMAC. The facility is located off U.S. Highway 285, approximately five miles south of El Dorado, in Sections 6 and 31, Township 14 and 15 North, Range 10 East, Santa Fe County. Ground water most likely to be affected is at a depth of approximately 82 feet and has a total dissolved solids concentration of approximately 190 milligrams per liter.

The permittee's application consists of the materials submitted by Erin English, P.E., on behalf of the Commonweal Conservancy dated October 1, 2008. 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: expanding land application area; 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	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 and 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.	Within 30 days prior to discharging from the facility, the permittee shall give written notification to NMED stating the date the discharge is to commence. [20.6.2.3109.H NMAC]
4.	The permittee is authorized to discharge up to 30,000 gpd of domestic wastewater from a community development consisting of residential and commercial facilities. Domestic wastewater is discharged through individual residential pretreatment septic tanks and commercial grease interceptors followed by centralized large capacity septic tanks before being conveyed to a constructed wetlands recirculating sand filter system for treatment. Treated wastewater is filtered, disinfected by ultraviolet radiation and stored in four-25,000 gallon reclaimed wastewater storage tanks. Reclaimed wastewater is pumped from the tanks and discharged to a 130,435 square foot subsurface drip irrigation field, a synthetically lined storage lagoon or land applied to 18 acres of land application area (community common area landscaping) by spray irrigation. [20.6.2.3104 NMAC, 20.6.2.3106 NMAC]
5.	The permittee shall obtain all necessary easements to lawfully access all components associated with the wastewater treatment facility. This includes obtaining easements for the inspection and maintenance of all individual residential septic tanks, commercial grease interceptors, centralized large capacity septic tanks, and any future components which will be part of the wastewater treatment facility’s collection, treatment and disposal systems. Easements allowing access to components associated with the wastewater treatment facility shall be obtained prior to discharge to each component. [20.6.2.3109 NMAC]
6.	The permittee shall incorporate a Sewer Service Agreement in all property deeds informing residential and commercial property owners that all pretreatment septic tanks, grease interceptors and sewer collection systems connected to the wastewater treatment facility are under the sole responsibility and ownership of The Village at Galisteo Basin Preserve. All property deeds shall include a recorded easement shown on a site drawing for each respective property which clearly locates all pretreatment and conveyance components connected to the wastewater treatment facility for inspection and maintenance. [20.6.2.3109 NMAC]

7.	<p>Reclaimed wastewater discharged from the reclaimed wastewater storage tank shall not exceed the following limitations:</p> <table border="1" data-bbox="266 352 1398 617"> <thead> <tr> <th data-bbox="266 352 631 426">Test</th> <th data-bbox="631 352 885 426">30-day geometric mean</th> <th data-bbox="885 352 1122 426">30-day average</th> <th data-bbox="1122 352 1398 426">maximum</th> </tr> </thead> <tbody> <tr> <td data-bbox="266 426 631 464">Total Nitrogen:</td> <td data-bbox="631 426 885 464">N/A</td> <td data-bbox="885 426 1122 464">N/A</td> <td data-bbox="1122 426 1398 464">20 mg/L</td> </tr> <tr> <td data-bbox="266 464 631 501">Fecal coliform bacteria:</td> <td data-bbox="631 464 885 501">5 Org/100 mL</td> <td data-bbox="885 464 1122 501">N/A</td> <td data-bbox="1122 464 1398 501">23 Org/100 mL</td> </tr> <tr> <td data-bbox="266 501 631 539">BOD₅:</td> <td data-bbox="631 501 885 539">N/A</td> <td data-bbox="885 501 1122 539">10 mg/L</td> <td data-bbox="1122 501 1398 539">15 mg/L</td> </tr> <tr> <td data-bbox="266 539 631 577">Turbidity:</td> <td data-bbox="631 539 885 577">N/A</td> <td data-bbox="885 539 1122 577">3 NTU</td> <td data-bbox="1122 539 1398 577">5 NTU</td> </tr> <tr> <td data-bbox="266 577 631 617">UV Transmissivity:</td> <td data-bbox="631 577 885 617">N/A</td> <td data-bbox="885 577 1122 617">Monitor Only</td> <td data-bbox="1122 577 1398 617">Monitor Only</td> </tr> </tbody> </table> <p>[20.6.2.3109 NMAC]</p>	Test	30-day geometric mean	30-day average	maximum	Total Nitrogen:	N/A	N/A	20 mg/L	Fecal coliform bacteria:	5 Org/100 mL	N/A	23 Org/100 mL	BOD₅:	N/A	10 mg/L	15 mg/L	Turbidity:	N/A	3 NTU	5 NTU	UV Transmissivity:	N/A	Monitor Only	Monitor Only
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8.	<p>The permittee shall discharge reclaimed domestic wastewater to the 130,435 square foot subsurface drip irrigation field, synthetically lined storage lagoon or to 18 acres of land application area. When reclaimed domestic wastewater is discharged to the subsurface drip irrigation field or to the 18 acre land application area, the amount of total nitrogen applied in the wastewater shall not exceed 200 pounds per acre per calendar 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.</p> <p>[20.6.2.3109 NMAC]</p>																								
9.	<p>Prior to discharging from the facility, the permittee shall construct the proposed wastewater collection, treatment and disposal systems, and synthetically lined storage lagoon according to the final construction plans and specifications submitted to NMED on October 1, 2008. The permittee shall notify NMED at the commencement of construction to allow NMED personnel to be onsite for inspection during the construction phase. Record drawings of the finished wastewater treatment facility and synthetically lined storage lagoon 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.</p> <p>[20.6.2.3109 NMAC]</p>																								
10.	<p>Prior to discharging reclaimed wastewater to the 130,435 square foot subsurface drip irrigation field and 18 acres of land application area, the permittee shall install the infrastructure necessary to properly transfer, distribute and apply wastewater. Written confirmation of the distribution system installation including the type and locations of the system, the method of backflow prevention employed (if applicable), and photographic documentation, shall be submitted to NMED prior to discharging.</p> <p>[20.6.2.3109 NMAC]</p>																								
11.	<p>Prior to discharging from commercial businesses having a cafeteria/kitchen, the permittee shall install grease interceptor(s) at all commercial businesses having a cafeteria/kitchen which shall be sized and designed according to Uniform Plumbing Code (UPC) specifications to accommodate the discharge from each cafeteria/kitchen. The sizing of the grease interceptor(s) shall be approved by NMED prior to installation. Record drawings of the grease interceptor(s) shall be submitted to NMED within 30 days of each completion.</p> <p>[20.6.2.3109 NMAC]</p>																								
12.	<p>Prior to discharging from the facility, the permittee shall install fences around the entire</p>																								

	<p>central wastewater treatment facility (constructed wetlands, sand filters, synthetically lined lagoon, and re-use pump station) 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 or locking lids) and shall be maintained throughout the term of this Discharge Permit. [20.6.2.3109 NMAC]</p>
13.	<p>Prior to discharging from the facility, the permittee shall have in place mechanisms to control public access to all residential septic tanks, grease interceptors and centralized large capacity septic tanks designated for each cluster neighborhood and commercial area which are not located within the central wastewater treatment facility. The access openings shall have a secured lid to deter unauthorized access but the lid shall remain above ground, unconcealed by dirt or pavement. A secure lid shall consist of one of the following: a padlock; a twist lock cover requiring special tools for removal; a cover weighing 58 pounds or more, net weight; or a stainless steel hinge and hasp mechanism, and shall be maintained throughout the term of this Discharge Permit. [20.6.2.3107 NMAC]</p>
14.	<p>Prior to discharging from the facility, the permittee shall post signs in English and Spanish 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]</p>
15.	<p>Prior to discharging from the facility, the permittee shall post signs in English and Spanish at all above ground areas receiving reclaimed wastewater (common irrigation sites). The signs shall be posted at the entrance and/or at other locations where public access may occur and shall state:</p> <p style="text-align: center;">NOTICE: THIS AREA IS IRRIGATED WITH RECLAIMED WASTEWATER - DO NOT DRINK.</p> <p style="text-align: center;">AVISO: ESTA ÁREA ESTÁ REGADA CON AGUAS NEGRAS RECOBRADAS - NO TOMAR.</p> <p>Alternate wording and/or graphics may be submitted for NMED approval. [20.6.2.3107 NMAC, 20.6.2.3109 NMAC]</p>
16.	<p>The lagoon liner shall be maintained in such a manner as to avoid conditions which could affect the structural integrity of the lagoon and/or lagoon liner. Such conditions include, but are not limited to:</p> <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

	<ul style="list-style-type: none"> • The presence of large pieces or large quantities of debris in the lagoon. The permittee shall visually inspect the lagoon 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]
17.	<p>The permittee shall maintain a minimum of two feet of freeboard between the liquid level in the lagoon and the top elevation of the lagoon liner at all times. [20.6.2.3107 NMAC, 20.6.2.3109 NMAC]</p>
18.	<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. [20.7.4 NMAC]</p>
19.	<p>The permittee shall meet the following general requirements for above ground use of reclaimed domestic wastewater:</p> <ol 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 and 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. [20.6.2.3109 NMAC]
20.	<p>Prior to discharging to the land application distribution system, the permittee shall install a backflow prevention method to protect all wells connected to the land application distribution system from contamination by reclaimed wastewater. Backflow prevention shall be achieved by installation of a physical air gap between the discharge pipe and the</p>

	<p>liquid surface at least twice the diameter of the discharge pipe, a reduced pressure principal valve assembly or other method approved by NMED. With the exception of a physical air gap, backflow prevention devices shall be tested by a certified backflow assembly tester at the time of installation, repair or relocation and at least on an annual basis thereafter and shall be maintained functional at all times. Inspection and maintenance records for the backflow prevention device shall be kept on-site and available for NMED review upon request.</p> <p>[20.6.2.3109 NMAC]</p>
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MONITORING, REPORTING, AND OTHER REQUIREMENTS

#	Terms and Conditions
21.	<p>The permittee shall conduct the following monitoring, reporting, and other requirements listed below.</p> <p>[20.6.2.3107 NMAC]</p>
22.	<p>METHODOLOGY - Unless otherwise approved in writing by NMED, the permittee shall conduct sampling and analysis in accordance with the most recent edition of the following documents:</p> <ol style="list-style-type: none"> a) American Public Health Association, Standard Methods for the Examination of Water and Wastewater (18th, 19th or current); b) U.S. Environmental Protection Agency, Methods for Chemical Analysis of Water and Waste; c) U.S. Geological Survey, Techniques for Water Resources Investigations of the U.S. Geological Survey; 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>
23.	<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 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>
24.	<p>The permittee shall measure the monthly volume of wastewater discharged to the constructed wetlands treatment system using a totalizing flow meter. The monthly meter</p>

	<p>readings and monthly discharge volumes shall be reported in U.S. gallons and submitted to NMED in the quarterly monitoring reports. The flow meter shall be calibrated on a annual basis and to within +/- 10% of actual flow and kept operational at all times. [20.6.2.3107 NMAC, 20.6.2.3109 NMAC]</p>
25.	<p>The permittee shall measure and record all discharges from the reclaimed wastewater storage tanks to the subsurface drip irrigation field, synthetically lined storage lagoon and land application area using a totalizing flow meter located at the reuse pumping station on a monthly basis. The permittee shall maintain a daily log showing the location of each discharge, totalizing meter readings immediately prior to and after each discharge, and the calculated total volume of each discharge. A summary of the log entries and the calculated monthly discharge volumes applied to the land application area shall be in U.S. gallons and submitted to NMED in the quarterly monitoring reports. The volumes discharged each month, calculated based upon the log, shall be used to calculate nitrogen loading on the LADS. The flow meter shall be calibrated on an annual basis and to within +/- 10% of actual flow and kept operational at all times. [20.6.2.3107.A(1) NMAC, 20.6.2.3109.C(3) NMAC]</p>
26.	<p>Prior to discharging from the facility, the permittee shall install five new monitoring wells. The permittee shall install:</p> <ul style="list-style-type: none"> • One monitoring well (MW-1) hydrologically upgradient of the wastewater treatment facility; • One monitoring well (MW-2) located 20 to 50 feet hydrologically downgradient of the constructed wetlands treatment system; • One monitoring well (MW-3), located 20 to 50 feet hydrologically downgradient of the subsurface drip irrigation field; • One monitoring well (MW-4) located 20 to 50 feet hydrologically downgradient of the synthetically lined storage lagoon; and • One monitoring well (MW-5) located 20 to 50 feet hydrologically downgradient of the Central Green Park. <p>All monitoring well locations shall be approved by NMED prior to installation. The wells shall be completed in accordance with the attachment titled <i>Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions</i>, Revision 1.0, July 2008 (copy enclosed). Construction and lithologic logs shall be submitted to NMED within 30 days of well completion. [20.6.2.3107 NMAC]</p>
27.	<p>Prior to discharging from the facility, following well development and no more than five days after installation of the new monitoring wells required by this Discharge Permit, the permittee shall sample ground water in the new wells and analyze the samples for NO₃-N, TKN, Cl, and TDS. The permittee shall sample:</p> <ul style="list-style-type: none"> • MW-1, intended to be located hydrologically upgradient of the wastewater treatment facility; • MW-2, intended to be located 20 to 50 feet hydrologically downgradient of the constructed wetlands treatment system; • MW-3, intended to be located 20 to 50 feet hydrologically downgradient of the

	<p>subsurface drip irrigation field;</p> <ul style="list-style-type: none"> • MW-4, intended to be located 20 to 50 feet hydrologically downgradient of the synthetically lined storage lagoon; and • MW-5, intended to be located 20 to 50 feet hydrologically downgradient of the Central Green Park. <p>Ground water sample collection, preservation, transport and analysis shall be performed according to the following procedure:</p> <ol style="list-style-type: none"> a) measure the depth-to-ground water from the top of well casing to the nearest hundredth of a foot; b) purge three well volumes of water from the well prior to sample collection; c) obtain samples from the well for analysis; d) properly prepare, preserve and transport samples; and e) analyze samples in accordance with the methods authorized in this Discharge Permit. <p>Depth-to-water measurements, analytical results, including the laboratory QA/QC summary report, and a facility layout map showing the location and number of each well shall be submitted to NMED within 45 days of the installation of the monitoring wells. [20.6.2.3107 NMAC]</p>
28.	<p>Prior to discharging from the facility, the permittee shall survey all wells approved by NMED for Discharge Permit monitoring purposes to a U.S. Geological Survey (USGS) or other permanent benchmark. Survey data shall include northing, easting and elevation to the nearest hundredth of a foot or in accordance with the "Minimum Standards for Surveying in New Mexico" (12.8.2 NMAC). A survey elevation shall be established at the top-of-casing, with a permanent marking indicating the point of survey. The survey shall be completed and certified by a licensed New Mexico professional surveyor. Depth-to-water shall be measured to the nearest hundredth of a foot in all surveyed wells, and the data shall be used to develop a map showing the location of all monitoring wells and the direction and gradient of ground water flow at the facility. The data and map of ground water flow direction at the facility shall be submitted to NMED within 30 days of survey completion. [20.6.2.3107 NMAC]</p>
29.	<p>The permittee shall perform quarterly ground water sampling in five monitoring wells and analyze the samples for NO₃-N, TKN, Cl, and TDS. The permittee shall sample:</p> <ul style="list-style-type: none"> • MW-1, intended to be located hydrologically upgradient of the wastewater treatment facility; • MW-2, intended to be located 20 to 50 feet hydrologically downgradient of the constructed wetlands treatment system; • MW-3, intended to be located 20 to 50 feet hydrologically downgradient of the subsurface drip irrigation field; • MW-4, intended to be located 20 to 50 feet hydrologically downgradient of the synthetically lined storage lagoon; and • MW-5, intended to be located 20 to 50 feet hydrologically downgradient of the Central Green Park.

	<p>Ground water sample collection, preservation, transport and analysis shall be performed according to the following procedure:</p> <ol style="list-style-type: none"> a) measure the depth-to-ground water from the top of well casing to the nearest hundredth of a foot; b) purge three well volumes of water from the well prior to sample collection; c) obtain samples from the well for analysis; d) properly prepare, preserve and transport samples; and e) analyze samples in accordance with the methods authorized in this Discharge Permit. <p>Depth-to-water measurements, analytical results, including the laboratory QA/QC summary report, and a facility layout map showing the location and number of each well shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107 NMAC]</p>
30.	<p>The permittee shall develop a ground water elevation contour map on a quarterly basis using the monitoring well survey data and quarterly depth-to-water measurements required by this Discharge Permit. The ground water elevation contour map shall depict the ground water flow direction based on the ground water elevation contours. The data and ground water elevation contour maps shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107 NMAC]</p>
31.	<p>The permittee shall sample reclaimed wastewater from the sampling port located at the reuse pump station on a quarterly basis and analyze the samples for TKN, NO₃-N, TDS and Cl. Samples shall be properly prepared, preserved, transported and analyzed in accordance with the methods authorized in this Discharge Permit. Analytical results shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107 NMAC]</p>
32.	<p>The permittee shall perform the following analyses on reclaimed wastewater samples collected from the sampling port located at the reuse pump station using the sampling method and frequency indicated:</p> <ul style="list-style-type: none"> • Fecal coliform bacteria: grab sample once per week; • BOD₅: grab sample once per two weeks; • The permittee shall continuously monitor reclaimed wastewater for turbidity after the final treatment process during discharge. The permittee shall record the average and maximum turbidity values for each calendar month. • The permittee shall record UV transmissivity values whenever fecal coliform samples are collected. <p>Samples shall be properly prepared, preserved, transported and analyzed in accordance with the methods authorized in this Discharge Permit. Analytical results, monthly average and maximum turbidity values, and a copy of the log of UV transmissivity values shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107 NMAC]</p>
33.	<p>The permittee shall complete individual land application data sheets (LADS) quarterly that document the amount of nitrogen applied to the 130,435 square foot subsurface drip irrigation field and 18 acre land application area. Each LADS (copy enclosed) shall reflect</p>

	<p>the nitrogen concentration from the most recent wastewater analysis and the measured discharge volumes for each month. The LADS shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107 NMAC]</p>
34.	<p>The permittee shall keep a log of all additional fertilizer applied to all land application areas. The log shall contain the date of fertilizer application, the type and nutrient concentration of the fertilizer, and the amount of fertilizer applied to each field. A summary of the log entries shall be submitted to NMED in the quarterly monitoring reports and summarized on the LADS. [20.6.2.3107 NMAC]</p>
35.	<p>The permittee shall inspect all grease interceptors on a quarterly basis and pump each as needed. Inspection records shall be kept on-site. Pumping invoices shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3109 NMAC]</p>
36.	<p>The permittee shall inspect all residential septic tanks within each neighborhood and all centralized large capacity septic tanks designated for each neighborhood and commercial area annually for the accumulation of scum and solids. In the event that the scum layer exceeds three inches or the settled solids occupy 50% of the tank or more, the contents of the tanks shall be pumped by a licensed hauler. The inspection and pumping records shall be submitted to NMED in the monitoring reports due by February 1st each year. [20.6.2.3107 NMAC]</p>
37.	<p>The permittee shall inspect all centralized large capacity septic tanks which are utilized as lift stations on a quarterly basis, and clean each as needed. The inspection and cleaning records shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107 NMAC]</p>
38.	<p>The permittee shall visually inspect the area above the subsurface drip irrigation field semi-annually to ensure proper maintenance. Any conditions that indicate damage to the subsurface drip irrigation system shall be corrected. Such conditions include, but are not limited to erosion damage, animal activity/damage, or evidence of seepage. The permittee shall keep a log of the inspection findings and repairs made. [20.6.2.3107 NMAC]</p>

CONTINGENCY PLAN

#	Terms and Conditions
39.	<p>In the event that monitoring indicates ground water standards are violated during the term of this Discharge Permit, upon closure of the facility or during post-closure monitoring, the permittee shall collect a confirmatory sample from the monitoring well within 15 days to confirm the initial sampling results. Within 15 days of confirmation of ground water contamination, 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</p>

	contamination. [20.6.2.1203 NMAC, 20.6.2.4105.A(8) NMAC]
40.	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]
41.	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]
42.	In the event that analytical results of a quarterly treated 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: <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>
43.	In the event that analytical results of a reclaimed domestic wastewater sample exceed any of the maximum limitations for BOD ₅ , Turbidity, 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: <ul style="list-style-type: none"> a) NMED shall be notified immediately that the contingency plan is being enacted. b) The permittee shall immediately cease discharging reclaimed domestic wastewater to the above ground irrigation areas. c) The permittee shall examine the operation and maintenance log, required under the

	<p>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>When the analytical results from samples of reclaimed domestic wastewater, sampled as required by this Discharge Permit, no longer exceed any of the maximum limitations, the permittee may resume discharging reclaimed wastewater to the land application area.</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>
44.	<p>In the event that ground water flow information obtained pursuant to this Discharge Permit indicates that a monitoring well(s) was not installed hydrologically downgradient of the intended discharge location(s), the permittee shall install a replacement well(s) within 90 days of notification from NMED. The well location(s) shall be approved by NMED prior to installation and completed in accordance with the attachment titled <i>Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions</i>, Revision 1.0, July 2008. Construction and lithologic logs shall be submitted to NMED within 30 days of well completion. [20.6.2.3107 NMAC]</p>
45.	<p>In the event that LADS show that the amount of nitrogen in wastewater applied exceeds 200 pounds per acre per year or the subsurface drip irrigation field or land application area, the permittee shall submit a corrective action plan for the reduction of nitrogen loading for the respective 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>
46.	<p>In the event that a minimum of two feet of freeboard cannot be maintained in the synthetically lined storage lagoon 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>
47.	<p>In the event that inspection findings reveal significant damage likely to affect the ability of the synthetically lined storage lagoon to contain contaminants, the permittee shall submit a corrective action plan for the repair or replacement of the lagoon liner 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>
48.	<p>In the event that an inspection of the subsurface drip irrigation field reveals failure, the permittee shall enact the following contingency plan:</p> <ol style="list-style-type: none"> a) Within 24 hours of the discovered failure, the permittee shall notify NMED of the

	<p>failure and public access to the area shall be restricted.</p> <p>b) The permittee shall conduct a physical inspection of the treatment and disposal system to identify additional failures.</p> <p>c) The permittee shall submit a corrective action plan for NMED approval to address the failure and propose methods of correction. The corrective action plan shall be submitted within 30 days of the discovered failure and shall be implemented immediately upon NMED approval.</p> <p>[20.6.2.3107 NMAC, 20.6.2.3109 NMAC]</p>
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CLOSURE PLAN

#	Terms and Conditions
49.	<p>Upon closure of the facility, the permittee shall perform the following closure measures:</p> <p>a) Complete the installation of all monitoring wells as required by this Discharge Permit.</p> <p>b) Remove or plug all lines leading to the septic tanks, the treatment system, the synthetically lined storage lagoon, the subsurface drip irrigation field and the land application areas so that a discharge can no longer occur.</p> <p>c) Drain and/or evaporate all liquids from all cells within the constructed wetlands recirculating sand filter and synthetically lined storage lagoon and dispose of all sludge in accordance with all local, state, and federal (40 CFR Part 503) regulations.</p> <p>d) Drain and/or evaporate liquids from all grease interceptors, all individual residential septic tanks, all centralized large capacity septic tanks designated for neighborhoods/commercial areas and the reclaimed wastewater storage tanks and dispose of all sludge in accordance with all local, state, and federal (40 CFR Part 503) regulations.</p> <p>e) Perforate or remove the synthetic liners from the constructed wetlands cells recirculating sand filter and storage lagoon and re-grade each area with clean fill to blend with surface topography and prevent ponding.</p> <p>f) Backfill all grease interceptors, all individual residential septic tanks and centralized large capacity septic tanks and re-grade each area with clean fill to blend with surface topography and prevent ponding or remove from each site.</p> <p>g) Continue ground water monitoring as required by this Discharge Permit for two years after closure to confirm the absence of ground water contamination. If monitoring results show that the ground water standards in Section 20.6.2.3103 NMAC are being violated, the permittee shall implement the contingency plan required by this Discharge Permit.</p> <p>h) Following notification from NMED that post-closure monitoring may cease, the permittee shall plug and abandon the monitoring wells in accordance with the attachment titled <i>Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions</i>, Revision 1.0, July 2008.</p> <p>When all post-closure requirements have been met, the permittee may request to terminate the Discharge Permit.</p> <p>[20.6.2.3107.A(11) NMAC]</p>

GENERAL TERMS AND CONDITIONS

#	Terms and Conditions
50.	<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>
51.	<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.</p> <p>[20.6.2.3107.A NMAC]</p>
52.	<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 monitoring equipment and repair or replacement of any equipment used in the permittee's waste or wastewater treatment and disposal system.</p> <p>[20.6.2.3107.A NMAC]</p>
53.	<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.</p> <p>[20.6.2.3107.A NMAC]</p>
54.	<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.</p> <p>[20.6.2.3107.A NMAC]</p>
55.	<p>INSPECTION and ENTRY - The permittee shall allow the Secretary or an authorized representative, upon the presentation of credentials, to:</p> <ul 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.

	<p>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.</p> <p>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.</p> <p>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.</p> <p>[20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]</p>
56.	<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.</p> <p>[20.6.2.3107 NMAC, 74-6-9(B) & (E) WQA]</p>
57.	<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.</p> <p>[20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]</p>
58.	<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.</p> <p>[20.6.2.1203 NMAC]</p>
59.	<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 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>
60.	<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>
61.	<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,</p>

	<p>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>
62.	<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. [74-6-10.2(A-F) WQA]
63.	<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>
64.	<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>
65.	<p>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]</p>
66.	<p>TERM - Pursuant to WQA 74-6-5(I) and Subsection H of 20.6.2.3109 NMAC, the term of this Discharge Permit is seven years from its effective date or five years from the date the discharge commences, whichever occurs first. To renew this Discharge Permit, the permittee must submit an application for renewal at least 180 days before the termination date.</p>

	[20.6.2.3109.H NMAC, 74-6-5(I) WQA]
67.	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

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