GROUND WATER DISCHARGE PERMIT RENEWAL
Holloman Air Force Base, DP-1127

I. INTRODUCTION

The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal (Discharge Permit), DP-1127, to Holloman Air Force Base (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 Holloman Air Force Base (HAFB) 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:

> HAFB's Waste Water Treatment Facility (WWTF) is authorized to receive, treat and discharge up to 4.5 million gallons per day (mgd) of domestic wastewater using an activated sludge treatment system. Treated domestic wastewater is discharged to Lake Holloman under a National Pollutant Discharge Elimination System (NPDES) and reclaimed domestic wastewater is discharged to the Holloman Air Force Base Golf Course via spray irrigation following storage in a 400,000-gallon holding tank and for dust suppression and construction purposes for areas within the Base.
>
> In addition, HAFB is authorized to discharge to various septic tank/leachfield systems located on the Base that are considered discharges to protectable water as defined in Subsection A of 20.6.2.3101 NMAC. Other septic tank/leachfield systems exist on the Base but discharge to ground water that NMED has determined is not protectable. These systems are <u>not</u> covered under this Discharge Permit. The permitted septic tank/leachfield systems are identified by the Building Identification Numbers (BIN) which they serve and are listed as follows: BIN-149, BIN-312, BIN-375, BIN-864, BIN-885, BIN-887, BIN-1022, BIN-1066, BIN-1195, BIN-75600 and BIN-1290.

The HAFB-WWTF is located approximately 10 miles west of Alamogordo. The WWTF is located in Section 15, Township 17S, Range 08E, Otero County and discharges under a NPDES Permit in Sections 21, 22, 23, 27 and 28 Township 17S, Range 08E, Otero County. The HAFB Golf Course which will be receiving reclaimed domestic wastewater is located in Sections 14 and 23, Township 17S, Range 08E, Otero County. The septic tank/leachfield systems are located as follows:

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Septic Tank ID	**Location**		
	Section	***Township***	***Range***
149	12	17S	08E
312	12	17S	08E
375	12	17S	08E
864	10	17S	08E
885	10	17S	08E
887	10	17S	08E
1022	11	17S	08E
1066	1	17S	08E
1195	27	16S	08E
75600	35	16S	08E
1290	12	16S	08E

The ground water most likely to be affected by the discharge is at a depth of approximately 10-18 feet and has a total dissolved solids concentration of approximately 1,900-33,000 milligrams per liter.

The original Discharge Permit was issued on April 24, 1997 and subsequently renewed on October 28, 2002. The permittee's application consists of the materials submitted by David Goldfein, Brigadier General, U.S. Air Force, dated September 11, 2007 and additional information submitted by David Griffin on June 9, 2009 and June 23, 2009. 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: ceasing discharges; changing waste management practices; expanding monitoring requirements 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

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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 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 4.5 million gallons per day (mgd) of domestic wastewater using an activated sludge treatment system. Treated domestic wastewater is discharged to Lake Holloman under a National Pollutant Discharge Elimination System (NPDES) and reclaimed domestic wastewater is discharged to the Holloman Air Force Base Golf Course via spray irrigation following storage in a 400,000-gallon holding tank

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	and for dust suppression and construction purposes for areas within the Base. In addition, HAFB is authorized to discharge to various septic tank/leachfield systems located on the Base that are considered discharges to protectable water as defined in Subsection A of 20.6.2.3101 NMAC. Other septic tank/leachfield systems exist on the Base but discharge to ground water that NMED has determined is not protectable. These systems are <u>not</u> covered under this Discharge Permit. The permitted septic tank/leachfield systems are identified by the Building Identification Numbers (BIN) which they serve and are listed as follows: BIN-149, BIN-312, BIN-375, BIN-864, BIN-885, BIN-887, BIN-1022, BIN-1066, BIN-1195, BIN-75600 and BIN-1290. [20.6.2.3104 NMAC, 20.6.2.3106 NMAC]
4.	Within 120 days of the effective date of this Discharge Permit (by [date]), the permittee shall submit to NMED an up-to-date scaled map of the entire facility. The map shall be clear and legible, and drawn to a scale such that all necessary information is plainly shown and identified. The map shall show the scale in feet or metric measure, a graphical scale, a north arrow, and the effective date of the map. Documentation identifying the means used to locate the mapped objects (i.e., GPS, land survey, digital map interpolation, etc.) and the relative accuracy of the data (i.e., +/- XX feet or meters) shall be included with the map. The map shall include the following elements: a) The property boundary; b) Location of all supply wells; c) Location of meters used to measure wastewater discharges; d) Location of Wastewater Treatment Facility, all septic tanks (including size), leachfields, and land application areas; and e) Location of monitoring wells used to monitor discharges authorized under this Discharge Permit (including permanent designation and TDS concentrations). If these items cannot be directly shown, due to their location inside of existing structures or because they are buried without surface identification, they shall be identified on the map in a schematic format and called out as such. The facility map shall be updated and resubmitted to NMED within 120 days of any additions or changes to the facility layout which includes any of the items listed above. [20.6.2.3106 NMAC, 20.6.2.3109 NMAC]
5.	Prior to initial discharge to the golf course, the permittee shall give written notification to NMED stating the date the discharge is to commence and the specific location. [20.6.2.3109.H NMAC]
6.	Reclaimed wastewater discharged to the golf course shall not exceed the following limitation: **Total Nitrogen: 20 mg/L**. [20.6.2.3109 NMAC]
7.	Reclaimed wastewater discharged to the golf course shall not exceed the following limitations:

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Test	30-day geometric mean	30-day average	maximum
Fecal coliform bacteria:	**100 Org/100 mL**	**N/A**	**200 Org/100 mL**
BOD_5:	**N/A**	**30 mg/L**	**45 mg/L**
TSS:	**N/A**	**30 mg/L**	**45 mg/L**
TRC:	**N/A**	**Monitor Only**	**Monitor Only**

All samples shall be collected following the final treatment process. [20.6.2.3109 NMAC]

8. The permittee is authorized to apply reclaimed domestic wastewater to the golf course. 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. Application of reclaimed domestic wastewater to other locations is not authorized. [20.6.2.3109 NMAC]

9. 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 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. [20.6.2.3109 NMAC]

10. The permittee shall maintain fences around the WWTF 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]

11. The permittee shall maintain signs at the WWTF entrance and other areas in the facility 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]

12. Prior to discharging to the golf course, 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. All signs shall remain visible and legible for the term of this Discharge Permit. [20.6.2.3107 NMAC, 20.6.2.3109 NMAC]

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13.	The permittee shall remove solids from the treatment facility as needed, depending on process control testing such as: the 30-minute settleometer test, the Mixed Liquor Suspended Solids concentration or the Mean Cell Residence Time. The solids shall be contained, transported, and disposed of in accordance with all local, state, and federal (40 CFR Part 503) regulations. [20.6.2.3109 NMAC]
14.	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]
15.	The permittee shall meet the following general requirements for above ground use of reclaimed domestic wastewater: a) 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. b) 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. c) The discharge of reclaimed wastewater shall be confined to the area designated and approved for receiving the wastewater. d) 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. e) 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 transfer 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]
16.	The permittee shall meet the following setbacks, access restrictions and equipment requirements for spray irrigation using Class 1B reclaimed domestic wastewater: a) A minimum 100-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) Whenever reclaimed wastewater is used in areas with public access it shall be applied at times and in a manner that minimizes public contact. d) The spray irrigation system shall utilize only low trajectory spray nozzles. [20.6.2.3109 NMAC]
17.	Within 180 days of the effective date of this Discharge Permit (by DATE), the permittee shall provide access to each septic tank by installing two 24-inch openings. The access openings shall be located above the inlet and outlet piping of the septic tank to facilitate

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	inspection of the tank's interior, repair of the internal piping and removal of sludge and scum. The access openings shall be extended from the tank to at least three inches above the ground surface or as approved by NMED. 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. [20.6.2.3107 NMAC]

MONITORING, REPORTING, AND OTHER REQUIREMENTS

#	**Terms and Conditions**
18.	The permittee shall conduct the following monitoring, reporting, and other requirements listed below. [20.6.2.3107 NMAC]
19.	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: 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. [20.6.2.3107.B NMAC]
20.	The permittee shall submit quarterly monitoring reports to NMED by the 1st of February, May, August and November each year. Quarterly monitoring shall be performed during the following periods: • 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. [20.6.2.3107 NMAC]
21.	The permittee shall measure the totalized, daily average and peak volume of wastewater discharged to the treatment facility each month using a primary measuring device equipped with head sensing, totalizing and chart recording/data logging mechanisms. The totalized, daily average and peak discharge volumes for each month shall be submitted to NMED in the quarterly monitoring reports. The flow meter shall be calibrated against the primary measuring device to within +/- 10% of actual flow and kept operational at all times.

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	[20.6.2.3107 NMAC]
22.	The permittee shall measure and record daily discharges from the wastewater treatment system to the golf course using a totalizing flow meter on the transfer line. The calculated 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. [20.6.2.3107.A(1) NMAC, 20.6.2.3109.C(3) NMAC]
23.	The permittee shall estimate the volume of wastewater discharged monthly for dust suppression and construction purposes on a monthly basis. The estimated volume of wastewater discharged shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107.A(1) NMAC, 20.6.2.3109.H(1) NMAC]
24.	Prior to discharging to the golf course, the permittee shall install three new monitoring wells. The permittee shall install: • One monitoring well (MW-01) hydrologically upgradient of the golf course, • One monitoring well (MW-02) located 20 to 50 feet hydrologically downgradient of an area within the golf course which receives reclaimed domestic wastewater, • One monitoring well (MW-03) located at an alternate location from MW-02 and 20 to 50 feet hydrologically downgradient of an area within the golf course which receives reclaimed domestic wastewater. All monitoring well locations shall be approved by NMED prior to installation. The wells shall be completed in accordance with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions*, 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]
25.	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 NO_3-N, TKN, Cl, and TDS. The permittee shall sample: • MW-01, intended to be located hydrologically upgradient of the golf course; • MW-02, intended to be located hydrologically downgradient of an area within the golf course which receives reclaimed domestic wastewater; and • MW-03, intended to be located at an alternate location from MW-02 and hydrologically downgradient of an area within the golf course which receives reclaimed domestic wastewater. Ground water sample collection, preservation, transport and analysis shall be performed according to the following procedure: 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

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	e) analyze samples in accordance with the methods authorized in this Discharge Permit. 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]
26.	Prior to discharging to the golf course, 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]
27.	The permittee shall perform quarterly ground water sampling in the three monitoring wells associated with the golf course and analyze the samples for NO_3-N, TKN, Cl, and TDS. The permittee shall sample: • MW-01, intended to be located hydrologically upgradient of the golf course; • MW-02, intended to be located hydrologically downgradient of an area within the golf course which receives reclaimed domestic wastewater; and • MW-03, intended to be located at an alternate location from MW-02 and hydrologically downgradient of an area within the golf course which receives reclaimed domestic wastewater. Ground water sample collection, preservation, transport and analysis shall be performed according to the following procedure: 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. 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]
28.	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

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	water elevation contour maps shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107 NMAC]
29.	The permittee shall sample reclaimed wastewater from the sampling station located after the final treatment process and prior to the NPDES outfall on a quarterly basis and analyze the samples for TKN, NO_3-N, TDS and Cl. Analytical results shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107 NMAC]
30.	The permittee shall perform the following analyses on reclaimed wastewater samples collected from the sampling station located after the final treatment process, and prior to the NPDES outfall using the sampling method and frequency indicated: • TSS: six-hour composite sample three times per week; • Fecal coliform bacteria: grab sample at peak daily flow three times per week, • BOD_5: six-hour composite sample three times per week, • The permittee shall record TRC concentrations whenever fecal coliform samples are collected. Analytical results and a copy of the log of TRC concentrations shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107 NMAC]
31.	On an annual basis, the permittee shall sample reclaimed wastewater from the sampling station located after the final treatment process, and prior to the NPDES outfall by collecting a 24-hour flow weighted composite sample and analyze the composite sample for the following inorganic chemicals: aluminum, arsenic, barium, boron, cadmium, chromium, cobalt, copper, cyanide, fluoride, iron, lead, manganese, molybdenum, mercury (total unfiltered), pH, nickel, radioactivity: combined radium-226 & radium-228, selenium, silver, sulfate, uranium, zinc On an annual basis, the permittee shall sample reclaimed wastewater from the sampling station located after the final treatment process, and prior to the NPDES outfall by collecting a grab sample and analyze the grab sample for the following organic chemicals: benzene, benzo-a-pyrene, carbon tetrachloride, chloroform, 1,1-dichloroethane, 1,2-dichloroethane (EDC), 1,1-dichloroethylene (1,1-DCE), Phenols, Polychlorinated biphenyls (PCBs), toluene, 1,1,2,2-tetrachloroethane, 1,1,2,2-tetrachloroethylene (PCE), 1,1,1-trichloroethane, 1,1,2-trichloroethane

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	ethylbenzene ethylene dibromide (EBD) methylene chloride PAHs: total naphthalene plus monomethylnaphthalenes 1,1,2-trichloroethylene (TCE) vinyl chloride xylenes (total) On an annual basis, the permittee shall sample untreated wastewater from the inlet of the treatment facility (prior to any treatment) by collecting a grab sample and analyze the grab sample for fats, oils and grease (FOG). Analytical results shall be submitted to NMED in the monitoring reports due by February 1st each year. [20.6.2.3107 NMAC]
32.	The permittee shall sample wastewater from the septic tank/leachfield systems on an annual basis for TKN ,TDS and Cl. The wastewater samples shall be collected from BIN-149, BIN-312, BIN-375, BIN-882, BIN-864, BIN-885, BIN-886, BIN-887, BIN-1022, BIN-1066, BIN-1195, BIN-75600, BIN-1290. Analytical results shall be submitted to NMED in the monitoring report due by February 1st of each year. [20.6.2.3107 NMAC]
33.	The permittee shall inspect the septic tanks semi-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 records and pumping invoices shall be submitted to NMED in the monitoring reports due by February and August 1st of each year. [20.6.2.3107 NMAC]
34.	The permittee shall visually inspect the area above the leachfields semi-annually to ensure proper maintenance. Any conditions that indicate damage to the leachfields shall be corrected. Such conditions include, but are not limited to erosion damage, animal activity/damage, woody shrubs, or evidence of seepage. The inspection records shall be submitted to NMED in the monitoring reports due by February and August 1st of each year. [20.6.2.3107 NMAC]
35.	The permittee shall complete land application data sheets (LADS) quarterly that document the amount of nitrogen applied to the golf course. 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]
36.	The permittee shall keep a log of all additional fertilizer applied to the golf course. 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. [20.6.2.3107 NMAC]

CONTINGENCY PLAN

#	**Terms and Conditions**
37.	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

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	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 though 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]
38.	In the event that analytical results of a quarterly reclaimed domestic wastewater sample exceed the total nitrogen limit 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: 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. 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]
39.	In the event that analytical results of a reclaimed domestic wastewater sample exceed any of the maximum limitations for BOD_5, TSS, or fecal coliform bacteria set by this Discharge Permit for discharges to the golf course, 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: 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 golf course. c) 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. 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. If the facility is required to enact the contingency plan more than two times in a calendar

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	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. [20.6.2.3107.A(10) NMAC]
40.	In the event that an inspection of the leachfields reveals failure, the permittee shall enact the following contingency plan: a) Within 24 hours of the discovered failure, the permittee shall: • restrict public access to the area; • take immediate actions to stop/reduce the system failure or impacts from it; • disinfect contaminated soil and other materials; and • notify NMED of the failure including information on which system failed, the size/volume of the discharge resulting from the failure, and the immediate actions taken b) The permittee shall conduct a physical inspection of the treatment and disposal system(s) to identify additional failures. c) Within 1 week of the discovered failure, the permittee shall submit written notification to NMED of the information obtained for a) and b) above in addition to the following: • The names, addresses, and phone numbers of the person in charge of the facility and the owner/operator; • The name and address of the facility; • The date, time, specific location, and duration of the discharge • The source and the cause of the discharge; • The estimated volume of the discharge; and • All actions taken to mitigate the immediate damage from the discharge since the failure began. d) 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 15 days of the discovered failure and shall be implemented immediately upon NMED approval. [20.6.2.1203 NMAC, 20.6.2.3107 NMAC, 20.6.2.3109 NMAC]
41.	In the event that information available to NMED indicates that a well(s) is not appropriately constructed to effectively monitor ground water quality, contains insufficient water to allow the collection of representative ground water samples, or is not completed in a manner that is protective of ground water quality, the permittee shall install a replacement monitoring well(s) within 90 days of notification from NMED. Replacement monitoring well location(s) shall be approved by NMED prior to installation and completed in accordance with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions*, Revision 1.0, July 2008. Construction and lithologic logs shall be submitted to NMED within 30 days of well completion. Upon completion of the replacement monitoring well(s), the monitoring well(s) requiring replacement shall be properly plugged and abandoned. The well(s) shall be plugged and abandoned in accordance with the abandonment details in the attachment titled *Ground*

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	Water Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.0, July 2008, and any applicable local, state, and federal regulations. Documentation describing the plugging and abandonment procedures, including photographic documentation, shall be submitted to NMED within 30 days of completed well abandonment. [20.6.2.3107 NMAC]
42.	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, the permittee shall install a replacement well(s) within 90 days of notification from NMED. The well(s) location shall be approved by NMED prior to installation and completed in accordance with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions*, 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]
43.	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]
44.	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]
45.	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]

CLOSURE PLAN

#	**Terms and Conditions**
46.	Upon discontinuance of transfer of reclaimed domestic wastewater to the golf course, the permittee shall remove or plug all lines leading to the golf course so that transfer can no longer occur. [20.6.2.3107.A(11) NMAC]
47.	Upon closure of the facility, the permittee shall perform the following closure measures: a) Complete the installation of all monitoring wells as required by this Discharge Permit. b) Remove or plug all lines leading to the treatment system so that transfer and discharge can no longer occur. c) Remove or plug all lines conveying wastewater to the septic tank/leachfield systems so

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	that a discharge can no longer occur. d) Drain and/or evaporate all liquids from all treatment units and dispose of all sludge in accordance with all local, state, and federal (40 CFR Part 503) regulations. e) Remove or demolish all tanks and re-grade area with clean fill to blend with surface topography and prevent ponding. f) 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. g) Following notification from NMED that post-closure monitoring may cease, the permittee shall plug and abandon the monitoring well(s) in accordance with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions*, Revision 1.0, July 2008. When all post-closure requirements have been met, the permittee may request to terminate the Discharge Permit. [20.6.2.3107.A(11) NMAC]

GENERAL TERMS AND CONDITIONS

#	Terms and Conditions
48.	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: 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. [20.6.2.3107.A NMAC]
49.	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]
50.	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

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	in the permittee's waste or wastewater treatment and disposal system. [20.6.2.3107.A NMAC]
51.	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]
52.	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]
53.	INSPECTION and ENTRY - The permittee shall allow the Secretary or an authorized representative, upon the presentation of credentials, to: 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]
54.	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]
55.	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]
56.	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]
57.	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

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	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. [20.6.2.3107.C NMAC]
58.	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. [20.6.2.1202 NMAC]
59.	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]
60.	CRIMINAL PENALTIES – Any person who knowingly violates or knowingly causes or allows another person to: 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]
61.	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]
62.	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]

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63.	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]
64.	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]
65.	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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