

GROUND WATER DISCHARGE PERMIT RENEWAL
City of Albuquerque Los Angeles Landfill Ground Water Remediation System, DP-1468

I. INTRODUCTION

The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal (Discharge Permit), DP-1468, to City of Albuquerque Environmental Health Department (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 City of Albuquerque Los Angeles Landfill Ground Water Remediation System (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 460,000 gallons per day (gpd) of remediated ground water is discharged to onsite injection wells. Hydrocarbon-contaminated ground water is pumped from four extraction wells (GWEX-1, GWEX-2, GWEX-3 and GWEX-4) to a pre-treatment storage tank prior to filtration and air-stripper treatment. Remediated ground water from the remediation system is held in two pre-injection storage tanks prior to being discharged to the injection wells (IW-1, IW-2, IW-3 and IW-4). This Discharge Permit authorizes discharges associated with an abatement plan pursuant to Sections 20.6.2.4101 through 20.6.2.4116 NMAC. 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 at 4400 Paseo del Norte NE, Albuquerque, in Section 23, Township 11N, Range 3E, Bernalillo County. Ground water most likely to be affected is at a depth of approximately 160 feet and has a total dissolved solids concentration of approximately 500 milligrams per liter.

The original Discharge Permit was issued on December 22, 2004. The permittee's application consists of the materials submitted by the permittee dated July 31, 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 changing remediation practices and/or expanding monitoring requirements.

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

The following abbreviations may be used in this Discharge Permit:

Abbreviation	Explanation	Abbreviation	Explanation
BOD ₅	biochemical oxygen demand (5-day)	NTU	nephelometric turbidity units
CFR	Code of Federal Regulations	Org	organisms
Cl	chloride	TDS	total dissolved solids
LADS	land application data sheet(s)	TKN	total Kjeldahl nitrogen
mg/L	milligrams per liter	total nitrogen	TKN+NO ₃ -N
mL	milliliters	TRC	Total Residual Chlorine
NMAC	New Mexico Administrative Code	TSS	total suspended solids
NMED	New Mexico Environment Department	WQA	New Mexico Water Quality Act
NMSA	New Mexico Statutes Annotated	WQCC	Water Quality Control Commission
NO ₃ -N	nitrate-nitrogen		

II. FINDINGS

In issuing this Discharge Permit, NMED finds:

1. The permittee is discharging effluent or leachate from the facility so that such effluent or leachate may move directly or indirectly into ground water within the meaning of Section 20.6.2.3104 NMAC.
2. The permittee is discharging effluent or leachate from the facility so that such effluent or leachate may move into ground water of the State of New Mexico which has an existing concentration of 10,000 milligrams per liter or less of total dissolved solids within the meaning of Subsection A of 20.6.2.3101 NMAC.
3. The discharge from the facility is not subject to any of the exemptions of Section 20.6.2.3105 NMAC.

III. CONDITIONS

The following conditions shall be complied with 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 discharge up to 460,000 gpd of remediated ground water to onsite injection wells. Hydrocarbon-contaminated ground water is pumped from four extraction wells (GWEX-1, GWEX-2, GWEX-3 and GWEX-4) to a pre-treatment storage tank prior to filtration and air-stripper treatment. Remediated ground water from the remediation system is held in two pre-injection storage tanks prior to being discharged to the injection wells (IW-1, IW-2, IW-3 and IW-4). This Discharge Permit authorizes discharges associated with abatement activities conducted pursuant to Sections 20.6.2.4101 through 20.6.2.4116 NMAC. [20.6.2.3104 NMAC, 20.6.2.3106 NMAC]
4.	<p>Remediated ground water discharged from the remediation system to the injection wells shall not exceed the following limits.</p> <ul style="list-style-type: none"> • 1,1,2,2-Tetrachloroethylene (i.e, Tetrachloroethene or PCE) – 0.02 mg/l (20 µg/l) • 1,1,2-Trichloroethylene (i.e, Trichloroethene or TCE) – 0.1 mg/l (100 µg/l) • 1,1-Dichloroethylene (i.e, Dichloroethene or 1,1-DCE) – 0.005 mg/l (5 µg/l) • Methylene Chloride (i.e., Dichloromethane or DCM) – 0.1 mg/l (100 µg/l) • TDS – 1,000 mg/l • Cl – 250 mg/l <p>[20.6.2.3109, 20.6.2.3103 NMAC]</p>
5.	The permittee shall maintain access control mechanisms around the remediation system to limit public access. The access controls 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]

MONITORING, REPORTING, AND OTHER REQUIREMENTS

#	Terms and Conditions
6.	The permittee shall conduct the following monitoring, reporting, and other requirements listed below. [20.6.2.3107 NMAC]
7.	<p>METHODOLOGY - Unless otherwise approved in writing by NMED, the permittee shall conduct sampling and analysis in accordance with the most recent edition of the following documents:</p> <ul 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; and f) Methods of Soil Analysis: Part 1. Physical and Mineralogical Methods and Part 2. Microbiological and Biochemical Properties; and Part 3. Chemical Methods, American Society of Agronomy. <p>[20.6.2.3107.B NMAC]</p>
8.	<p>The permittee shall submit quarterly monitoring reports to NMED for the most recently completed quarterly period by the 1st of February, May, August and November each year.</p> <p>Quarterly monitoring shall be performed during the following periods:</p> <ul style="list-style-type: none"> • January 1st through March 31st (first quarter) – due by May 1st; • April 1st through June 30th (second quarter) – due by August 1st; • July 1st through September 30th (third quarter) – due by November 1st; and • October 1st through December 31st (fourth quarter) – due by February 1st. <p>[20.6.2.3107 NMAC]</p>
9.	The permittee shall measure the monthly volume of remediated ground water discharged from the remediation system to the injection well(s) using a totalizing flow meter. The monthly meter readings and 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 NMAC, 20.6.2.3109 NMAC]
10.	Following the re-commencement of ground water remediation activities at this facility, the permittee shall sample <u>contaminated ground water</u> (influent) on a sampling frequency consistent with the effluent sampling frequency specified in Condition 11 of this Discharge Permit. Samples shall be collected from a sampling port located between the ground water extraction wells and the remediation system, and analyzed for the following chemical constituents.

	<ul style="list-style-type: none"> • 1,1,2,2-Tetrachloroethylene (i.e., Tetrachloroethene or PCE) • 1,1,2-Trichloroethylene (i.e., Trichloroethene or TCE) • 1,1-Dichloroethylene (i.e., Dichloroethene or 1,1-DCE) • Methylene Chloride (i.e., Dichloromethane or DCM) • TDS • Cl <p>Analytical results shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107 NMAC]</p>
11.	<p>Following the re-commencement of ground water remediation activities at this facility, the permittee shall sample <u>remediated ground water</u> (effluent) on a monthly basis for 12 months to demonstrate the efficacy of the remediation system. Following the collection of 12 monthly samples and provided the contingencies of Condition 15 of this Discharge Permit are not enacted as a result of the analytical results, the permittee may adopt a quarterly sampling frequency thereafter.</p> <p>Samples shall be collected from a sampling port located between the remediation system and the injection wells, and analyzed for the following chemical constituents.</p> <ul style="list-style-type: none"> • 1,1,2,2-Tetrachloroethylene (i.e., Tetrachloroethene or PCE) • 1,1,2-Trichloroethylene (i.e., Trichloroethene or TCE) • 1,1-Dichloroethylene (i.e., Dichloroethene or 1,1-DCE) • Methylene Chloride (i.e., Dichloromethane or DCM) • TDS • Cl <p>Analytical results shall be submitted to NMED in the quarterly monitoring reports. [20.6.2.3107 NMAC]</p>

CONTINGENCY PLAN

#	Terms and Conditions
12.	<p>In the event that ground water standards are violated during the term of this Discharge Permit as a result of the discharge authorized by this Discharge Permit, 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 corrective action plan shall address abatement in conjunction with the facility's abatement plan pursuant to Sections 20.6.2.4101 through 20.6.2.4116 NMAC.</p>
13.	<p>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</p>

	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]
14.	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]
15.	In the event that analytical results of a routine sample of remediated ground water collected per Condition 11 exceeds any of the limitations set by this Discharge Permit or the standards of 20.6.2.3103 NMAC, the permittee shall enact the following contingency plan. <ol style="list-style-type: none"> a) Extraction of contaminated ground water and injection of the remediated ground water shall cease immediately. b) NMED shall be notified within 24 hours of discovery of the failure of the remediation system to treat ground water. c) The remediation system shall be repaired and if necessary, the permittee shall install an alternate or additional remediation system, or component(s). d) Sampling of the extracted and remediated ground water shall be conducted in accordance with this Discharge Permit to confirm repair of the system. e) Upon repair of the remediation system, any remediated ground water that was stored prior to injection that does not meet the limitations set by this Discharge Permit and the standards of 20.6.2.3103 NMAC shall be pumped through the remediation system for treatment. f) The frequency of sampling of extracted and remediated ground water required by this Discharge Permit shall be increased to weekly. Routine sampling per Condition 11 may resume following four consecutive weeks of analytical results that demonstrate the limitations set by this Discharge Permit and the standards of 20.6.2.3103 NMAC have been met. [20.6.2.3107(A)10 NMAC, 20.6.2.3109 NMAC]

CLOSURE PLAN

#	Terms and Conditions
16.	Upon closure of the remediation facility, the permittee shall perform the following closure measures. <ol style="list-style-type: none"> a) Remove or plug all lines leading to and from the extraction wells, remediation system, and injection wells so that discharge can no longer occur. b) Remove the remediation system components from the site. 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
17.	<p>RECORD KEEPING - The permittee shall maintain at its facility a written record of all data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit. The following information shall be recorded and shall be made available to NMED upon request:</p> <ul style="list-style-type: none"> a) The dates, exact place and times of sampling or field measurements; b) The name and job title of the individuals who performed each sample collection or field measurement; c) The date of the analysis of each sample; d) The name and address of the laboratory and the name and job title of the person that performed the analysis of each sample; e) The analytical technique or method used to analyze each sample or take each field measurement; f) The results of each analysis or field measurement, including raw data; g) The results of any split sampling, spikes or repeat sampling; and h) A description of the quality assurance and quality control procedures used. <p>[20.6.2.3107.A NMAC]</p>
18.	<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>
19.	<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 remediation and disposal system. [20.6.2.3107.A NMAC]</p>
20.	<p>RECORD KEEPING - The permittee shall maintain a written record of the amount of effluent, leachate or other wastes discharged pursuant to this Discharge Permit. [20.6.2.3107.A NMAC]</p>
21.	<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>
22.	<p>INSPECTION and ENTRY - The permittee shall allow the Secretary or an authorized representative, upon the presentation of credentials, to:</p> <ul style="list-style-type: none"> a) Enter at regular business hours or at other reasonable times upon the permittee's premises or other location where records must be kept under the conditions of this Discharge Permit, or under any federal or WQCC regulation. 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>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. [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]</p>
23.	<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. [20.6.2.3107 NMAC, 74-6-9(B) & (E) WQA]</p>
24.	<p>DUTY to PROVIDE INFORMATION - The permittee shall furnish to NMED, within a reasonable time, any documents or other information which it may request to determine whether cause exists for modifying, terminating and/or renewing this Discharge Permit or to determine compliance with this Discharge Permit. The permittee shall also furnish to NMED, upon request, copies of documents required to be kept by this Discharge Permit. [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]</p>
25.	<p>SPIILLS, 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>
26.	<p>MODIFICATIONS and/or AMENDMENTS - The permittee shall notify NMED of any changes to the permittee's remediation and disposal system, including any changes in the effluent flow rate or the volume of effluent 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>
27.	<p>PLANS and SPECIFICATIONS - The permittee shall file plans and specifications with NMED for the construction of a remediation 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 remediation 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>
28.	<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,</p>

	<p>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>
29.	<p>CRIMINAL PENALTIES – Any person who knowingly violates or knowingly causes or allows another person to:</p> <ol style="list-style-type: none"> 1) make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or required to be maintained under the WQA; 2) falsify, tamper with or render inaccurate any monitoring device, method or record required to be maintained under the WQA; or 3) fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation, is subject to felony charges and shall be sentenced in accordance with the provisions of Section 31-18-15 NMSA 1978. <p>[74-6-10.2(A-F) WQA]</p>
30.	<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>
31.	<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>
32.	<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>
33.	<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>
34.	<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

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