

GROUND WATER DISCHARGE PERMIT RENEWAL
Village of Taos Ski Valley Sludge Disposal Site, DP-1383

I. INTRODUCTION

The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal and Modification (Discharge Permit), DP-1383, to Bruce A. Kelly and the Village of Taos Ski Valley Wastewater Treatment Plant (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 of Taos Ski Valley Wastewater Treatment Plant (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 3,700 gallons per day (gpd), not to exceed 80,000 gallons per year, of treated domestic wastewater sludge is land applied to a disposal site. Raw domestic wastewater is treated by extended aeration, filtration and disinfection at the Village of Taos Ski Valley Wastewater Treatment Plant and resultant wastewater sludge is then dewatered through a belt press operation, transported to the land application site and disked into the soil. 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 on the west side of State Highway 64, approximately 1.5 miles northwest of the Rio Grande Gorge Bridge, in Section 15, Township 26N, Range 11E, Taos County. Ground water most likely to be affected is at a depth of approximately 370-588 feet and has a total dissolved solids concentration of approximately 209 milligrams per liter.

The original Discharge Permit was issued on October 11, 2002. The permittee's application consists of the materials submitted by Bruce A. Kelly dated May 7, 2009 and additional information received on June 17, 2009, June 18, 2009 and July 14, 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: expanding land application areas; changing waste management practices; expanding monitoring requirements; and/or implementing abatement of water pollution.

Issuance of this Discharge Permit does not relieve the Village of Taos Ski Valley 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)	NMSA	New Mexico Statutes Annotated
CFR	Code of Federal Regulations	NO ₃ -N	nitrate-nitrogen
CFU	colony forming units	NTU	nephelometric turbidity units
Cl	chloride	TDS	total dissolved solids
LADS	land application data sheet(s)	TKN	total Kjeldahl nitrogen
mg/L	milligrams per liter	TSS	total suspended solids
mL	milliliters	total nitrogen	TKN+NO ₃ -N
NMAC	New Mexico Administrative Code	WQCC	Water Quality Control Commission
NMED	New Mexico Environment Department		

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 NMAC and 20.6.2.3103 NMAC are not violated. [20.6.2.3103 NMAC]
3.	The permittee is authorized to discharge up to 3,700 gallons per day, not to exceed 80,000 gallons per year, of treated domestic wastewater sludge from the Village of Taos Ski Valley Wastewater Treatment Plant to a five-acre disposal cell. Treatment, storage and disposal of sludge shall be in accordance with requirements set forth in 40 CFR Part 503. [20.6.2.3104 NMAC]
4.	The permittee shall maintain fences around the entire disposal facility to prevent unrestricted access. A minimum of a three-strand barbed wire fence and locked gate shall surround the site. [20.6.2.3109 NMAC]
5.	Within 60 of days of the effective date of this Discharge Permit (by [date]), the permittee shall post and maintain signs at the facility entrance and every 500 feet along the boundary of the five acre disposal site which states the following in both English and Spanish: "Notice – Domestic Sludge Disposal Area-Keep Out." A sign with the name, phone number, emergency phone number, and location of facility including township, range, and section shall be posted at the entrance gate. All tanks shall be labeled with the name of their contents and tanks containing contaminated water should be labeled "Not Potable Water". All signs shall remain visible and legible for the term of this Discharge Permit. Site security shall be the responsibility of the permittee. The permittee shall accept wastes only during established business hours. [20.6.2.3109 NMAC]
6.	To prevent run-on and run-off from a 25-year storm event, within 60 of days of the effective date of this Discharge Permit (by [date]), the permittee shall construct and maintain a 24-inch earthen berm surrounding the perimeter of the facility. In addition, the permittee shall construct and maintain shallow (minimum depth of six inches) storm water diversion bar trenches parallel to and on each side of the site entrance gate. The berms shall be inspected on a regular basis and after any major rainfall event and repaired as necessary. [20.6.2.3107 NMAC, 20.6.2.3109 NMAC]
7.	Sludge shall be applied to the five-acre disposal cell by small body dump truck. The sludge shall be evenly distributed. The amount of total nitrogen applied with the sludge shall not exceed 200 pounds per acre per year. Excessive ponding shall be prevented. [20.6.2.3109 NMAC]

MONITORING, REPORTING, AND OTHER REQUIREMENTS

#	Terms and Conditions
8.	The permittee shall conduct the monitoring, reporting, and other requirements listed below. [20.6.2.3107 NMAC]
9.	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

	<p>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>
10.	<p>The permittee shall submit semi-annual monitoring reports to NMED by the 1st of February and August each year.</p> <p>Semi-annual monitoring shall be performed during the following periods:</p> <ul style="list-style-type: none"> • January 1st through June 30th (first half) – report due by August 1st; and • July 1st through December 31st (second half) – report 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>. [20.6.2.3107 NMAC]</p>
11.	<p>The permittee shall create a manifest for each waste pick-up/disposal recording the following information: the name of the hauling company if other than the Village of Taos Ski Valley, the date of pick-up and disposal, the volume of waste, and the disposal location (location within the cell). A log of the manifest records listing the date of pick-up, the volume of waste, and the disposal location shall be submitted with the semi-annual monitoring report. [20.6.2.3107 NMAC]</p>
12.	<p>The permittee shall measure and record the volume and dry weight of liquid sludge and volume, weight, and density of solid sludge discharged monthly to the surface disposal cell by tracking the number of loads transported from the WWTP and either the average percent total solids of the liquid sludge or the density of the solid sludge as determined by representative sampling of each source of sludge. Records of the volume and dry weight of the liquid sludge and the volume, weight, and density of dry sludge discharged shall be submitted to NMED in the semi-annual monitoring reports. [20.6.2.3107 NMAC]</p>
13.	<p>The permittee shall sample sludge transported to the surface disposal facility from each source on an annual basis for TKN and NO₃-N. Analytical results, reported as mg/kg TKN and NO₃-N (dry weight basis), shall be submitted to NMED in the monitoring report due February 1st. [20.6.2.3107 NMAC]</p>
14.	<p>The permittee shall complete the Discharge Monitoring Report (DMR) required under 40 CFR Part 503. Copies shall be submitted in the semi-annual monitoring reports. [40.503(17) CFR, 74-6-5(E)(1) WQA, 74-6-5(K) WQA]</p>
15.	<p>The permittee shall complete land application data sheets (LADS) semi-annually to document the amount of nitrogen applied to the surface disposal cell. The LADS shall</p>

	reflect the nitrogen concentration from the most recent sludge analysis and the total number of dry tons discharged each month (determined using the representative total solids concentration or density of the sludge and volume measurement of each truck load of sludge transported to the surface disposal facility). Nitrogen content shall not be adjusted to account for volatilization or mineralization processes. The LADS shall be submitted to NMED in the semi-annual monitoring reports. [20.6.2.3107 NMAC]
16.	The permittee shall collect two composite soil samples annually from the cell where sludge was applied. Six soil aliquots shall be collected at a depth of 24 inches and six soil aliquots shall be collected at a depth of 48 inches. The six aliquots collected at each depth shall be mixed to create two composite soil samples. The permittee shall also collect soil samples at a depth of 24 and 48 inches at a nearby location not receiving sludge applications. The two composite samples from the cell where sludge was applied and the two samples from the location not receiving sludge applications shall be analyzed for TKN and NO ₃ -N. Soil NO ₃ -N shall be analyzed by a 2 molar KCl extract, as described in Methods of Soil Analysis: Part 2, Chemical and Microbiological Properties, Agronomy Monograph no.9 (2 nd edition), pp 643-698, American Society of Agronomy, or another method approved by NMED. Analytical results and a map outlining the sampling locations shall be submitted to NMED in the monitoring report due August 1 st . [20.6.2.3107 NMAC]

CONTINGENCY PLAN

#	Terms and Conditions
17.	In the event that ground water standards are violated during the term of this Discharge Permit, upon closure of the facility or during the implementation of post-closure requirements, the permittee shall submit to NMED a corrective action plan that proposes measures to mitigate damage from the discharge including, at a minimum, source control measures and an implementation schedule. The permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC, if the corrective action plan will not result in compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC within 180 days of confirmation of ground water contamination. [20.6.2.1203 NMAC, 20.6.2.4105.A(8) NMAC]
18.	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]
19.	In the event NMED or the permittee identifies any other failures of the discharge plan 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]
20.	In the event that the analytical results from the soil sampling indicate significant migration of NO ₃ -N, TKN, and/or other constituents attributable to the disposed waste, the permittee shall submit to NMED within 60 days a corrective action plan. The plan shall propose, at a minimum, source control or a reduction of the total nitrogen discharged. [20.6.2.3107.A(10) NMAC]
21.	In the event that LADS show that the amount of nitrogen applied annually exceeds 200 pounds per acre per year, the permittee shall submit to NMED for approval a corrective action plan for the reduction of nitrogen loading to the sludge disposal area. The corrective action plan shall be implemented within 30 days of NMED approval. [20.6.2.3107.A(10) NMAC]
22.	In the event that the sludge disposal area is frozen or covered with snow, sludge shall not be discharged to the surface disposal area. In the event that the adverse conditions persist beyond the storage capacity of the WWTP, the permittee shall obtain NMED approval for a temporary alternative. [20.6.2.3107.A(10) NMAC]

CLOSURE PLAN

#	Terms and Conditions
23.	<p>Upon closure of the facility, the permittee shall perform the following closure measures:</p> <ol style="list-style-type: none"> a. Maintain the fencing around the disposal facility for 30 days to prevent access. b. Allow any retention ponds that collect disposal site runoff to dry and then regrade the ponds with clean fill to blend with the surface topography. <p>When all post-closure requirements have been met, the permittee may request to terminate the Discharge Permit. [20.6.2.3107.A(11) NMAC]</p>

GENERAL TERMS AND CONDITIONS

#	Terms and Conditions
24.	<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> <ol 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;

	<p>f) The results of each analysis or field measurement, including raw data;</p> <p>g) The results of any split sampling, spikes or repeat sampling; and</p> <p>h) A description of the quality assurance and quality control procedures used.</p> <p>[20.6.2.3107.A NMAC]</p>
25.	<p>RECORD KEEPING - The permittee shall maintain a written record of any spills, seeps, and/or leaks of effluent, and of leachate and/or process fluids not authorized by this Discharge Permit. [20.6.2.3107.A NMAC]</p>
26.	<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>
27.	<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>
28.	<p>RECORD KEEPING - The permittee shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this Discharge Permit, and records of all data used to complete the application for this Discharge Permit for a period of at least five years from the date of the sample collection, measurement, report or application. This period may be extended by request of the Secretary at any time. [20.6.2.3107.A NMAC]</p>
29.	<p>INSPECTION and ENTRY - The permittee shall allow the Secretary or an authorized representative, upon the presentation of credentials, to:</p> <p>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> <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>
30.	<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>
31.	<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</p>

	<p>whether cause exists for modifying, terminating and/or renewing this Discharge Permit or to determine compliance with this Discharge Permit. The permittee shall also furnish to NMED, upon request, copies of documents required to be kept by this Discharge Permit. [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]</p>
32.	<p>SPILLS, LEAKS, and OTHER UNAUTHORIZED DISCHARGES - This Discharge Permit authorizes only those discharges specified herein. Any unauthorized discharges violate Section 20.6.2.3104 NMAC and must be reported to NMED and remediated as required by Section 20.6.2.1203 NMAC. [20.6.2.1203 NMAC]</p>
33.	<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. [20.6.2.3107.C NMAC]</p>
34.	<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. [20.6.2.1202 NMAC]</p>
35.	<p>CIVIL PENALTIES – Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject the permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the WQCC Regulations, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. [74-6-10 WQA, 74-6-10.1 WQA]</p>
36.	<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

	<p>required to be maintained under the WQA; or</p> <p>3) fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation, is subject to felony charges and shall be sentenced in accordance with the provisions of Section 31-18-15 NMSA 1978.</p> <p>[74-6-10.2(A-F) WQA]</p>
37.	<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>
38.	<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>
39.	<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>
40.	<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 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]</p>
41.	<p>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]</p>

EFFECTIVE DATE: **effective date**

EXPIRATION DATE: **expiration date**

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