GROUND WATER DISCHARGE PERMIT
Deming Wastewater Treatment Facility Sludge Disposal Project, DP-1795

I. INTRODUCTION

The New Mexico Environment Department (NMED) issues this Discharge Permit (Discharge Permit), DP-1795, to the City of Deming (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 Deming Wastewater Treatment Facility (WWTF) Sludge Disposal Project (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 8,501,086 gallons (42,090 cubic yards) of liquid domestic wastewater treatment facility sludge removed from Ponds, 1, 2, 3, 4, 5, and 6 to allow for liner rehabilitation, is discharged to a 101-acre disposal area (comprised of six cells and a reserve area) via tanker truck. 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 southwest corner of J Street SE and Tapia Rd., approximately 4 miles southeast of Deming, in Sections 6 and 7, Township 24S, Range 8W, Luna County. Ground water most likely to be affected is at a depth of approximately 75-87 feet and has a total dissolved solids concentration of approximately 300 milligrams per liter.

The permittee's application consists of the materials submitted by Felix Carles of Smith Engineering Company on behalf of the permittee dated May 19, 2011, materials submitted by Eric Krch of Souder Miller and Associates on behalf of the permittee dated September 29, 2011, and materials contained in the administrative record prior to issuance of this Discharge Permit. The discharge shall be managed in accordance with all conditions and requirements of this Discharge Permit.

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

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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)		NO_3-N	nitrate-nitrogen
CFR	Code of Federal Regulations		NTU	nepholometric turbidity units
CFU	colony forming units		SDDS	Surface Disposal Data Sheet
Cl	chloride		TDS	total dissolved solids
EPA	United States Environmental Protection Agency		TKN	total Kjeldahl nitrogen
Mg/kg	Milligrams per kilogram			
mg/L	milligrams per liter		TPH	total petroleum hydrocarbons
mL	milliliters		TSS	total suspended solids
NMAC	New Mexico Administrative Code		total nitrogen	TKN+NO_3-N
NMED	New Mexico Environment Department		WQCC	Water Quality Control Commission
NMSA	New Mexico Statutes Annotated			

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.

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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 8,501,086 gallons (42,090 cubic yards) of liquid domestic wastewater treatment facility sludge that is removed from Ponds, 1, 2, 3, 4, 5, and 6 to a 101-acre disposal area (comprised of six cells and a reserve area) via tanker truck. The sludge removal project will allow for the rehabilitation of the pond liners. [20.6.2.3104 NMAC]
4.	Prior to discharging at the facility, the permittee shall give written and verbal notification to NMED stating the date the discharge is to commence. [20.6.2.3109.H NMAC]
5.	Prior to discharging at the facility, the permittee shall submit an up-to-date diagram of the layout of surface disposal facility to NMED. The diagram shall include the following elements: • a north arrow • the effective date of the diagram • the bermed perimeter of the 101-acre disposal area • the 101-acre disposal area divided into six disposal cells and a reserve area • the numerical identification of each cell [Subsection C of 20.6.2.3106 NMAC, Subsection A of 20.6.2.3107 NMAC]
6.	Prior to discharging at the facility, the permittee shall install 18 to 24-inch berms around the 101-acre disposal area to prevent surface water run-on and run-off. Documentation of berm installation shall consist of a narrative statement including the berm locations and shall be submitted to NMED prior to discharging. The berms shall be inspected on a regular basis and after any major precipitation event, and repaired as necessary. [NMSA 1978, § 74-6-5.D, Subsections B and C of 20.6.2.3109 NMAC]
7.	Prior to discharging at the facility, the permittee shall post and maintain the following signs at the following locations:

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#	**Terms and Conditions**
	• Signs in both English and Spanish that state: "Notice: Waste Disposal Area - KEEP OUT" and "Aviso: Área de Disposición - NO ENTAR" posted at the facility entrance and every 500 feet along the berms that outline the facility boundary. • A sign to identify each cell by number. All signs shall be weatherproof and posted at the boundary of the cells to facilitate a rotational disposal schedule as required in conditions below. All signs shall remain legible for the term of this Discharge Permit. [20.6.2.3109 NMAC]
8.	The permittee shall not discharge liquid domestic wastewater treatment facility sludge during periods of precipitation or when surface soils are frozen or saturated. Sludge may be stored in tanker trucks during these periods. [20.6.2.3109 NMAC]
9.	The permittee shall apply liquid domestic wastewater treatment facility sludge to the six cells (and reserve area, if appropriate) on a rotational basis such that the sludge is evenly distributed throughout the individual cells in use. Sludge shall be incorporated into the soil by disking within six hours following surface disposal. Ponding of liquid sludge shall be minimized. [20.6.2.3104 NMAC]
10.	The amount of total nitrogen applied from domestic wastewater treatment facility sludge shall not exceed 200 pounds in any 12-month period. Nitrogen content shall not be adjusted to account for volatilization or mineralization processes. [20.6.2.3109 NMAC]
11.	Disposal of sludge shall be in accordance with requirements set forth in 40 CFR Part 503. [40 CFR Part 503]

MONITORING, REPORTING, AND OTHER REQUIREMENTS

#	**Terms and Conditions**
12.	The permittee shall conduct the monitoring, reporting, and other requirements listed below. [20.6.2.3107 NMAC]
13.	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

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	31.Water e) Federal Register, latest methods published for monitoring pursuant to Resources Conservation Recovery Act regulations f) U.S. Geological Survey, et al., National Handbook of Recommended Methods for Water Data Acquisition g) Methods of Soil Analysis: Part 1. Physical and Mineralogical Methods; Part 2. Microbiological and Biochemical Properties; and Part 3. Chemical Methods, American Society of Agronomy. [20.6.2.3107.B NMAC]
14.	The permittee shall submit semi-annual monitoring reports to NMED by the 1st of February and August each year. Semi-annual monitoring shall be performed during the following periods: • 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**. [20.6.2.3107 NMAC]
15.	The permittee shall submit copies of the completed Discharge Monitoring Reports (DMR) required by 40 CFR Part 503 to NMED in the semi-annual monitoring report due by August 1st. [40.503(17) CFR, 74-6-5(E)(1) WQA, 74-6-5(K) WQA]
16.	The permittee shall complete a SDDS to document the amount of nitrogen applied to each surface disposal cell, each month. A SDDS shall be completed for each disposal cell, and shall reflect the nitrogen concentration from the sludge analysis submitted to NMED on September 29, 2011, and the total number of metric tons of sludge discharged to each cell each month (dry weight basis). Nitrogen content shall not be adjusted to account for volatilization or mineralization processes. The SDDS, or a statement that no surface disposal occurred within the specific cells, shall be submitted to NMED in the semi-annual monitoring reports. [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 a corrective action plan that proposes measures to mitigate damage from the discharge including, at a minimum, source control measures and an implementation schedule to NMED. 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

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	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 that a SDDS shows that the amount of nitrogen applied annually to any cell exceeds 200 pounds per acre in any 12-month period, the permittee shall submit a corrective action plan for the reduction of nitrogen loading to the sludge disposal area to NMED for approval. The corrective action plan shall be implemented within 30 days of NMED approval. [20.6.2.3107.A(10) NMAC]
19.	In the event that the sludge disposal area is saturated, frozen or covered with snow, sludge shall not be discharged to the surface disposal area. Should the adverse conditions persist beyond the sludge storage capacity of the wastewater treatment facility, the permittee shall obtain NMED approval for a temporary alternative. [20.6.2.3107.A(10) NMAC]
20.	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 seven 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]
21.	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]

CLOSURE PLAN

#	Terms and Conditions
22.	Upon closure of the facility, the permittee shall perform the following closure measures: a) Re-grade the berms to blend with surface topography, promote positive drainage and prevent ponding. b) Re-vegetate the cells and disturbed areas at the facility by establishing a vegetative cover equal to 70% of the native perennial vegetative cover consisting of at least three native plant species including at least one grass, but not including noxious weeds. The permittee shall maintain the vegetative cover through two consecutive growing seasons.

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#	Terms and Conditions
	c) Submit proof to NMED that all closure activities set forth for the facility under 40 CFR 503 have been completed. When all closure and 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
23.	RECORD KEEPING - The permittee shall maintain a written record of the following information: a) Information and data used to complete the application for this Discharge Permit. b) Records of any releases (commonly known as "spills") not authorized under this Discharge Permit and reports submitted pursuant to 20.6.2.1203 NMAC. c) Records of the operation, maintenance, and repair of all facilities/equipment used to treat, store or dispose of wastewater. d) Facility record drawings (plans and specifications) showing the actual construction of the facility and bear the seal and signature of a licensed New Mexico professional engineer. e) Copies of monitoring reports completed and/or submitted to NMED pursuant to this Discharge Permit. f) The volume of wastewater or other wastes discharged pursuant to this Discharge Permit. g) Ground water quality and wastewater quality data collected pursuant to this Discharge Permit. h) Copies of construction records (well log) for all ground water monitoring wells required to be sampled pursuant to this Discharge Permit. i) Records of the maintenance, repair, replacement or calibration of any monitoring equipment or flow measurement devices required by this Discharge Permit. j) 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: i) The dates, location and times of sampling or field measurements; ii) The name and job title of the individuals who performed each sample collection or field measurement; iii) The sample analysis date of each sample; iv) The name and address of the laboratory, and the name of the signatory authority for the laboratory analysis; v) The analytical technique or method used to analyze each sample or collect each field measurement; vi) The results of each analysis or field measurement, including raw data;

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	vii) The results of any split, spiked, duplicate or repeat sample; and viii) A copy of the laboratory analysis chain-of-custody as well as a description of the quality assurance and quality control procedures used. The written record shall be maintained by the permittee at a location accessible during a facility inspection by NMED for a period of at least five years from the date of application, report, collection or measurement and shall be made available to the department upon request. [NMSA 1978, § 74-6-5.D, 20.6.2.3109.B NMAC, 20.6.2.3107.A NMAC]
24.	INSPECTION and ENTRY – The permittee shall allow inspection by NMED of the facility and its operations which are subject to this Discharge Permit and the WQCC regulations. NMED may upon presentation of proper credentials, enter at reasonable times upon or through any premises in which a water contaminant source is located or in which are located any records required to be maintained by regulations of the federal government or the WQCC. The permittee shall allow NMED to have access to and reproduce for their use any copy of the records, and to perform assessments, sampling or monitoring during an inspection for the purpose of evaluating compliance with this Discharge Permit and the WQCC regulations. 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 local, state or federal regulations. [20.6.2.3107.D NMAC, NMSA 1978, §§ 74-6-9.B and 74-6-9.E]
25.	DUTY to PROVIDE INFORMATION - The permittee shall, upon NMED's request, allow NMED's inspection/duplication of records required by this Discharge Permit and/or furnish to NMED copies of such records. [NMSA 1978, § 74-6-5.D, 20.6.2.3109.B NMAC 20.6.2.3107.D NMAC, NMSA 1978, §§ 74-6-9.B and 74-6-9.E]
26.	MODIFICATIONS and/or AMENDMENTS – In the event the permittee proposes a change to the facility or the facility's discharge that would result in a change in the volume discharged; the location of the discharge; or in the amount or character of water contaminants received, treated or discharged by the facility, the permittee shall notify NMED prior to implementing such changes. The permittee shall obtain approval (which may require modification of this Discharge Permit) by NMED prior to implementing such changes.

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#	**Terms and Conditions**
	[NMSA 1978, § 74-6-5.D, 20.6.2.3109.E NMAC, 20.6.2.3107.C NMAC]
27.	PLANS and SPECIFICATIONS – In the event the permittee is proposing to construct a wastewater system or change a process unit of an existing system such that the quantity or quality of the discharge will change substantially from that authorized by this Discharge Permit, the permittee shall submit construction plans and specifications to NMED for the proposed system or process unit prior to the commencement of construction. In the event the permittee implements changes to the wastewater system authorized by this Discharge Permit which result in only a minor effect on the character of the discharge, the permittee shall report such changes (including the submission of record drawings, where applicable) as of January 1 and June 30 of each year to NMED. [NMSA 1978, § 74-6-5.D, 20.6.2.3109.B NMAC, 20.6.2.1202 NMAC]
28.	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. [NMSA 1978, §§ 74-6-10 and 74-6-10.1]
29.	CRIMINAL PENALTIES – No person shall: 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. Any person who knowingly violates or knowingly causes or allows another person to

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	violate the requirements of this condition is guilty of a fourth degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who is convicted of a second or subsequent violation of the requirements of this condition is guilty of a third degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition or knowingly causes another person to violate the requirements of this condition and thereby causes a substantial adverse environmental impact is guilty of a third degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition and knows at the time of the violation that he is creating a substantial danger of death or serious bodily injury to any other person is guilty of a second degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. [NMSA 1978, §§ 74-6-10.2.A through 74-6-10.2.F]
30.	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]
31.	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 days of the receipt of postal notice of this Discharge Permit and shall include a statement of the issues to be raised and the relief sought. Unless a timely petition for review is made, the decision of NMED shall be final and not subject to judicial review. [NMSA 1978, § 74-6-5.O]
32.	TRANSFER of DISCHARGE PERMIT - Prior to the transfer of any ownership, control, or possession of this facility or any portion thereof, the permittee shall: 1) notify the proposed transferee in writing of the existence of this Discharge Permit; 2) include a copy of this Discharge Permit with the notice; and 3) 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. Until both ownership and possession of the facility have been transferred to the transferee, the permittee shall continue to be responsible for any discharge from the facility. [20.6.2.3111 NMAC]
33.	PERMIT FEES - 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

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	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. Permit fees are associated with issuance of this Discharge Permit. Nothing in this Discharge Permit shall be construed as relieving the permittee of the obligation to pay all permit fees assessed by NMED. A permittee that ceases discharging or does not commence discharging from the facility during the term of the Discharge Permit shall pay all permit fees assessed by NMED. 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, NMSA 1978, § 74-6-5.K]

V. PERMIT TERM & SIGNATURE

EFFECTIVE DATE: [effective date]
TERM ENDS: [date term ends]

[20.6.2.3109.H NMAC, NMSA 1978, § 74-6-5.I]

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JERRY SCHOEPPNER
Acting Chief, Ground Water Quality Bureau
New Mexico Environment Department

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