STATE OF NEW MEXICO SECRETARY OF THE DEPARTMENT OF ENVIRONMENT

IN THE MATTER OF THE APPLICATION §
OF THE CAMINO REAL ENVIRONMENTAL §
CENTER, INC. FOR A SOLID WASTE §
FACILITY PERMIT FOR THE CAMINO §
REAL LANDFILL §

APPLICATION FOR PERMIT



Jonathan V. Queen, P.E. (NM 25844)
Weaver Consultants Group, LLC
6420 Southwest Blvd., Suite 206
Fort Worth, Texas 76109
817-735-9770
Environmental Consultant to and
Representative of:
Camino Real Environmental Center Inc.
1000 Camino Real Blvd.
Sunland Park, New Mexico 88063
575-589-9440

CERTIFICATION OF SERVICE

CERTIFICATION	O SERVICE
I hereby certify that a copy of the forego Modification was received by the following pa	
N 1:	olid Waste Bureau ew Mexico Environment Department 190 St. Francis Drive anta Fe, New Mexico 87502
Si	gnature
Pi	rinted Name
	ate

CERTIFICATION OF APLICATION

The Permit Application submitted for the Camino Real Landfill located in Sunland Park, New Mexico, was prepared by me and technical staff under my direct supervision. I certify that, to the best of my knowledge and belief, the information contained herein is accurate, and that the Permit Application complies with the current New Mexico Solid Waste Rules (20.9.2-20.9.10 NMAC). I am a registered professional engineer in good standing in the State of New Mexico practicing under License No. 25844, and a specialist in solid waste facility engineering and design.

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Jonathan V. Queen, P.E. New Mexico P.E. No. 25844

9/26/22

SIGNATURE AND VERIFICATION

STATE OF NEW MEXICO)
SUNLAND PARK)

I, <u>Brady Stewart</u>, being first duly sworn, state that I am the Engineering Manager of the Camino Real Environmental Center, Inc. that I have read the foregoing Application for Permit Renewal and Modification including the contents of any exhibits, and the same is true and correct to the best of my knowledge and belief.

Brady Stewart

Central Region Engineer

Camino Real Environmental Center, Inc.

Bung Stern

Subscribed and sworn to before me this **26** day of **September**, 2022.

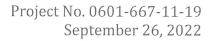
HELEN M. HANSON
Notary Public, State of Texas
Comm. Expires 05-17-2025
Notary ID 10180332

Notary Public

My Commission Expires <u>5/17/25</u>

Weaver Consultants Group, LLC

Rev. 0, 9/23/2





Joan M. Snider Solid Waste Bureau Chief New Mexico Environment Department 1190 St. Francis Dr., Suite N2150 P.O. Box 5469 Santa Fe, NM 87502

Re: Application for Permit Modification and Renewal

Camino Real Landfill Sunland Park, New Mexico

Dear Ms. Snider:

On behalf of Camino Real Environmental Center, Inc. (CREC), please find enclosed three hard copies and one electronic copy of the above-mentioned Application for Permit Modification and Renewal for the Camino Real Landfill (CRLF). CREC is seeking a Permit Modification (20.9.3.22 NMAC) and Permit Renewal (20.9.3.25 NMAC) for the CRLF to modify the existing permitted landfill configuration and to renew the current permit. Also enclosed is a check covering the submittal fees associated with this application.

The Camino Real Landfill has provided for the municipal solid waste (MSW) disposal needs of Sunland Park and surrounding areas for over 35 years. This modification will ensure that this critical service will continue for the landfills' service area.

CREC is fully committed to operating the CRLF consistent with NMED solid waste rules for the protection of human health and the environment.

Please call if you have any questions or need additional information.

Sincerely,

Weaver Consultants Group, LLC

Jonathan V. Queen, P.E.

Project Director

cc: Brady Stewart, Camino Real Environmental Center, Inc.

WEAVER CONSULTANTS GROUP, LLC
6420 SOUTHWEST BLVD STE 206
BENBROOK, TX 76109-6905

37-65/1119 3540

DATE 9/21/2022

PAY TO THE
ORDER OF New Mexico Environment Department

\$ 18,000. 00

DOLLARS

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Wells Fargo Bank, N.A.
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CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738(SP)

APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

Prepared for

Camino Real Environmental Center, Inc.

September 2022



Prepared by

Weaver Consultants Group, LLC

6420 Southwest Boulevard, Suite 206 Fort Worth, Texas 76109 817-735-9770 IKG, LLC 24 Tejon Canon Rd. Placitas, NM 87043 505-301-2026

WCG Project No. 0601-667-11-06

CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738(SP)

APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

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Prepared for

Camino Real Environmental Center, Inc.

September 2022



Prepared by

Weaver Consultants Group, LLC 6420 Southwest Boulevard, Suite 206 Fort Worth, Texas 76109 817-735-9770

IKG, LLC 24 Tejon Canon Rd. Placitas, NM 87043 505-301-2026

CAMINO REAL LANDFILL APPLICATION FOR PERMIT MODIFICATION AND RENEWAL NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738(SP)

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CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738 (SP)

APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

VOLUME I OF VI PERMIT APPLICATION TEXT

Prepared for

Camino Real Environmental Center, Inc.

September 2022



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6420 Southwest Boulevard, Suite 206 Fort Worth, Texas 76109 817-735-9770 IKG, LLC 24 Tejon Canon Rd. Placitas, NM 87043 505-301-2026

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CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738(SP)

APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

VOLUME I – PERMIT APPLICATION TEXT SECTION 1 – INTRODUCTION AND PROJECT DESCRIPTION

Prepared for

Camino Real Environmental Center, Inc.
September 2022



Prepared by

Weaver Consultants Group, LLC 6420 Southwest Boulevard, Suite 206 Fort Worth, Texas 76109 817-735-9770 IKG, LLC 24 Tejon Canon Rd. Placitas, NM 87043 505-301-2026

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Attachments

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1 INTRODUCTION

The Camino Real Landfill (CRLF) is an existing solid waste facility operating in compliance with its current Permits, SWM-030738 and SWM-030738(SP), and the New Mexico Environment Department (NMED) Solid Waste Rules (the Rules; 20.9.2-20.9.10 NMAC). The owner and operator of the Camino Real Landfill is Camino Real Environmental Center, Inc. (CREC).

CREC is seeking a Permit Modification (20.9.3.22 NMAC) and Permit Renewal (20.9.3.25 NMAC) for the CRLF to modify the existing permitted landfill configuration and to renew the current permit. Each of these items is discussed in more detail below.

- Landfill Permit Modification. The overall concept of the landfill modification is to optimize the use of the existing permitted footprint without significantly changing the visible configuration of the site to surrounding communities. As discussed in Section 1.4, the footprint in the northern part of the site will be reduced by about 18 acres to create a larger physical buffer between the landfill and the communities located north of the facility. The maximum existing permitted elevation will also remain unchanged. existing lined areas will be combined to provide one contiguous landfill footprint. The existing external design slopes of the landfill will be a uniform 4H:1V. This will facilitate drainage, minimize erosion, and provide for the long-term stability of the site. In addition to the creation of an extended physical buffer between the landfill footprint and communities located north of the facility, this permit modification also proposes a synthetic turf final cover system that will be installed on the northern landfill external slope to further enhance the aesthetics of the site (refer to Section 1.4 for additional information). Finally, a detailed design for the previously permitted Unit 4 area is also provided with this modification.
- Special Wastes. CRLF is currently permitted to accept sludge, industrial solid waste, and petroleum contaminated soils. CRLF is not seeking authorization to accept any additional special wastes.
- Permit Renewal. The current solid waste operating permits do not expire until July 2028. However, this application includes a request to renew the solid waste operating permit for an additional 20 years beyond this approval by NMED since the permit process requirements are the same for the requested permit modification.

1.1 Site Location

The CRLF is an existing solid waste disposal facility that encompasses approximately 480 acres of land located at 1000 Camino Real Blvd. on the New Mexico (NM)/Mexico (MX) border in Sunland Park. The approximate geographic coordinates for the center of the CRLF site are: Latitude 31° 47′ 24.7272″ N and Longitude 106° 35′ 32.6508″ W. A topographic map showing the CRLF site location is provided as Figure I.1.1.

The legal description of the site is summarized as follows:

A certain parcel of land situated within Section 12 and 13, Township 29 South, Range 3 East, New Mexico Principal Meridian, City of Sunland Park, Doña Ana County, New Mexico.

CRLF is constructed, operated, monitored, and inspected in compliance with the Solid Waste Facility Permits granted by the NMED Solid Waste Bureau (SWB) pursuant to the Rules (20.9.2-20.9.10 NMAC).

1.2 Site History

The land now used for the CRLF site was used for indiscriminate open dumping from the 1970s until the current Landfill property was purchased by Joab, Inc., predecessor to Camino Real, in April 1987. The facility was registered with NMED initially as the Nu-Mex Landfill (Nu-Mex), and waste from across the site was collected and consolidated into the first fill area (Unit 1).

Nu-Mex continued to receive municipal solid waste as a registered landfill and submitted the first Application for Permit to NMED on November 11, 1991 in response to new Solid Waste Management Regulations (SWMR-1). Permit No. SW 91-04 was granted by NMED on November 6, 1992 and authorized continued development and operations in the "Permit Area" (Unit 2) for a 5-year term. The initial permitting process included the design of new lined "Subtitle D" landfill cells and the installation of environmental monitoring networks.

In compliance with the prevailing SWMR, an Application of Permit Renewal/Modification was submitted by CRLF on November 5, 1995, one year in advance of expiration of the initial permit. The 1995 Application included updated site characterization data for the "Permit Renewal Area" (Unit 2), which includes the original Permit Area (Unit 2.1). Unit 2 is an active fill area and includes Subtitle D lined disposal cells on 124.2 acres. Environmental monitoring networks were extended to encompass the new lined cells in Unit 2, and landfill management plans and calculations were submitted to meet new SWMR requirements and NMED policies. Following responses to NMED comments and public hearings, Solid Waste Permit No. SW 96-05 (P) was authorized on March 5, 1997 for a ten-year term. Solid Waste Permit No. SW 96-05 (P) was modified on October 19, 1999 to address

the installation of the Gas Collection and Control System (GCCS) required by NSPS and Solid Waste Permit No. SW-00-10 (M) was issued March 12, 2001.

On September 1, 2000, a "Title V" Permit Application was submitted to NMED's Air Quality Bureau (AQB) as required by the New Source Performance Standards (NSPS). The AQB issued Title V Operating Permit No. P186L on April 30, 2001. As required by NSPS, the Application to renew the Title V Permit was submitted to AQB on April 29, 2005.

In March 2007, CREC submitted an Application for Permit Renewal and Modification to provide detailed site characterization data and engineering designs for the Unit 3 area. This Application was approved by the NMED, and 10-year permits SWM-030738 and SWM-030738(SP) were issued on July 24, 2008. The Final Order issued in July 2008 by the Secretary of the Environment is included in Attachment I.1-B. The New Mexico Solid Waste Act was amended in 2011 to allow the issuance of 20-year permits for privately-owned landfills. Documentation regarding CREC's decision to opt into the 20-year permit cycle for the CRLF was received by the Solid Waste Bureau on April 27, 2011 and approved on December 17, 2014. The NMED approval letter and permit certificates revised to reflect the 20-year permit life are included in Attachment I.1-A.

Each private solid waste facility permit issued by NMED is required to be reviewed at least every 5 years. CRLF's solid waste facility currently approved permit is due to expire on July 24, 2028, and CRLF's Permit Renewal Application is included in this application.

1.3 Existing Permitted Landfill Unit Overview

As shown on Figure I.1.2, MSW disposal and development at CRLF is defined by four "area fill" Units, i.e., 1 through 4, which are further divided into cells. Unit 1 (50 acres) is designated as closed. Unit 2 (124.2 acres) is an active landfill area. Unit 3 (60.5 acres) is permitted for waste disposal, and recently (2019) the first cell in this unit was developed. Portions of Unit 3 have been excavated to provide soils for ongoing operations. Unit 4 (73.0 acres) is located east of the current operations and is permitted but undeveloped. Soils from the Unit 4 area have also been excavated to support the ongoing operation, and the area has also been used to stockpile construction soils. Cell phasing within each unit is determined by operational conditions. This Application for Permit Modification and renewal addresses subgrade configurations in Units 3 and 4 and final contour design over all units.

1.4 Landfill Permit Modification

The overall concept of this permit modification is to optimize the use of the existing permitted footprint, without significantly changing the visible configuration of the site to surrounding communities. A comparison between the currently permitted and proposed landfill configurations are shown on Figure I.1.3. As demonstrated,

this is not a significant change to the overall configuration of the site. The footprint in the northern part of the site will be reduced by about 18 acres to create a greater physical buffer between the landfill and the communities located north of the facility. The maximum existing permitted elevation will also remain unchanged. In addition, existing lined areas will be combined to provide one contiguous landfill footprint. The design external slopes of the landfill will be a uniform 4H:1V. This will facilitate drainage, minimize erosion, and provide for the long-term stability of the site. In addition to the creation of an extended physical buffer between the landfill footprint and communities located north of the facility, this permit modification also proposes a synthetic turf final cover system that will be installed on the northern landfill external slope to further enhance the aesthetics of the site. Finally, a detailed design for the previously permitted Unit 4 area is also provided with this modification. Figure I.1.4 provides a detailed comparison of the permitted and proposed site configurations. A summary of basic quantity information is provided as Table I.1-1.

Table I.1-1
Permit Modification Summary

ltem	Existing Permit	Proposed Modification	Increase/ Decrease	
Permit Boundary	480.0 acres	480.0 acres		
Landfill Disposal Area	333 acres	307.7 acres	-25.3 acres	
Permitted Capacity	60 million cy	69 million cy	9 million cy	
Undeveloped Disposal Area to be Lined	150.7 acres	133.5 acres	-17.2 acres	
Overliner Area to be Lined (Southeast Slope of Unit 1)	0 acres	10 acres	10 acres	
Highest Elevation	4,232 ft-msl	4,232 ft-msl	None	

The proposed site configuration was influenced by the stormwater drainage systems. The proposed drainage systems have been designed to incorporate several detention ponds that will attenuate stormwater flows at the site so that peak flows from the expansion condition are equal to or less than the current or existing permitted condition. The waste column thickness will increase over the existing Unit 2 area as a result of creating a contiguous landfill footprint; however, this additional load does not adversely impact the existing constructed liner systems or existing leachate collection pipes (refer to Volume III for additional technical demonstrations regarding the impact of the additional waste column thickness on the existing liner system).

The northern portion of the landfill final cover is planned to consist of a closure turf final cover system. The closure turf final cover system will not only provide aesthetic value but will also provide a geomembrane barrier that will virtually eliminate stormwater infiltration. Advantages over traditional final cover systems include: (1) drastically reduced construction time given that the synthetic turf will function as an erosion layer immediately after construction; (2) improved water quality – the synthetic turf is designed to minimize erosion; and (3) improved stability. In addition to the above, this final cover system will conserve valuable

water resources, as the installation of the final cover system utilizes almost no water. As further described in Volume II, Section 5, this application also proposes an option to use the synthetic turf final cover system over the entire site.

1.5 Permit Application Format

For ease of review and reference, this Application is organized in the same order and format as the Solid Waste Rules, 20.9.2-20.9.10 NMAC. Volume I, Permit Application Text, addresses the applicable requirements of 20.9.2-20.9.10 NMAC by restating each rule (in bold) followed by the appropriate response (in italics). Tabs are used to subdivide Volume I into nine sections that correlate with Parts 2 through 10 of 20.9.2-20.9.10 NMAC. Volume II is a set of primarily narrative Landfill Management Plans; and Volume III provides the applicable Landfill Engineering Calculations. Site characterization and hydrogeology data were affirmed by NMED approval of the initial Permit Application submitted in 1995 and approved in 1997. This information, including significant updates as appropriate, is included in Volume IV and Volume V, respectively. In addition, CRLF submitted the required Vulnerable Area Assessment pursuant to 20.9.3.8.D under separate cover (see Attachment IV.2-B).

In many cases, the technical response to an item is so sufficiently detailed or complex that a separate graphic, table, report or plan has been prepared (i.e., Engineering Calculations). The applicable technical documents in this Application are cross-referenced in the narrative responses to each of the individual regulatory rules as delineated in Volume I. Specific "stand-alone" Application for Permit components that are primarily administrative in nature have been consolidated in Volume VI to facilitate preparation and review:

- Financial Assurance (Section 1)
- Public Notification (Section 2)
- Disclosure (Section 3)

Each section of each Volume also includes, as applicable:

- Table of Contents
- List of Figures
- List of Tables
- List of Attachments

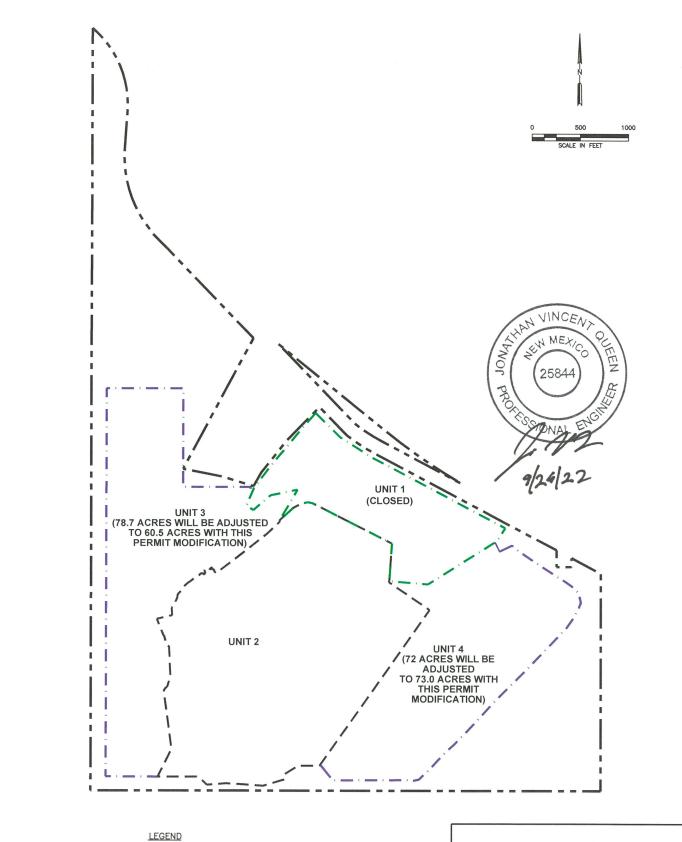
The Table of Contents for the entire six-volume Application is also included in each Volume to assist in cross-referencing, along with the List of Permit Plans (Table I.1-2). A List of Acronyms and Definitions is provided to assist in reviewing this Application. In compliance with the Fee Schedule, 20.9.3.39 NMAC, a check for \$18,000 was submitted at the time of application, made out to NMED (i.e., \$5,000 for the Modification, \$10,000 for the Renewal, and \$1,000 each for the three Special Wastes).

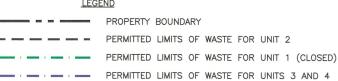
Table I.1-2 List of Permit Plans

	Drawings
1	Cover Sheet
2	Existing Site Plan
3	Site Development Plan
4	Excavation Plan
5	Permitted Completion Plan
6	Proposed Completion Plan
7	Existing Drainage Conditions
8 .	Permitted Drainage Conditions
9	Proposed Drainage Conditions
10	Landfill Cross Section A
11	Landfill Cross Section B
12	Landfill Cross Section C
13	Landfill Cross Section D
14	Liner System Details
15	Leachate Collection System Details
16	Unit 2/4 Liner System Details
17	Closure Turf Final Cover Details
18	ET AFC Final Cover Details

Note: Permit Plans are provided at a reduced size in Volume II, Section 1 for ease of reference.

This modification has been prepared to comply with the current Solid Waste Rules, and to address revisions to the Rules, related recodification, and current NMED Solid Waste Bureau (SWB) policies as applicable. CRLF operations will continue in accordance with the current Permits until the modification has been approved by NMED and the new Permits have been granted.





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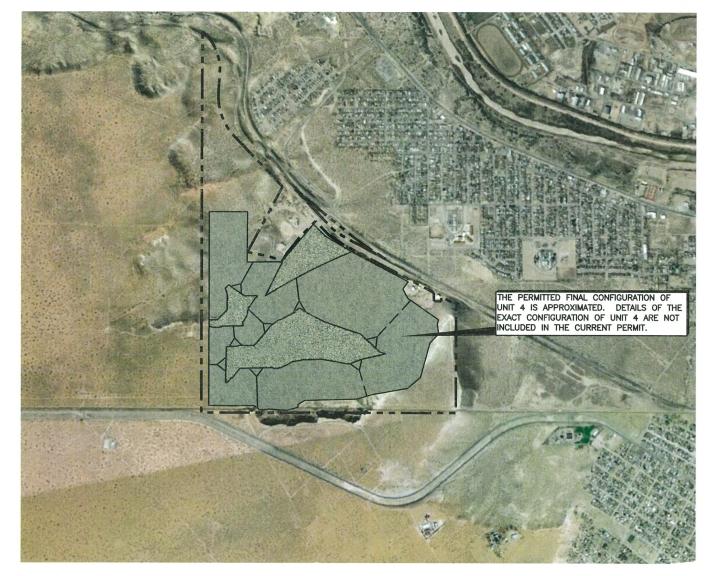
EXISTING PERMITTED UNITS

CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO



Weaver Consultants Group

DRAWN BY: JDW	DATE: 07/2022	FILE: WIND ROSE
REVIEWED BY: JAE	CAD: 0601-667-11	FIGURE 1.1.2





PERMITTED LANDFILL COMPLETION PLAN

Landfill Configuration Comparison

LEGEND
PROPERTY BOUNDARY
CLOSURE TURF AREA

NOTES:

1.		PHOTOGRAPH Y 2020.	PROVIDED	BY	GOOGLE	EARTH	IN
	JANUAR	1 2020.					

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Item	Existing	Proposed				
Property Boundary	480.0 ACRES	480.0 ACRES				
Landfill Disposal Area	333.0 acres	307.7 acres				
Capacity	60,000,000 cy	69,000,000 cy				
Grade Break Elevation	4,215 ft-msl	4,190 ft-msl				
Peak Elevation	4,232 ft-msl	4,232 ft-msl				

PROPOSED LANDFILL COMPLETION PLAN



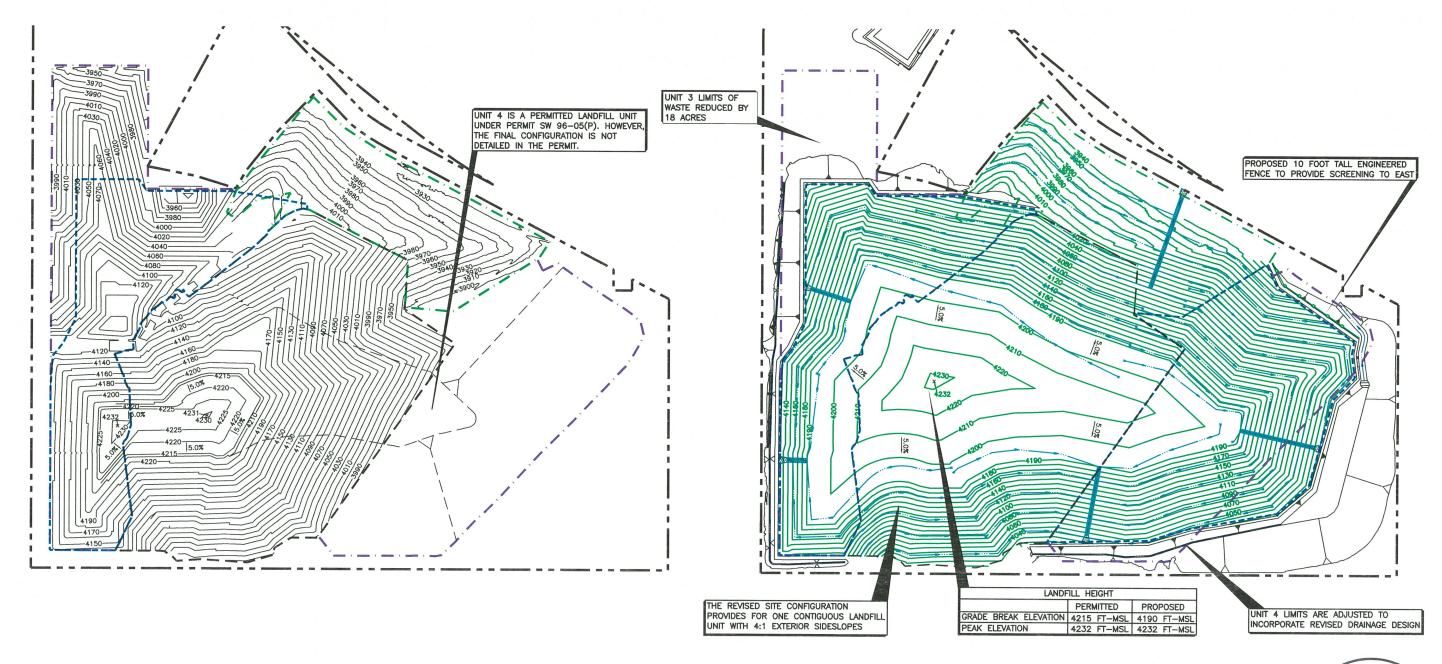
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DATE: 07/2022 DRAWN BY: SRF				REVISIONS	
FILE: 0601-667-11 CAD: I-1-3 FINAL COVER COMPARISON.DWG	DESIGN BY: KRB REVIEWED BY: JVQ	NO.	DATE	DESCRIPTION	
Weaver Consulta	ints Group		- 1		

EXISTING AND PROPOSED LANDFILL COMPLETION PLAN AERIAL PHOTO

CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO

WWW.WCGRP.COM FIGURE I.1.3

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PERMITTED LANDFILL COMPLETION PLAN

PROPERTY BOUNDARY PERMITTED LIMITS OF WASTE FOR UNIT 2 PERMITTED LIMITS OF WASTE FOR UNIT 1 (CLOSED) PERMITTED LIMITS OF WASTE FOR UNITS 3 AND 4 ADJUSTED LIMITS OF WASTE FOR UNITS 3 AND 4 SCALE IN FEET A190 FINAL COVER CONTOUR DRAINAGE SWALE DRAINAGE CHUTE

NOTES:

1. AERIAL PHOTOGRAPH PROVIDED BY MERRICK & COMPANY FROM AN AERIAL SURVEY FLOWN APRIL 30, 2019.

PROPOSED LANDFILL COMPLETION PLAN



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DATE: 07/2022 DRAWN BY: SRF	DRAWN BY: SRF	REVISIONS															
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CAD: I-1-4 FINAL COVER COMPARISON.DWG																	
Wasser Consults																	
Weaver Consulta	ants Group				WWW												
					AA AA AA												

EXISTING AND PROPOSED LANDFILL COMPLETION PLAN

CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO

WWW.WCGRP.COM

FIGURE I.1.4

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LIST OF ACRONYMS

AASHTO

American Association of State Highway and Transportation Officials

ACM

Asbestos Containing Materials – Asbestos waste means a solid waste that contains more than one percent asbestos. Asbestos is a regulated Special Waste.

ACM

Assessment of Corrective Measures – Upon finding that any constituent listed in 20.9.9.20 NMAC has exceeded its Corrective Action Level (CAL) the owner/operator must submit an Assessment of Corrective Measures (ACM) to demonstrate the practical capabilities of remedial technologies in achieving compliance with groundwater protection standards; other remedial objective; etc.

ADC

Alternative Daily Cover – Materials that are suitable for use, with Department approval, as a replacement for the 6" daily cover layer include; tarps, foams, select C & D and other emerging technologies that conserve landfill capacity.

AML

Assessment Monitoring Level – Uppermost concentration of groundwater monitoring parameters listed in Subsection A of 20.9.9.20 NMAC which is used to determine if background groundwater quality has been impacted by a solid waste facility; and whether or not the facility is subject to the assessment monitoring requirements of 20.9.9.13 NMAC.

AQB

Air Quality Bureau, NMED – AQB is responsible for regulating potential air emissions from landfills as a function of the New Source Performance Standards (NSPS) administered nationally by USEPA.

BCV

Background Concentration Value – The simple mean (i.e., arithmetic average) of the concentrations of each parameter listed in Subsections A&C of 20.9.9.20 NMAC during background monitoring conducted pursuant to 20.9.9.10.E NMAC.

CAL

Corrective Action Level – Uppermost concentration of groundwater monitoring parameters listed in Subsection A of 20.9.9.20 NMAC which is used to determine if the facility is subject to the Corrective Action requirements of 20.9.9.15 NMAC.

C/PC

Closure/Post-Closure – C/PC refers to two independent steps following completion of the landfill to its design capacity:

- Closure typically refers to installation of the landfill cap and repositioning of infrastructure to accommodate post-closure.
- Post-closure care and environmental monitoring is required for up to 30 years after closure.

CQA

Construction Quality Assurance – CQA is the process of applying field and laboratory testing and construction observation to confirm that environmental control systems (e.g., liners and caps) are installed according to the design, regulatory requirements, and current industry standards.

C&D

Construction and Demolition Debris – Materials generally considered to be not water soluble and nonhazardous in nature, including, but not limited to, steel, glass, brick, concrete, asphalt roofing materials, pipe, gypsum wallboard and lumber from the construction or destruction of a structure project, and includes rocks, soil, tree remains, trees and other vegetative matter that normally results from land clearing.

DMP

Disposal Management Plan – A management plan for the disposal of a specific type of waste or special waste.

DTW

Depth to Water – Measurement of the depth to groundwater in a monitoring well during sampling. Used to develop groundwater elevation contours.

EC

Emergency Coordinator – The person or persons in charge of coordinating and implementing emergency activities as discussed in the Contingency Plan.

FAA

Federal Aviation Administration – The national agency that is responsible for regulating "public use" airports in the United States. FAA is notified when a landfill is planned within 6 miles of potentially affected airport activities.

FML

Flexible Membrane Liner (or geomembrane) – Geosynthetic plastic liners are the standard design for the primary (upper) containment layer of the composite liner system, which in a RCRA Subtitle D (solid waste) Landfill is underlain by a compacted clay liner (CCL) or a geosynthetic clay liner (GCL).

GCL

Geosynthetic Clay Liner – These are composite materials with geotextiles (fabrics) used in conjunction with dense bentonite clays, and are commonly used as the secondary lower liner in the landfill liner system.

GWPS

Groundwater Protection Standard

HDPE

High Density Polyethylene – This geomembrane (plastic) is the preferred material for FML landfill liners, and is typically installed in 60 - 100 mil thicknesses. HDPE is also used for leachate collection system piping and landfill gas management systems.

ISW

Industrial Solid Waste

CRLF

Camino Real Landfill

CREC

Camino Real Environmental Center, Inc.

LEL

Lower Explosive Limit – Each flammable gas has both an LEL and an upper explosive limit (UEL), which is the range over which it can ignite when mixed with air. For methane, the gas concentration must be above 5% (the LEL) and below 15% (the UEL) to present a potential hazard in the presence of an ignition source.

LEPC

Local Emergency Planning Committee

LFG

Landfill Gas – Decomposing organic wastes in landfill environments typically produce LFG, which in MSW landfills is comprised of approximately 50% methane (CH4) and 50% carbon dioxide (CO2), both of which are odorless and colorless. C & D produce less gas, and at a slower rate, than other MSW waste streams (i.e., residential).

MCL

Maximum Contaminant Level – The maximum concentration of a chemical that is allowed in public drinking water systems. Established by the U.S. Environmental Protection Agency (EPA).

MDL

Method Detection Limit – The lowest concentration at which an analyte can be detected in a sample and its concentration can be reported with a reasonable degree of accuracy and precision.

MRL

Method Reporting Limit – The MDL is the lowest concentration at which an analyte can be detected in a sample that does not cause matrix interferences (typically determined using spiked reagent water).

MSW

Municipal Solid Waste – Municipal Solid Waste is an industry term that includes residential, commercial, and some industrial wastes; and specifically excludes defined hazardous, radioactive, and infectious wastes. C & D is considered part of the MSW stream, and recyclables are subtracted if recovered.

MW

Monitoring Well

NELAC

National Environmental Laboratory Accreditation Conference

NMDOT

New Mexico Department of Transportation – The NMDOT is committed to providing safe and reliable transportation systems to the state of New Mexico. NMDOT also works closely with other state agencies on transportation related issues.

NMOSE

New Mexico Office of the State Engineer

NMED

New Mexico Environment Department – NMED is a cabinet-level state agency that regulates environmental compliance through its Solid Waste, Air Quality, Surface Water Quality, Groundwater Quality, Hazardous Waste, Construction Programs, and Petroleum Storage Tank Bureaus.

NOI (USEPA)

Notice of Intent – Application to USEPA for stormwater discharges associated with industrial activity under the NPDES program.

NOI

Notice of Inspection – The written record of a compliance inspection by a regulatory agency (i.e., NMED's Solid Waste Bureau).

NPDES

National Pollutant Discharge Elimination System – A federal permit program which requires all point sources discharging pollutants to waters of the United States to obtain a permit.

NRCS

Natural Resources Conservation Service – The federal agency with local offices that provide guidance on seeding of the final cover.

NSPS

New Source Performance Standards – National air quality reporting and compliance requirements for MSW landfills administered by AQB with USEPA review.

Weaver Consultants Group, LLC

PCS

Petroleum Contaminated Soils – Soils contaminated with petroleum products such as from a spill or release. PCS are a special waste.

POTW

Publicly-owned Treatment Works (or wastewater treatment plant) – A facility for managing domestic sewage and other approved liquid wastes typically operated by a local/regional governmental unit.

PPE

Personal Protective Equipment

PSL

Protective Soil Layer – All liners shall have a protective cover of at least two feet of granular soil. This protective cover shall, in addition to providing physical protection for the liner, facilitate the collection of leachate in the leachate collection system.

PQL

Practical Quantitation Limit – The minimum concentration of a substance that can be measured and reported with 99 % confidence that the true value is greater than zero."

PVC

Polyvinyl Chloride

QA/QC

Quality Assurance/Quality Control

RAI

Request for Additional Information – The SWB typically issues "RAI's" to seek clarification or additional information on data provided by the applicant. SWB is using a recently developed template to project timelines and deadlines for the landfill permitting process that limits Applicant responses to two formal "RAI's" by SWB.

I.1-12

RCRA

Resource Conservation and Recovery Act – The USEPA requirements for MSW landfills are defined in RCRA "Subtitle D", and states must be approved for equivalency. NMED's Solid Waste Management Rules (SWMR) are more stringent than the federal standards.

SC

Specific Conductance – A measure of how well water can conduct an electrical current.

SSI

Statistically Significant Increase – Statistical evaluation of historical groundwater quality data to determine when/if assessment monitoring is practical for a given site.

SU

Standard Unit

SWAA

Special Waste Acceptance Application – Generators of special waste will be required to complete a Special Waste Acceptance Application (SWAA) prior to acceptance for treatment and disposal. The SWAA includes information regarding the generator, hauler, waste characteristics, a non-hazardous determination, and a waste certification statement. The SWAA, in addition to other information about the waste stream (e.g., laboratory analytical results, will be reviewed to determine if the generator has satisfied the waste characterization requirements of 20.9.8 NMAC.

SWB

Solid Waste Bureau, NMED – The agency directly responsible for the permitting and compliance of solid waste facilities in New Mexico [20.9.2 – 20.9.10 NMAC]

SWMR

Solid Waste Management Rules – NMED's Solid Waste Bureau is responsible for regulating solid waste landfills in accordance with these state requirements [20.9.2 – 20.9.10 NMAC].

SWNOS

Solid Waste Not Otherwise Specified

SWPPP

Stormwater Pollution Prevention Plan – Sites subject to the federal National Pollutant Discharge Elimination System (NPDES) regulations must prepare and implement a SWPPP. The Plan identifies potential pollutant sources and plans to mitigate/eliminate these sources.

TD

Total Depth – Measurement of the total depth of a groundwater monitoring well during sampling.

TDS

Total Dissolved Solids – The total amount of mobile charged ions, including minerals, salts or metals dissolved in a given volume of water.

TFCH

Treated Formerly Characteristic Hazardous Waste

USEPA

United States Environmental Protection Agency – The federal entity responsible for administering the RCRA program; and more specifically RCRA Subtitle D that sets national standards for solid waste landfills. USEPA also sets national standards for air quality (NSPS) and stormwater quality (NPDES) protection.

UTLV

Upper Tolerance Limit Value – Parameter/well-specific statistical value to determine if a statistically significant increase (SSI) in parameter concentration is apparent. Calculated via evaluation of applicable background monitoring analytical data by industry-standard statistical literature or software programs (e.g., Sanitate).

VAA

Vulnerable Area Assessment

VOC

Volatile Organic Compound

VRS

Verification Re-sampling – Implemented within 90 days of the date of initial sampling to confirm if an original laboratory analytical result was not the result of either a sampling and analysis error, or temporal/spatial variations in groundwater quality.

ATTACHMENT I.1-A

CRLF PERMITS: SWM-030738 AND SWM-030738(SP)



NEW MEXICO ENVIRONMENT DEPARTMENT

THE WENT OF WAR

SUSANA MARTINEZ
Governor

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RYAN FLYNN
Cabinet Secretary
BUTCH TONGATE
Deputy Secretary

December 17, 2014

Mr. Juan Carlos Tomas District Manager Camino Real Environmental Center P.O. Box 580 Sunland Park, New Mexico 88063

RE: Twenty-Year Municipal Solid Waste and Special Waste Permits, Camino Real Landfill

Dear Mr. Tomas:

The New Mexico Solid Waste Act was amended in 2011 to allow the issuance of twenty-year permits for privately-owned landfills. Prior to amendment of the Solid Waste Act, privately-owned landfills were eligible to receive permits for ten-year terms only. The amended Solid Waste Act required the owners of privately-owned landfills permitted prior to July 1, 2011 to submit documentation to the New Mexico Environment Department no later than September 1, 2011 stating the landfill's intention to opt into the twenty-year permit cycle and providing a demonstration that the remaining active life of the facility exceeds the twenty-year permit period.

Documentation regarding Camino Real Environmental's decision to opt into the twenty-year permit cycle for the Camino Real Landfill was received by the Solid Waste Bureau on April 27, 2011. Additional information (updated site life calculation) was received on May 10, 2012. The documentation demonstrates that Camino Real Landfill has a remaining active life of at least 85 years.

The information submitted for Camino Real Landfill satisfies the requirements for extending the facility's permit term to twenty years. Please see the attached permit certificates indicating the revised solid waste facility permit expiration date of July 24, 2028, i.e., twenty years from the issuance date of the current permit. Facility operations remain subject to the conditions of the Secretary's Final Order issued on July 24, 2008, the Solid Waste Rules (20.9.2 through 20.9.10 NMAC), and the approved permit application. Please feel free to contact me by telephone at 505-827-2775 or by e-mail at auralie.ashley-marx@state.nm.us if you have any questions or require additional information.



The New Mexico Environment Department hereby issues this



Special Waste Permit

Facility ID No: SWM-030738 (SP)

Special Waste Types: Industrial Solid Waste, Sludge, Petroleum Contaminated Soils

Facility Name & Location:

1000 Camino Real Blvd., Sunland Park, NIM Within Sections 12 & 13, T29S, R3E Doña Ana County, New Mexico Camino Real Landfill

Camino Real Environmental, Inc. Operator's Name & Address: Sunland Park, NM 88063 P.O. Box 580

Revised Permit Expiration Date: July 24, 2028

Permit Issuance Date: July 24, 2008

The permit term is revised pursuant to Section 74-9-24 NMSA 1978 (2011 Amendment) for the period of 20 years from the date of permit issuance. The permit is subject to the Final Order of the Secretary (dated July 24, 2008), the Solid Waste Rules (20.9.2-20.9.10 NMAC), and the approved permit application.

Given this 157 day of December, 2014.

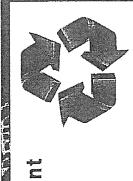
Ryan Filydn

Cabinet Secretary, Environment Department



The New Mexico Environment Department hereby issues this

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Solid Waste Facility Permit

Type of Facility: Municipal Solid Waste Landfill

Facility ID No: SWM-030738

1000 Camino Real Blvd., Sunland Park, NM Within Sections 12 & 13, T29S, R3E Doña Ana County, New Mexico Facility Name & Location: Camino Real Landfill

Camino Real Environmental, Inc. Operator's Name & Address: Sunland Park, NM 88063 P.O. Box 580

Revised Permit Expiration Date: July 24, 2028

Permit Issuance Date: July 24, 2008

The permit term is revised pursuant to Section 74-9-24 NMSA 1978 (2011 Amendment) for the period of 20 years from the date of permit issuance. The permit is subject to the Final Order of the Secretary (dated July 24, 2008), the Solid Waste Rules (20.9.2-20.9.10 NMAC), and the approved permit application.

Given this 15th day of December, 2014.

Ryan Flynn

Cabinet Secretary, Environment Department

ATTACHMENT I.1-B

CRLF FINAL ORDER: JULY 2008

STATE OF NEW MEXICO BEFORE THE SECRETARY OF ENVIRONMENT

IN THE MATTER OF THE APPLICATION OF CAMINO REAL ENVIRONMENTAL, INC. FOR THE RENEWAL AND MODIFICATION OF A SOLID WASTE FACILITY PERMIT FOR THE CAMINO REAL LANDFILL



NO. SWB 07-41(P)

FINAL ORDER

This matter comes before the Secretary of Environment following a hearing before the Hearing Officer on December 5, 2007 through December 20, 2007, in Sunland Park, New Mexico.

Applicant Camino Real Environmental, Inc. seeks renewal and modification of its Solid Waste Facility Permit for the Camino Real Landfill (CRLF), located in Sunland Park, Dona Ana County. In addition to seeking renewal of its Permit for a new 10-year period, Applicant is seeking modification approval. This approval is sought because in addition to continuing its operations in Unit 2, Applicant has requested approval of continued operations into new lined cells in Unit 3, which in prior permit submittals, had been designated as "Phase III". The Application provides detailed site characterization data and engineering designs for Unit 3. The New Mexico Environment Department Solid Waste Bureau supports the issuance of the permit with conditions necessary to protect public health and welfare and the environment.

Having considered the administrative record in its entirety, and being otherwise fully advised regarding this matter;

THE SECRETARY HEREBY ADOPTS THE HEARING OFFICER'S
REPORT, PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW
AND RECOMMENDED CONDITIONS, **EXCEPT AS DISCUSSED BELOW**.

First, notwithstanding those points on which I depart from the Hearing Officer's discussion, findings and conclusions, the record does reflect that the Hearing Officer conducted the hearing in a way that allowed all parties and the public to fully participate, to express their views and to examine others testifying.

Second, although the summary of testimony included in the Hearing Officer's Report greatly assisted in the review of the lengthy transcript in this matter, the summary did not include any portion of the public comment offered by 61 people at the hearing, and I note expressly that I reviewed the transcript for the testimony of Aurelia Roque, Richard Moore, Sabino Segura, Balbina Pinon, Francisco Uvina, Jose Alfredo Garcia, Augustine Barraza, Jose Ibarra, Carolina Renteria, Florentino Silva, Ernestina Stevens, Manuel Garcia, Eva Marie Salas, Winfried Stevens, Veronica Perez, Fabiola Rodriguez, Maria Elena Trejo, Raul Facio, Alicia Roman, Margarita Perea, Rosalia Morales, Lorenzo Najera, Delfina Aguirre, Mario Correa, Mary Helen Garcia, Cassandra Murillo, Vanessa Sanchez, Veronica Carmona, Martha Gonzalez, Norma Renteria, Natalia G. Francis, Dora Alicia Sanchez, Jesus Esparza, Carmen Carranza, Ruben Rodriguez, Raul Pinon, Dorothy Vale Roberts, Cesar Ontiveros, Kenneth Magness, Cynthia Nava, Raquel Tovar, Esteban Bermudez, Sofia Martinez, Bill Guerra Addington, Frank McKinnon, Victor Aguirre, Jason Cardenas, Mario Ortiz. Adan Vasquez, Dolores Saldana-Caviness, Francisco Uvina, Jesus Valdez,

Antonia Ramirez, Bertha Uvina, Elizabeth Ureno, Jessica Aleman, Amber Saenz, Pedro Caro, and Angel Caro.

As the Hearing Officer noted, much of this comment reflects personal fears and concerns regarding physical health, home safety, ground water, roads and the injurious nature of air and noise pollution. (Report, p. 13.) The Hearing Officer characterized these beliefs as "genuine" and noted the "high emotional and psychological aspects surrounding the citizens' negative view of the Landfill…", "anxiety" and "distrust" which have been strongly resistant to information based on technical or scientific discernment of potential impacts. (Report, pp. 29-32.)

The Hearing Officer relies upon the evidence showing compliance with technical requirements to conclude that denying the permit or issuing a permit shorter than ten years on the basis of the citizen complaints is outside the scope of the Secretary's authority, and could represent a "taking" under the New Mexico Constitution. (Report, pp. 14-15.) This is where I must depart from the Hearing Officer's analysis.

Regarding the potential "taking," I believe the opportunity to construct and operate a landfill is a privilege, not a right, and is one granted only in a highly regulated context. Particularly considering that the active life of a large landfill is measured in decades, this agency must be able to take action on new information and in changed circumstances without being deemed to have abused its authority.

Regarding the persistent fears and concerns on the part of the community, the Hearing Officer concluded that these fears were subjective and unsubstantiated, and, without a nexus to "anti-hazard" requirements in the regulations, that the mandate under *Rhino* had been met. Again, I must disagree. A commitment to full implementation of the guidance and directives in the *Rhino* opinion from the New Mexico Supreme Court includes a consideration of community opposition and general concerns, including concerns of a sociological nature, such as the perception of being "dumped on" and community stigmatization. Each of these concerns was mentioned repeatedly during the public comment periods in this matter, and *Rhino* does not call for them to be dismissed based on lack of substantiation. In addition to the concerns shared between the citizens of Chaparral and Sunland Park, I would note especially the concerns in Sunland Park around the issue of economic development, and the widespread fear or perception that the continued existence of the landfill will hamper sustainable development in that area.

In connection with this part of his analysis, the Hearing Officer notes that Sunland Park does not qualify as a "colonia" "as that term is used in New Mexico." Considering the definition of "colonia" included in *Rhino* as well as the definition included in the regulations or guidance of the Housing and Urban Development agency that was the subject of testimony in the hearing, the record does appear to support the conclusion that Sunland Park is not a "colonia," but also supports the conclusion that Anapra, which is part of the larger Sunland Park area, is a "colonia." Anapra, New Mexico is part of Sunland Park, is close

to the Landfill, and makes imperative the careful application of the Court's discussion in *Rhino*.

In Rhino the Court notes that public opposition does not require denial of a permit application, and I am not denying the application, but reducing its term to one year. In that year, the Applicant, staff in this agency and the citizens will be able to continue to meet, and will have much more information about whether Asarco, which has negatively affected the health and welfare of the Sunland Park community, will be permitted by the State of Texas to reopen; whether new maquiladora development and other development anticipated in the area will proceed, and whether it has a beneficial effect in the community. This agency's vigorous opposition to the Asarco air quality permit and equally vigorous investigation and enforcement efforts at the Camino Real Landfill reflect the holistic approach to border health and environmental issues to which we are committed. A short-term permit is consistent with our attempts to be responsive to community concerns about potentially harmful physical, economic, psychological and social effects (see Rhino, n. 4), and active in assuring community protection.

Finally, although the precise language of the Solid Waste Management Regulations has changed, Secretary Judith Espinosa issued a five-year permit to this same facility in 1992, when a ten-year permit had been applied for, and the New Mexico Court of Appeals affirmed her in that action, noting that a permit may be issued for less than the regulatory maximum period of ten years. I believe the issuance of a one-year permit to be within my authority.

Reviewing the Hearing Officer's proposed Findings and Conclusions, and mindful of his role in evaluating witness demeanor and credibility, I adopt proposed Findings of Fact 1 through 59, 61-63, and 65 through 405. In Finding 60, I would insert the words "but not all" after the word "Much." In Finding 64, I would add the statement that "Anapra, which is part of the Sunland Park community, and is close to the Landfill, is a colonia." I do not adopt proposed Finding 406 to the effect that there must be a nexus between pollutants generated and the media potentially harmed in considering proliferating industries.

I would add several findings to convey the substance of the public comments. In particular, I would add a Finding noting that notwithstanding the traffic and noise studies conducted, members of the community spoke at length about the disruption caused by trash trucks on the community's roads, and described being wakened by noise from the Landfill. Although some witnesses testified that the odors prevalent in the community came from the City's wastewater treatment plant and the horses, many community members continue to attribute odors to the Landfill. The Hearing Officer described as part of his discussion the various illnesses attributed by citizens to the Landfill, and I would add findings reflecting that that testimony had been given.

I adopt proposed Conclusions of Law Number 1 through 34, 39-51, 53-59, 64-65, and 68-69, with the qualification in Finding 69 that the permit should be granted in its entirety "for one year." I do not adopt proposed Conclusions 35-38, 52, 60-63, 66-67, based on the discussion above.

IT IS THEREFORE ORDERED:

The Application for a solid waste facility permit is approved, the permit is granted for a term of one (1) year, and the modification in the Application, noted above, is approved, subject to the conditions below:

- 1. The Applicant will comply with all applicable requirements of the Solid Waste Management Regulations, the Solid Waste Act, and any other conditions set forth in the permit, and shall construct and operate the Landfill in accordance with the permit application. This condition is to remind the Applicant that all applicable requirements and application statements must be complied with throughout the life of the landfill.
- 2. At least 30 days prior to the start of new cell construction, the Applicant will furnish the Department with a major milestone schedule. This condition is to ensure that the Department is given timely notice to effectively monitor new construction at the landfill.
- 3. The Liner Construction Certification Report must be submitted to and approved by the Department prior to disposal of any solid or special waste in any new cell. Any new disposal area must be inspected by a representative of the Solid Waste Bureau prior to waste disposal. A letter from the Department must be received authorizing acceptance of waste prior to disposal. This condition is to ensure that the liner is constructed in accordance with the permit and regulations.
- 4. The Waste Inspection and Screening Program (Volume II, Section 2, Part 4.4, of the Permit Application) shall be amended prior to implementation at the Landfill to indicate that no less than three random waste screening inspections shall be conducted during each operating day. One of the required daily load inspections shall be conducted upon a load of maquiladora waste, unless no loads of such waste were received during the operating day. Within 30 days of permit issuance, the Waste Inspection Screening Program shall be updated and items as specified by the Department shall be included. The Screening Program shall include:
 - Inspection documentation that specifies the identity, by name and title, of the persons completing the inspection.

- A statement that staff shall inspect loads from the ground and not just from heavy equipment.
- Details on how the inspections will be completed; such as how many staff will undertake the inspections, what equipment will be used, what methods will be used to check the loads (i.e. ripping bags open using rakes), what personal protective equipment will be used, and any other information necessary.
- Information that addresses the procedures in place regarding maquiladora deliveries; such as identifying the number of waste totes inspected from maquiladora trucks and other details regarding the selection of these loads for inspection.
- 5. The Plan of Operations and the Special Waste Disposal Plan Industrial Solid Waste Disposal Management Plan shall be amended to include additional details regarding use of Category I of daily covers (ADC). A pilot beneficial use plan, with a completed field evaluation of Category II ADCs including Auto/Fluff/ Automotive Shredder Residue (ASR) and foam, shall be submitted to the Solid Waste Bureau for approval prior to any use of Category II ASR. Use of Category III ADCs is denied.
- As a result of public comments regarding dust generation from CRLF, within 60 days of issuance of the permit, the Applicant shall install a weather station at a location on-site that will accurately reflect the site's meteorological conditions. capabilities of the station shall include, at a minimum, wind speed, wind direction, humidity, barometric pressure, temperature, and a precipitation gauge. The station shall be able to monitor wind speed (hourly peak wind speed) and wind direction at two different elevations, at eye level (5-6 feet from the surface of the landfill, and at a height between 10-20 feet. The Applicant shall install a system that is able to record data hourly and maintain records via a computer or other technology. The data should be compiled on a monthly basis, and the records maintained on-site for review by Department staff. Weather data shall be obtained for a minimum of five years. The Department has confirmed that Dave Nolan, 505-589-3972, NOAA - National Weather Service Forecast Office. Santa Teresa, New Mexico, will provide technical assistance regarding equipment, placement and data sharing. The goal of this condition is to obtain five years of site specific data to assist and enhance the evaluation of air particulate monitoring data.

- 7. The Applicant shall submit a Plan to the Department within 90-days of permit issuance that explores options to minimize particulate matter from the fleet of on-site heavy equipment, and for the El Paso Disposal, a wholly owned subsidiary of Waste Connections. This plan applies only to equipment or vehicles used on-site or to deliver wastes to CRLF.
- 8. To facilitate on-going public involvement, the Applicant shall continue to assess community concerns, gauge the effectiveness of mitigation measures undertaken by owners of CRLF, and to provide information regarding operation of the facility to the residents, of Sunland Park, the Applicant shall hold at least one public meeting within one year. A report summarizing the comments from the meeting shall be provided to the Department within 30-days of the date of the meeting.
- 9. Upon issuance of the permit, the owner shall operate this facility in accordance with all applicable requirements of Title 20, Chapter 9, Parts 2-10.
- 10. The Applicant shall dilute any leachate collected and place it on lined cells only, but shall not place leachate on any other portion of the landfill, including access roads or other unlined areas. Prior to disposal of leachate at a Public Owned Treatment Works or permitted liquids management facility, the Applicant shall receive approval from the Department.
- 11. A view shed analysis of the proposed final elevation in comparison with the surrounding mesa shall be completed for Unit 3 within one year. The analysis must visually show a representation of the elevation from all directions.
- 12. Additional vegetative screening shall be established at this facility as specified in the CIA within one year.
 - 13. Three revisions shall be made to the Contingency Plan and submitted to the Bureau for approval prior to implementation.
 - It shall be revised to correctly identify the contact information for the landfill's emergency coordinator. The Contingency Plan shall be updated any time there is a material change in circumstances affecting the Contingency Plan.
 - The site plan shall be revised to show the location of the newly registered recycling center located adjacent to the landfill office.

The description of emergency response coordination should include the name of each agency; the date and location of coordination; the primary points of contact for each agency; a description of the equipment, expertise and assistance that the agency will provide in the event of an emergency; the agency's estimated response time to the landfill, if applicable; an indication of whether unaccompanied access after hours would be granted to the agency through the sharing of keys or codes or other means; and acknowledgment that the agency was apprised of potential contaminants and the type of incidents that could occur at the landfill; and, when applicable, the agency's failure or unwillingness to participate with the landfill regarding the contingency plan and related coordination efforts.

RON CURRY Secretary of Environment

NOTICE OF PROCEDURE FOR APPELLATE REVIEW

Any aggrieved party may seek appellate review in the Court of Appeals, pursuant to NMSA 1978, Section 74-9-30.

CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738(SP)

APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

VOLUME I – PERMIT APPLICATION TEXT SECTION 2 – SOLID WASTE MANAGEMENT GENERAL REQUIREMENTS

Prepared for Camino Real Environmental Center, Inc.

September 2022



Prepared by

Weaver Consultants Group, LLC 6420 Southwest Boulevard, Suite 206 Fort Worth, Texas 76109 817-735-9770 IKG, LLC 24 Tejon Canon Rd. Placitas, NM 87043 505-301-2026

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20.9.2.8 GENERAL REQUIREMENTS

C. Any person who stores solid waste, recyclable materials, yard refuse or white goods shall store such materials in a manner that prevents blowing litter, insect and rodent harborage and does not create a public nuisance or public health hazard.

Although storage is not anticipated, the Camino Real Environmental Center, Inc. (CREC) may temporarily store solid waste, recyclable materials, yard refuse, and white goods at the Camino Real Landfill (CRLF) as needed. These materials will be stored in such a manner that prevents blowing litter, insect and rodent harborage, and does not create a public nuisance or health hazard. In the unlikely event that solid waste is temporarily stored (e.g., due to an emergency), it will be covered (e.g., with a tarp or sand) or containerized to prevent blowing litter and vector harborage. Temporary storage is not anticipated to exceed two weeks. Solid waste within the landfill footprint stored longer than two weeks will be covered with a minimum of 12 inches of soil or approved alternative daily cover. Storage measures specific to special wastes are described in Volume II, Section 8 Waste Disposal Management Plans.

Tires are stored in a trailer and are recycled approximately twice per year. White goods are not currently accepted on a regular basis. If CRLF decides in the future to routinely accept white goods, they will be stored in a pile next to the tire trailer and recycled on a weekly basis.

D. Any person who generates, stores, processes, transports or disposes of solid waste shall do so in a manner that does not create a public nuisance.

CRLF is operated in a prescribed manner that does not cause a nuisance or create a potential hazard to public health, welfare, or the environment as demonstrated by its successful historic operations (i.e., permitted since 1992, and compliance with the applicable regulatory rules in place at the time).

E. All notifications to the department required by 20.9.2-20.9.10 NMAC shall be directed to the bureau chief of the solid waste bureau.

CREC will submit all notifications required by 20.9.2-20.9.10 NMAC to the Chief of the Solid Waste Bureau (SWB).

F. Soil, water and special waste testing to demonstrate compliance with the Solid Waste Act or 20.9.2 – 20.9.10 NMAC shall conform with permit requirements or otherwise be specifically approved by the Department prior to use.

Testing methods used at CRLF for soil, water, and special waste will conform with Permit requirements or be approved by the Department prior to their use.

G. Any person who excavates a closed cell or solid waste disposal area in response to an emergency situation shall notify the department of such excavation within 48 hours.

CREC will notify NMED within 48 hours of excavations taking place in closed cells or solid waste disposal areas due to an emergency situation.

- H. Any person who accepts, stockpiles, or uses clean fill material shall:
 - (1) manage the material in a manner that does not create a public nuisance or potential safety hazard, or adversely impact the environment;
 - (2) not place the material in a watercourse or wetland unless appropriate permits are obtained; and
 - (3) cover the material with two feet of clean earth within 30 days after being deposited, unless the clean fill material is clean soil, or unless a longer period or alternative material or depth is specifically approved by the department.

CREC will comply with the requirements of 20.9.2.8.H(1)-(3) NMAC when clean fill is accepted, stockpiled, or used at CRLF. Clean fill is currently used at CRLF for daily and intermediate cover and construction of temporary roads.

20.9.2.10 PROHIBITED ACTS

CRLF has not and will not be operated in violation of the requirements listed in Table I.2.1.

D. Nothing in this section shall prohibit a person for whom a drug or dangerous drug has been dispensed in accordance with a valid prescription from transferring the drug or dangerous drug to a law enforcement agency that collects, stores, transports, or disposes of drugs or dangerous drugs pursuant to a program in compliance with applicable state or federal law or a law enforcement household pharmaceutical take-back program that complies with the solid waste rules.

Not applicable.

E. Household pharmaceutical waste collected through a law enforcement household pharmaceutical take-back program may only be disposed of or incinerated in accordance with the solid waste rules.

Not applicable.

TABLE I.2.1 - Prohibited Acts [20.9.2.10 NMAC]

- A. In addition to the prohibited acts identified in Section 74-9-31(A) and Section 74-13-4(J), and subject to the exemptions in Section 74-9-31(B) of the Solid Waste Act, no person shall:
 - (1) store, process, or dispose of solid waste except by means approved by the secretary and in accordance with board regulations;
 - (2) dispose of any solid waste in this state in a manner that the person knows or should know will harm the environment or endangers the public health, welfare or safety;
 - dispose of any solid waste in a place other than a solid waste facility that meets the requirements of 20.9.2 20.9.10 NMAC;
 - (4) dispose of any solid waste, including special waste, in a solid waste facility when that facility's permit does not authorize the disposal of the particular type of solid waste in that facility:
 - (5) construct, operate, modify or close a solid waste facility unless the facility has approval under 20.9.2 20.9.10 NMAC from the department for the described action;
 - (6) modify permit conditions or modify a solid waste facility unless the facility has applied for and received permission from the secretary for the modification pursuant to 20.1.4 NMAC Permit Procedures Environment Department;
 - (7) dispose of petroleum waste, sludge which that does not meet the analytical criteria of 20.9.8.16 NMAC, septage, domestic sewage, or treated domestic sewage at any solid waste facility;
 - (8) dispose of hazardous wastes which are subject to regulation under Subtitle C of the Resource Conservation and Recovery Act, 42 USC 6901 et seq, at any solid waste facility, unless the facility is permitted for the disposal of hazardous wastes:
 - (9) dispose of liquid waste at any landfill unless:
 - (a) the liquid waste is household waste other than septic waste and is in a small container similar in size to that normally found in household waste and the container is designed to hold liquids for use other than storage;
 - (b) the liquid waste is leachate or landfill gas condensate generated on-site which is recirculated in accordance with applicable laws and regulations; or
 - (c) the liquid waste is managed in accordance with an approval issued by the secretary;
 - (d) the use of uncontaminated water for dust control or to improve vegetation on a final or intermediate cover is not considered disposal;
 - (10) process, recycle, transfer, transform, or dispose of radioactive waste in a solid waste facility;
 - (11) dispose of lead-acid batteries at any landfill or incinerator;
 - (12) dispose of any infectious waste in a landfill;
 - (13) dispose of any material regulated under the Federal Toxic Substances Control Act, 15 U.S.C. Sections 2601-2692, except in a solid waste facility, registered facility or operation authorized to accept such waste;
 - (14) allow open burning at a solid waste facility;
 - (15) excavate or trench a closed cell or solid waste disposal area without written approval by the department and a determination whether an excavation plan will be required, unless in response to an emergency situation; excavation and trenching do not include excavations or trenches of less than 120 cubic yards or exploratory borings for the purpose of waste characterization, site investigation or mapping, nor does it include removal of waste for routine maintenance on gas collection and control and venting systems:
 - (16) violate a term or condition of a closure and post-closure care plan, a registration, or conditions contained in an approval of the department under 20.9.2.17 NMAC;
 - (17) allow liquid extraction from sludge at a solid waste facility unless authorized by permit; or
 - (18) process, transfer, store, dispose, or allow the disposal of special waste at a collection center.
 - (19) dispose at a solid waste facility any type of non-hazardous material that is excluded from the definition of solid waste, unless permitted to do so, except that a landfill may dispose of non-hazardous excluded waste listed under the following subparagraphs of Paragraph (9) of Subsection S of 20.9.2.7 NMAC unless prohibited from doing so in its permit; Subparagraphs (d) (agricultural), (f) (sand and gravel), (i) (densified refuse derived fuel), (m) (scrap tires), (n) (recyclable materials), (o) (compost), and (p) (materials, other than those that are regulated as hazardous, toxic or special waste, that are retained as evidence in a criminal proceeding and that are required to be destroyed or managed in accordance with a court or administrative order, and ash derived from such materials).
- B. Any person who generates, stores, processes, transports or disposes of solid waste shall take reasonable measures to determine the characteristics of the waste being handled to assure that no prohibited act is being performed.
- C. A Subtitle C facility authorized to accept special waste for disposal may accept solid waste if allowed under its permit.

20.9.2.12 SOLID WASTE FACILITIES; ENTRY BY DEPARTMENT; AVAILABILITY OF RECORDS TO DEPARTMENT

The secretary or any other authorized representative, employee or agent of the department may enter, inspect, monitor, sample, or obtain records of a solid waste facility, or commercial hauler as provided in Section 74-9-33 of the Solid Waste Act.

CREC will allow any authorized representative, employee or agent of the Department to enter, inspect, monitor, sample or obtain records of the facility during hours of normal operation.

20.9.2.13 SPECIFIC APPROVALS

- A. Where a specific approval or authorization for an alternative time period, test method or other requirement is allowed under 20.9.2 20.9.10 NMAC, the following procedures apply.
 - **(1)** The owner or operator shall submit a written request to the department seeking the specific approval or authorization and indicate the regulatory provision allowing the approval or authorization. If the requested approval is for a background groundwater quality determination, the request shall include all sample results, approved practical quantitation limits, and a detailed explanation supporting the requested levels. If the request is for an alternative time period, test method or other requirement under 20.9.2 - 20.9.10 NMAC, the request shall explain why the proposed alternative is at least as protective of the public health, safety and welfare as the requirement for which an alternative is requested. In addition, the request shall provide any technical information required in the section allowing the specific approval. The department may request further information prior to acting on the request.
 - (2) The department shall approve, approve with terms and conditions, or deny the request in writing.
 - (3) Any affected person who is dissatisfied with action taken by the department on a request for specific approval or authorization may appeal to the secretary. The request must be made in writing to the secretary within fifteen (15) days after notice of the department's action has been issued. Unless an appeal is received by the secretary within fifteen (15) days after notice to

the applicant of the department's action the decision of the department shall be final.

At this time, CREC is not seeking specific approvals for CRLF. Should CREC find it necessary to seek a specific approval, CREC will comply with the requirements of 20.9.2.13 NMAC.

B. If an appeal is received within the fifteen (15) day time limit, the secretary shall hold a hearing within fifteen (15) days after receipt of the request, unless extended for good cause. The secretary shall notify the person who requested the hearing of the date, time and place of the hearing by certified mail.

CREC will comply as applicable.

- C. In the appeal hearing, the burden of proof is on the person who requested the hearing. CREC will comply as applicable.
- D. Appeal hearings shall be held at a place designated by the secretary. The secretary may designate a person to conduct the hearing and make a final decision or make recommendations for a final decision. The secretary's hearing notice shall indicate who will conduct the hearing and make the final decision.

CREC will comply as applicable.

E. Upon request the hearing shall be recorded or transcribed by a court reporter. The person who requests the recording or transcription shall pay recording or transcription costs. A request for recording or transcription shall be made at least 5 working days prior to the hearing.

CREC will comply as applicable.

F. In appeal hearings, the rules governing civil procedure and evidence in district court do not apply. Hearings shall be conducted so that all relevant views, arguments and testimony are amply and fairly presented without undue repetition. The secretary shall allow department staff and the hearing requestor to call and examine witnesses, to submit written and oral evidence and arguments, to introduce exhibits, and to cross-examine persons who testify. All testimony shall be taken under oath. At the end of the hearing, the secretary or his designee shall decide and announce if the hearing record will remain open and for how long and for what reason it will be left open.

CREC will comply as applicable.

G. Based upon the evidence presented at the hearing, the secretary shall sustain, modify or reverse the action of the department. The secretary's decision shall be by written order within fifteen (15) days following the close of the hearing record. The decision shall state the reasons therefore and shall be sent by certified mail to the hearing requestor and any other affected person who requests notice. Appeals from the secretary's final decision are by Rule 1-075 NMRA.

CREC will comply as applicable.

20.9.2.15 VARIANCES

- A. Any person seeking a variance from any requirements of 20.9.2–20.9.10 NMAC shall do so in accordance with Permit Procedures Environment Department, 20.1.4 NMAC.
- B. Variance petitions shall be accompanied by proof of public notice as in accordance with the Solid Waste Act and with Permit Procedures Environment Department, 20.1.4 NMAC. The public notice shall:
 - (1) contain the name of the owner and operator of the solid waste facility;
 - (2) address and telephone number at which interested persons may obtain further information;
 - (3) briefly describe for what the variance is being sought and the proposed alternative;
 - (4) state the time period for which the variance is sought;
 - (5) be provided by certified mail to the owners of record, as shown by the most recent property tax schedule and tax exempt entities of record, of all properties:
 - (a) within one hundred feet of the property on which the facility is located if the facility is in a class A or H class county or a municipality with a population of more than 2,500 persons; or
 - (b) within one-half mile of the property on which the facility is located in a county or municipality other than those specified in Subparagraph (a) of Paragraph (5) of Subsection B of this section;
 - (6) be provided by certified mail to all municipalities and counties within a 10 mile radius of the property on which the facility is located;

- (7) be published once in a newspaper of general circulation in each county in which the property on which the facility is located; this notice shall appear either the classified or legal advertisements section of the newspaper and at one other place in the newspaper calculated to give the general public the most effective notice and, and when appropriate shall be printed in both English and Spanish; and
- (8) be posted in at least four publicly accessible and conspicuous places, including the existing facility entrance on the property on which the facility is located.
- C. The secretary shall deny the variance petition unless the petitioner establishes evidence that:
 - (1) application of the regulation would result in an arbitrary and unreasonable taking of the applicant's property or would impose an undue economic burden upon any lawful business, occupation or activity; and
 - (2) granting the variance will not result in any condition injurious to public health, safety or welfare or the environment.
- D. No variance shall be granted until the secretary has considered the relative interests of the applicant, other owners of property likely to be affected, and the general public.
- E. Variance or renewal of a variance shall be granted for time periods and under conditions consistent with reasons for the variance but within the following limitations:
 - (1) if the variance is granted on the grounds that there are no practicable means known or available for the adequate prevention of degradation of the environment or the risk to the public health, safety or welfare, it shall continue only until the necessary means for the prevention of the degradation or risk become known and available;
 - (2) if the variance is granted on the grounds that it is justified to relieve or prevent hardship of a kind other than that provided for in Paragraph (1) of this subsection, it shall not be granted for more than one year.

CREC is not seeking a variance for CRLF at this time. Should CREC apply for a variance, it will comply with the requirements of 20.9.2.15 NMAC.

- ten mile radius of the property on which the facility is proposed to be constructed, operated or closed;
- (3) published once in a newspaper of general circulation in each county in which the property in which the facility is proposed to be constructed, operated or closed is located; this notice shall appear in either the classified or legal advertisements section of the newspaper and at one other place in the newspaper calculated to give the general public the most effective notice and, when appropriate, shall be printed in both English and Spanish; and
- (4) posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance on the property on which the facility is or is proposed to be located.

Should CREC apply for an exemption, it will comply with the requirements of 20.9.2.16.C NMAC.

20.9.2.18 COMPLIANCE WITH OTHER REGULATIONS

Compliance with 20.9.2 - 20.9.10 NMAC does not relieve a person of the obligation to comply with other applicable local, state and federal laws.

CREC will comply with local, state, and federal laws and regulations applicable to CRLF.

20.9.2.21 CONTINUING EFFECT OF PRIOR ACTIONS; EXCEPTIONS

A. All permits and certificates of registration issued, and all closure and post-closure care plans approved, pursuant to previous regulations shall remain in effect until they expire or they are suspended, revoked, or otherwise modified.

CREC will comply with its current Permit for CRLF and Conditions until such time a Permit Modification and Renewal is issued that supersedes the current site-specific requirements.

CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738(SP)

APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

VOLUME I – PERMIT APPLICATION TEXT SECTION 3 – SOLID WASTE FACILITY PERMITS AND REGISTRATIONS

Prepared for

Camino Real Environmental Center, Inc.

September 2022



Prepared by

Weaver Consultants Group, LLC

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20.9.3.8 PERMIT APPLICATION REQUIREMENTS

A. Any person seeking to construct, operate, modify or close a solid waste facility shall first obtain a permit.

As described in Volume I, Section 1, the Final Order (Attachment I.1-B) approving the current Permits for the Camino Real Landfill (CRLF) was issued by the New Mexico Environment Department (NMED) in July 2008, and the Permits, SWM-030738 and SWM-030738(SP), were issued on 7/24/2008 (Attachment I.1-A). The application provided herein requests modification of the current CRLF Permit for a permit modification and renewal.

B. Any person who owns or operates an existing solid waste facility for which a permit application has not been submitted shall submit a permit application within one year of the effective date of this part. If the facility is a landfill that seeks to close rather than continue to operate, the owner or operator shall submit a plan for closure and post closure care for approval within one year of the effective date of this part. The closure and post closure care plan shall meet the requirements of 20.9.6 NMAC.

The Final Order (Attachment I.1-B) approving the current Permits for the Camino Real Landfill (CRLF) was issued by NMED in July 2008.

- C. Any person seeking a permit to construct, operate or modify a solid waste facility shall file an application, which shall:
 - (1) contain all information required by the Solid Waste Act and 20.9.2 20.9.10 NMAC;

This Application provides the information required by the Solid Waste Act (NMSA 1978 §74-9-1, et. Seq. 1993), and by applicable sections of the current (08/2007) New Mexico (NM) Solid Waste Rules (the "Rules"; 20.9.2-20.9.10 NMAC). For ease of review, this document is organized to address each element of the regulatory rules in the same sequence and format as 20.9.2-20.9.10 NMAC. In cases where the required response is detailed or complex in nature, the reviewer is referred to a particular volume, section, figure, table, or attachment that is specific to that issue.

(2) comply with Permit Procedures - Environment Department, 20.1.4 NMAC;

This Application complies with the current requirements of NMED's Permit Procedures (20.1.4 NMAC).

(3) contain information required by Section 74-9-21 of the Solid Waste Act, and if applicable, disclosure statements shall be on forms provided by the department;

Disclosure information, consistent with Section 74-9-21 of the Solid Waste Act, has been furnished under separate, confidential, cover on forms provided by NMED as described in Volume VI, Section 3.

(4) provide site information including:

(a) the name and address of the applicant, property owner, and solid waste facility owner and operator;

Applicant, Owner, and Operator of the CRLF:

Applicant, Owner, and Operator:

Camino Real Environmental Center, Inc. 1000 Camino Real Blvd. Sunland Park, NM 88063 505.589.9440

(b) total acreage, legal description and maps of the proposed facility site, including land use and zoning of the site and adjacent properties;

The CRLF is comprised of 480 acres located in parts of Sections 12 and 13, Township 29 South, Range 3 East of the New Mexico Principal Meridian. Figure I.1.1 is a Site Location Map plotted on the most recent United States Geological Survey (USGS) Quadrangle Map. A legal description and survey plat for CRLF is included as Attachment I.3-A.

The west boundary of the site represents the corporate limits of the City of Sunland Park, placing the site entirely within zoning for Sunland Park in Doña Ana County, New Mexico. Zoning and land use characterization for the site and surrounding areas is documented in Volume IV.

(c) a description of the facility's water source and its location;

The primary source of water for the CRLF is an existing water supply well designated Well A. This well has been servicing the facility since its installation in 1988 and provides the State Engineer's allocation of water for general office/maintenance facility use and dust control. The location of Well A is shown on Figure I.3.1. Bottled water is provided for facility employees and guests for drinking water.

(d) a description of the prevailing winds, including a wind rose diagram;

A Wind Rose based on the nearest available weather station (Station No. 23044, El Paso International AP, TX) is provided as Figure I.3.2. Calms (i.e., winds less than 1.3 miles per hour; mph) are predominant for the area approximately 1.00 percent of the time. Prevailing winds blow from the southeast, winds are also common from the west and southwest. Winds are commonly between 3 and 8 meters per second.

(e) a demonstration of compliance with the siting criteria in 20.9.4.9-12 NMAC;

Pursuant to 20.9.4.9 – 20.9.4.12 NMAC, the Applicant must make demonstrations that the facility's location complies with the applicable "Siting Criteria". 20.9.4.9.A NMAC states that "no municipal, construction and demolition, or special waste landfill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is [not in compliance with the siting criteria]." The most recent public notice for the CRLF facility was issued in association with the 2008 Permit Application. On the date of the first public notice (1990), per 20.9.4.9.A NMAC, no portion of the proposed CRLF disposal area was in conflict with the siting criteria, as confirmed by NMED in the 2008 Permit. The current siting demonstration is provided in Volume IV, Section 1. CREC is not proposing a lateral expansion, therefore no new site characterization studies are required. However, CRLF has updated the siting criteria demonstrations for this application including development of the Vulnerable Area Assessment which addresses demographics in detail.

(f) facility plans and drawings of the existing or proposed facility, with corresponding elevations and contours, signed and sealed by a professional engineer registered in New Mexico; and

Volume II, Section 1 is a set of Permit Plans at a reduced scale that establishes the engineering design criteria for the CRLF as listed in Table I.1-3. The same drawings are officially submitted with this Application as a full size (24 x 36-inch), sealed, plan set. These Permit Plans, and the Certification Statement that prefaces this volume, have been signed and sealed by a professional engineer registered in the state of New Mexico. That engineer, who is a specialist in solid waste engineering, is identified as follows:

Jonathan V. Queen, P.E.

New Mexico Professional Engineer #25844

Weaver Consultants Group
6420 Southwest Blvd., Suite 206

Fort Worth, Texas 76109
817-735-9770 Phone
817-735-9775 Fax

E-mail: jqueen@wcgrp.com

(g) the latitude and longitude of the geographical center of the existing or proposed facility (as approved by the department) in NAD-83 or equivalent;

The approximate geographic coordinates for the center of the 480-acre site area: Latitude 31° 47.2667' N and Longitude 106° 35.7033' W.

(5) contain a plan for compliance with 20.9.4.17 NMAC, if appropriate;

CREC is not seeking a Research, Development and Demonstration Permit per 20.9.4.17 NMAC at this time.

- (6) contain an operating plan for compliance with operational criteria, including
 - (a) the means for controlling access to the facility and controlling and mitigating odors and litter;
 - (b) a listing and description of the number, type and size of equipment to be used at the proposed solid waste facility for processing, recovering, diversion of recyclables, transforming or disposing of solid wastes;
 - (c) a description of the proposed solid waste facility, including:
 - (i) the anticipated origin, composition and weight or volume of solid waste and other materials that are projected to be received at the facility;
 - (ii) the processes to be used at the facility;
 - (iii) the daily operational methodology of the proposed process;
 - (iv) the loading rate, the expected life of the facility; and
 - (v) the design capacity through the expected life of the facility and through the permit life of the facility;
 - (d) a plan for an alternative waste handling or disposal system during periods when the proposed solid waste facility is not in operation, including procedures to be followed in case of equipment breakdown; procedures may include the use of standby equipment, extension of operating hours and contractual agreements for diversion of waste to other facilities;
 - (e) the anticipated start-up date of the facility;
 - (f) the planned operating hours of the proposed facility;
 - (g) the plans for transportation to and from the facility including:
 - (i) the size and approximate number of vehicles that will deliver waste to the facility daily;

- (ii) the anticipated routes that will be used by waste vehicles and the suitability of roads and bridges involved:
- (iii) measures for controlling litter, dust and noise caused by traffic;
- (iv) other predicted impacts of traffic to and from the facility; and
- (v) plans, if any, for diverting solid waste from the waste stream; and

An updated Plan of Operations which meets the requirements of 20.9.3.8.C(6) NMAC is provided as Volume II, Section 2, and describes routine practices that have proven successful in conducting safe and efficient daily operations at CRLF. Also provided is an updated Transportation Plan (Volume II, Section 9) detailing plans for transportation of waste to the facility

(h) a plan for complying with record keeping requirements in 20.9.5.16 NMAC as applicable;

A detailed plan for complying with record keeping requirements and submitting annual reports is included in Volume II, Section 2.

(7) contain an emergency contingency plan that meets the requirements of 20.9.5.15 NMAC;

An updated Contingency Plan has been prepared for the facility in accordance with 20.9.5.15 NMAC, and is provided as Volume II, Section 3.

(8) contain a closure and post-closure care plan in compliance with 20.9.6 NMAC;

An updated Closure and Post-Closure (CPC) Plan in compliance with 20.9.6 NMAC and prevailing NMED SWB rules is provided as Volume II, Section 5.

(9) demonstrate the ability to comply with any applicable special waste requirements in 20.9.8 NMAC;

CRLF is currently permitted to accept three special wastes:

- (1) Sludge
- (2) Industrial solid waste (ISW)
- (3) Petroleum contaminated soils (PCS)

A detailed description of the management of these wastes is provided in the updated Plan of Operations (Volume II, Section 2) and in the updated waste-specific Special Waste Disposal Management Plans (DMPs; Volume II, Section 8).

(10) contain a proposed groundwater monitoring system plan in compliance with 20.9.9 NMAC, including, if site assessment bore

holes are drilled to obtain data, a certification that the holes were plugged or sealed in accordance with the New Mexico office of state engineer's requirements for plugging or sealing of test holes, or will be converted to monitoring wells as part of the groundwater monitoring system;

On January 13, 2006, GEI submitted to NMED the *Groundwater Monitoring Program Update (January 2006 Update)* for CRLF. The *January 2006 Update*, approved by SWB on 5/17/07 (Attachment V.2-B) and updated on 6/15/07, summarizes the historical monitoring program for the site, provides statistical analyses of the background groundwater monitoring datasets from 1989 through 2005, and includes established assessment monitoring levels (AMLs) for each active well/inorganic parameter combination. Historic revisions to the Groundwater Monitoring Program and Groundwater Monitoring Network are outlined in Volume V, Section 2.

Volume V, Section 1 includes results of additional boring investigations in Unit 4. Certification that the borings were plugged in accordance with the New Mexico Office of State Engineer's requirements will be included in Volume V, Section 1 and plugging documentation provided as Attachment V.1-D. The Groundwater Monitoring Plan presented in Volume V, Section 2 includes a summary of the results of evaluations and statistical analyses performed to update the site's quality database

Volume V, Section 2 documents that the Groundwater Monitoring Plan utilized by CRLF complies with New Mexico Solid Waste Management Rules, 20 NMAC 9.9. A detailed description of the groundwater monitoring network is also provided in Volume V, Section 2.

(11) include a cost estimate in accordance with the requirements of 20.9.10 NMAC, in a format as specified by the department; and

Financial Assurance documentation is provided in Volume VI, Section 1. Updated Closure/Post-closure (C/PC) cost estimates developed in accordance with 20.9.10 NMAC, in a format specified by the Department, are also included in Volume II, Section 5 (C/PC Plan).

(12) contain any other information required by the secretary.

CREC will provide applicable information requested by the Secretary that is identified as a result of the permit modification and renewal review process.

D. Any person seeking an initial permit for a landfill or a transformation facility, or for a permit modification of a landfill resulting in a lateral or vertical expansion, excluding an on-site scrap tire monofill, shall first submit to the secretary the information that is necessary for the secretary to determine if the proposed site is in a vulnerable area. If the

secretary determines that the site or the proposed site is in a vulnerable area, and the applicant is proposing to site the facility, or expand the facility, in an area that has not been designated for the proposed use as the result of a land-use zoning process conducted by the local government that requires a quasi-judicial public hearing, with the opportunity for public participation, the applicant shall follow the following procedures.

The Vulnerable Area Assessment (VAA) was submitted to NMED on July 17, 2020. Although CRLF is not proposing to expand the facility laterally, a VAA was completed in March 2020 required by the modification aspect of this application. A copy of the VAA is provided as Attachment IV.2-B. The Secretary's response letter is also provided in Attachment IV.2-B.

E. If the proposed landfill, transformation facility or landfill modification resulting in a lateral or vertical expansion is proposed in a vulnerable area, or is not sited in an area that has been designated for the proposed use as the result of a land-use zoning process conducted by the local government that requires a quasi-judicial public hearing, with the opportunity of public participation, the applicant shall demonstrate that, within the state of New Mexico, granting the permit or permit modification will not result in a disproportionate effect on the health and environment of a particular socioeconomic group in the vulnerable area.

NMED's response letter regarding the site's status as a VAA is included in Attachment IV.2-B.

F. If the proposed initial landfill or transformation facility permit, or landfill modification resulting in a lateral or vertical expansion is not in a vulnerable area, or is sited in an area that has been designated for the proposed use as the result of a land-use zoning process conducted by the local government that requires a quasi-judicial public hearing, with the opportunity for public participation, the applicant is not required to prepare a community impact assessment.

NMED's response letter regarding the site's status as a VAA is included in Attachment IV.2-B.

G. Each permit application filed with the secretary shall include proof that the applicant has provided notice of the filing of the application and any community impact assessment scoping meetings, pre-assessment meetings or other notifications required by 20.9.2 - 20.9.10 NMAC, and unless otherwise specified by 20.9.2 - 20.9.10 NMAC, to the public and other affected individuals and entities. The notice shall:

- (1) be provided by certified mail to the owners of record, as shown by the most recent property tax schedule, and tax exempt entities of record, of all properties:
 - (a) within one hundred feet of the property on which the facility is located or proposed to be located if the facility is or will be in a class A or class H county or a municipality with a population of more than two thousand five hundred (2,500) persons; or
 - (b) within one-half mile of the property on which the facility is located or proposed to be located if the facility is or will be in a class B county or municipality with a population of 2,500 or less;

CRLF is located in Doña Ana County in the City of Sunland Park, with a population greater than 2,500 (population 14,106: 2010 census). Therefore, the Applicant is required to notify all owners of record within 100 feet of the facility boundary. Volume VI, Section 2 of the Permit Application provides a uniform property codes map (Figure VI.2.1) identifying properties local to CRLF. Figure VI.2.1 corresponds to Table VI.2-1, which lists the property owners and addresses at the time of Permit Application submission. Consistent with current NMED policy, public notice will be re-sent via certified mail 2 to 4 weeks prior to the public hearing to the owners of record as shown by the most recent property tax schedule, within 100 feet of the facility boundary; and the municipalities and counties in which CRLF is located and to the governing body of any county, municipality, Indian tribe or pueblo within a 10-mile radius of the property (Table VI.2-2). In addition, notice will be re-posted and re-published in the local paper 2 to 4 weeks prior to the public hearing. Notice of Filing of the Permit Application in compliance within Section 201 C.1.B is provided in Volume VI, Section 2.

(2) be provided by certified mail to all municipalities and counties in which the facility is or will be located and to the governing body of any county, municipality, Indian tribe or pueblo when the boundary of the territory of the county, municipality, Indian tribe or pueblo is within ten miles of the property on which the facility is proposed to be constructed, operated or closed;

A list of municipalities, counties, and tribal governments that were notified by certified mail is provided in Volume VI, Section 2, exceeding the minimum requirements. A 10-mile Radius Map is provided as Figure VI.2.2.

(3) be provided to all parties and interested participants of record for a permit modification or renewal;

A list of potential parties and interested participants of record notified pursuant to this Part is included with Volume VI, Section 2. This includes a list of notified parties, attempted notice, and copies of the sign-in sheets for the public meetings.

(4) be published once in a newspaper of general circulation in each county where the facility is proposed to be constructed, operated or closed; this notice shall appear in either the classified or legal advertisements section of the newspaper and at one other place in the newspaper calculated to give the general public the most effective notice; notice also shall be provided to residents of each community that is or will be affected significantly by the existing or proposed solid waste facility at least once in one or more other media in a manner that effectively reaches a substantial number of members of each community, and where printed shall be printed in both English and Spanish;

A copy of the NMED-approved Notice of Application is included along with an affidavit documenting its translation and publication, in Volume VI, Section 2 of this Permit Application.

(5) be posted in at least eight publicly accessible and conspicuous places, including the proposed or existing entrance to the property on which the facility is or is proposed to be located; and

Notification of Application was posted in a minimum of eight publicly accessible and conspicuous places, including the entrance to the Landfill. These locations are listed in Volume VI, Section 2, including an affidavit documenting the posting, and a copy of the posting.

- (6) include the following:
 - (a) name, address, and telephone number of the applicant and contact person;
 - (b) the anticipated start-up date of the facility or modification, and planned hours of operation;
 - (c) a description of the facility, including the general process, location, size, quantity, rate, and type of waste to be handled and a description of any proposed modification;
 - (d) the anticipated origin of the waste; and
 - (e) a statement that comments regarding the application should be provided to the applicant and the department.

The NMED-approved Notice of Application has been mailed, posted, and published per 20.9.3.8.G NMAC as documented in Volume VI, Section 2 of this Permit Application. The Notice provides the information listed in 20.9.3.8.G(6) NMAC.

H. Notices shall be submitted to the department for approval prior to publication, service and posting. The applicant shall submit a certificate from an American translators association certified translator showing that English versions have been accurately translated into Spanish.

A copy of the draft Notice will be submitted to the NMED SWB for approval prior to issuance. Following NMED final approval the Notice language will be translated into Spanish, and Certification of the translation will be included in Volume VI, Section 2 in compliance with 20.9.3.8.H NMAC.

20.9.3.9 ADDITIONAL PERMIT APPLICATION REQUIREMENTS FOR MUNICIPAL, MONOFILL OR SPECIAL WASTE LANDFILL FACILITIES

- A. Prior to the submission of a permit application or an application for a modification resulting in a lateral or vertical expansion for a municipal, monofill or special waste landfill, the applicant shall:
 - (1) meet with department representatives to discuss the proposed facility or modification; and

Representatives of Weaver Consultants Group (Mr. Jeffrey P. Young, P.E. and Ms. Ramsey Baker, E.I.T) met with NMED SWB representatives (Ms. Auralie Ashley-Marx and Ms. Erica Ortega) on 07/09/2019 to discuss the proposed Permit Application Renewal and Modification in a formal "pre-Application" meeting. CREC representatives Mr. Mark Adams, P.E. and Mr. Brady Stewart, P.E. were also present for the meeting, as well as Mr. I. Keith Gordon, P.E. of IKG, LLC.

- (2) submit a site assessment boring plan for departmental approval, including a demonstration that the installation of any monitoring well will comply with 20.9.9.9 NMAC:
 - (a) an applicant for approval of a site assessment boring plan shall submit a notice of intent to the secretary at least 14 days prior to the installation or decommissioning of any borings; and
 - (b) borings may be converted into piezometers or groundwater monitoring wells provided they are constructed in accordance with 20.9.9.9 NMAC, and the conversion is consistent with the groundwater monitoring plan and system plan approved by the department.

A Site Assessment Boring Plan for installation of two new groundwater monitoring wells (MW-D2 and MW-H) was approved by the NMED on November 30, 2005.

Installation and development of these two new wells was completed in February 2006.

As part of this application for permit modification and renewal, a Soil Boring Plan was submitted to the NMED on October 29, 2019 for drilling and soil testing of three borings to provide geotechnical characteristics specific to the Unit 4 area. The Soil Boring Plan was approved by the NMED on November 18, 2019, and locations of the three borings (4-1, 4-2, and 4-3) are shown on Figure V.1.6.

B. Any person seeking a permit for a municipal or special waste landfill shall submit the following information in addition to that required under 20.9.3.8 NMAC:

In this permit application, CREC is submitting the updated additional information required by 20.9.3.9 NMAC for a municipal and special waste landfill. Substantive data is detailed in the Permit Plans (Volume II, Section 1), and the Plan of Operations (Volumes II, Section 2), as detailed below.

(1) a schedule of filling and methods of compaction of solid waste;

CRLF operations are defined as the "area fill" method. The general schedule of filling is identified according to the sequence of numbered cells shown on the Permit Plans and is described in greater detail in the Plan of Operations (Volume II, Section 2). The cell sequence has been designed to facilitate operational efficiency with respect to the rate of waste receipts, earthmoving plans, site construction progress, and access. More than one cell may be in operation at any given time to provide operational flexibility (e.g., in the event of inclement weather). Currently, Units 2 and 3 are the active fill areas.

It is the policy of CRLF to place at least one "loose" lift of MSW over the protective soil layer as soon as practical after the liner installation. This operational procedure serves to protect the liner and leachate collection system; and also reduce the production of "contact" water, which is rainfall that falls within the cell's watershed before it is filled. This contact water is managed as leachate.

Waste will be compacted by specially designed, high ground-pressure solid waste compaction equipment. Waste will be spread in shallow lifts, and compacted by repeated passes of the waste compactors and/or bulldozers listed on Attachment II.2-A (List of Equipment). Daily fill face procedures are described in the Plan of Operations, Volume II, Section 2.

(2) a soil balance calculation and types and sources of daily, intermediate and final cover;

Daily, intermediate, and final cover soils are derived from on-site borrow sources and existing stockpiles, as cell excavations are completed. The volumetrics study for

CRLF is provided as Volume III, Section 1 and includes a Capacity Analysis (Table III.1-1) and a Materials Balance (Table III.1-2).

(3) site plans and cross-sections of the facility, drawn to scale, indicating the location of any:

The Permit Plans for CRLF, which are included with this Application for Permit Modification and Renewal at a reduced size in Volume II, Section 1 (and also included as a full-size 24 x 36-inch, sealed, plan set), provide maps, site plans, and cross-sections drawn to scale. A Site Plan is also provided as Figure I.3.1. These drawings illustrate the locations of the features described in 20.9.3.9.B(3) NMAC, as detailed below:

(a) groundwater monitoring wells and landfill gas monitoring points;

Figure I.3.1 shows the monitoring networks at CRLF for groundwater and landfill gas (LFG). The Groundwater Monitoring Plan (Volume V, Section 2) describes the groundwater monitoring program, and the LFG Management Plan (Volume II, Section 6) describes the landfill gas monitoring program.

(b) materials recovery operation(s);

Although CRLF does not currently operate a recycling program, it may elect to receive source–separated recyclables in the future based on need as determined by CREC. The current Public Convenience Station is adapted for recyclables management and includes containers or bins to collect and store select source-separated residential materials. Waste diversion and recycling may include yard waste, select C & D debris, metals, corrugated/paper, select metals, etc. The estimated quantities are well below the threshold that would require a separate permit. Recovered materials will be routinely transported to market or sent for disposal as necessary.

(c) borrow and fill areas:

The sequence for cell construction and filling is depicted on the Site Development Plan (Permit Plans). In general, materials excavated from future cells are either transported to the active fill area or stockpiled in proximity to operating cells to optimize the hauling and placement of daily and intermediate cover. Areas inside the solid waste disposal footprint are planned for both excavation and filling (following liner installation). Excess soils are stockpiled for later use as cover material on both undeveloped and filled areas, and positioned to optimize drainage and erosion control. "Fill areas" are the cells identified on the Permit Plans and Site Plan (Figure I.3.1). Stockpile locations are subject to change.

(d) fire protection equipment;

Fire prevention and protection are discussed in Volume II, Section 3, Contingency Plan. In addition, Engineering Drawing 2 shows the location of the site's water supply well, which is used to supply the onsite storage tank used as a water wagon filling station, that may serve as a source of water in the event of a fire. In addition, ABC type fire extinguishers are located in each of the significant structures and on each piece of mobile equipment as described in the Contingency Plan (Volume II, Section 3).

(e) barriers for concealing the site from public view and noise abatement;

The proposed design provides for sufficient setback distances in excess of applicable NMAC siting criteria. In comparison to the setback distances approved in the 2008 permit application, setbacks on the west, south, and north sides of the site have remained consistent; setbacks to the southeast, northeast, and northwest have increased, providing a greater physical buffer between the landfill and the communities located north of the facility and minimizing noise potential. The setback to the east has been slightly modified but maintains more than the required setback distance, and there is no population in proximity to east side of the site.

The location of CRLF has been optimized to provide visual and noise screening, and engineering measures and buffer zones have been added to mitigate potential impacts. Due to the site's topographic location and local land use, the public's only limited viewpoint of site activities is from the north. There are two elevated railroad embankments and a berm north of the Facility which serve to shield views from Sunland Park. In addition, a proposed 10-foot-tall engineered screening fence will be installed as shown on Figure I.1.4 to provide visual screening and improve aesthetics on the northeast side of the facility.

The selection of the landfill development sequence is specifically designed to mitigate visibility from surrounding roads and property uses. The provision of buffer zones, setbacks, and engineering screening measures (e.g., berms and fences) are focused on the areas with the nearest impact potential. The Noise Impact Assessment (Attachment I.2-B) provides an evaluation of noise levels from both operations and traffic.

(f) surface drainage;

Existing drainage features and major improvements to the stormwater control systems are shown on the Permit Plans. Calculations performed to confirm the efficacy of the proposed stormwater control infrastructure are furnished in Volume III, Section 8, and erosion control is addressed in Volume III, Section 6.

(g) water supply, including lines, tanks and wells;

The existing water supply well (Well A) shown on the permit plans is used to supply the on-site storage tank used as a water wagon filling station for dust control. Due to naturally occurring water quality conditions, the well water is non-potable and is used only for non-consumptive purposes in the Landfill Office. Bottled water is furnished as a drinking water supply at the Landfill Administration center.

(h) buildings, roads, utilities, storage ponds, fences and other site improvements;

The Permit Plans provide the locations for existing and proposed CRLF site improvements.

(i) electric power transmission and distribution lines, pipelines, railroads, water, gas, oil wells, and public and private roads within 300 feet of the facility; and

Attachment I.3-B shows the following data for installations on or immediately adjacent to the facility based on site reconnaissance:

- Electric power line easements
- Underground pipelines and easements
- Public and private roads
- Railroad

All water wells are shown on Figure I.3.3. There are no gas or oil wells at or within 300 feet of the CRLF. Mapping is generalized based on historical data.

(j) access roads to and within the landfill, including description, slopes, grades, length, load limits and points of entrance and exit;

Current and planned on-site access roads are shown on the Permit Plans. There are no load limits for on-site or off-site all-weather roadways; and all slopes, except temporary ramps, are \leq 7%. Details regarding the public roadway system used to access CRLF are provided in the Transportation Plan (Volume II, Section 9), including equipment access following closure.

(4) a topographic map of the site at a scale of 1"=200 feet, with a contour interval of two feet or less where relief is less than 50 feet; and five feet or less where relief exceeds 50 feet, with property boundaries of the landfill indicated;

A Site Topographic Map with a contour interval of 2 feet at a scale of 1 inch = 200 feet is provided as Attachment I.3-E.

(5) the most recent full size United States geological survey topographic map of the area, showing the waste facility boundary

and existing utilities and structures within 500 feet of the boundary of the facility site;

The most recent USGS Quadrangle Map is provided as Attachment I.3-B. The map includes the CRLF site boundary and a 500-ft offset, as well as the required features. Refer to the response to 20.9.3.9.B(3) NMAC for additional information.

(6) if available, the most recent federal emergency management agency 100-year frequency floodplain map, and if not available, the applicant shall otherwise demonstrate the site is not located in a 100-year frequency floodplain;

The applicable Federal Emergency Management Agency (FEMA) Floodplain Map (353013C1050F) was reviewed for 100-year floodplain delineations on or near CRLF. A review of this map, in addition to site inspections, indicates no watercourses or surface features characteristic of a regulated floodplain within or adjacent to CRLF. The FEMA Floodplain Map provided as Figure 4.5 (Volume III, Section 8) shows CRLF in relation to the nearest floodplains.

- (7) a description of site geology and hydrology including:
 - (a) characterization of the uppermost aquifer including depth, estimated thickness, estimated sustainable yield, water quality (including all constituents referenced in Subsection A of 20.9.9.20 NMAC, flow direction, gradient and velocity unless the application includes a petition for suspension of groundwater monitoring requirements in accordance with Subsection C of 20.9.9.8 NMAC;
 - (b) characterization of the geology, including:
 - (i) the results of the site assessment borings conducted in accordance with the approved boring plan;
 - (ii) a site plan showing the location, surface elevation and total depth of each boring;
 - (iii) lithologic log results of each boring, drawn to a scale of 1"=10' (except that borings of greater than 200 feet may be drawn to a scale of 1"=20'), graphically depicting the soil and/or rock strata penetrated and describing each layer; a) if soil: color, degree of compaction, moisture content, and any additional information necessary for an adequate description and visual classification of each stratum based on the unified soils classification system; and b) if rock: a detailed lithologic description, including rock type, degree

of induration, presence of fractures, fissility, porosity (including vugs), and any other information necessary for an adequate description; the descriptions shall be certified by a qualified groundwater scientist who shall be on-site at all times during drilling operations (all field notes of the groundwater scientist shall be made available upon request of the department); and

(iv) if groundwater was encountered, the initial depth it was encountered shall be indicated on the lithologic log;

A detailed hydrogeologic investigation was previously completed for the CRLF and approved by NMED SWB. An additional hydrogeologic investigation was conducted as part of this application which included drilling and soils laboratory testing specific to Unit 4. This updated information is summarized in Volume V, Section 1. No additional hydrogeologic investigations are warranted.

(8) a demonstration that run-off from the landfill will not discharge contaminants in violation of the New Mexico Water Quality Act, commission regulations or standards, or the Federal Clean Water Act, including an analysis of proposed run-on and run-off flow and control systems;

The proposed stormwater management systems are shown in the Permit Plans. Stormwater management calculations are provided in Volume III, Section 8, Drainage Calculations. Erosion control is addressed in Volume III, Section 6.

A Stormwater Pollution Prevention Plan (SWPPP) was developed for CRLF consistent with the requirements of the proposed National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit (MSGP) regulations. The SWPPP is maintained on-site at the Landfill Office. The new SWPPP encompasses CRLF property and facility operations, and utilizes existing and proposed stormwater drainage and detention infrastructure to protect surface water quality.

- (9) a groundwater monitoring plan in conformance with 20.9.9.10 NMAC;
- (10) plans and specifications for groundwater monitoring systems in accordance with 20.9.9.9 NMAC;

Volume V, Section 2 documents that the Groundwater Monitoring Plan utilized by CRLF complies with New Mexico Solid Waste Management Rules, 20.9.9.9 – 20.9.9.20 NMAC detailed description of the groundwater monitoring network is also provided in Volume V, Section 2.

(11) plans and specifications for liner and leachate collection systems in accordance with 20.9.4.13 NMAC and 20.9.4.15 NMAC:

Plans and specifications for liners and leachate collection systems, which conform to the requirements of 20.9.4.13 and 20.9.4.15 NMAC, are provided in the Permit Plans. Reference material documenting the efficacy and suitability of the liner and leachate collection system materials are furnished in Volume III, Section 4 (Compatibility Documentation), Volume III, Section 5 (Pipe Loading Calculations), and Volume III, Section 7 (Tensile Stresses in Liner Components). Leachate collection and management are addressed in the Leachate Management Plan (Volume II, Section 7). Materials specifications standards and installation criteria are stipulated in the CQA Plan (Volume II, Section 4).

(12) plans and specifications for landfill gas monitoring and management programs in accordance with 20.9.4.16 NMAC; and

The monitoring and management of landfill gas at CRLF will be conducted in accordance with the Landfill Gas Management Plan (Volume II, Section 6). Since April 2001, CRLF has operated a landfill gas collection and control system (GCCS) in accordance with AQB requirements and its Title V Permit. Landfill gas is collected via a network of vertical extraction wells and the gas is routed by headers to a flare for destruction or to the LFG-to-energy recovery plant for beneficial use. The Landfill Gas Management Plan (Volume II, Section 6) provides discussion of key GCCS design features.

(13) provide proof the applicant has notified the federal aviation administration and the affected airport if the facility is to be located within six miles of an airport used by the public and that the federal aviation administration does not object to the site being operated as a solid waste facility.

As described in Volume IV, Section 1, there are no airports located within 6 miles of the CRLF. The nearest public use airport is the Doña Ana County Airport located in Santa Teresa, NM, as shown on the Airport Location Map, provided as Figure I.3.4. CRLF is not located within the distance to airports set by the FAA for setbacks or FAA notification.

Based on height restrictions defined by the FAA's web-based Notice Criteria Tool (Obstruction Evaluation Version 2018.20), the CRLF is required to file notice with the FAA. This notice is included in Attachment I.3-F along with the FAA acceptance letter.

C. Applicants shall include disposal management plans for all types of special waste proposed to be disposed at the landfill. Such disposal management plans shall include, at a minimum:

- (1) a description of methods to identify the various special wastes, including the use of test parameters in 20.9.8.11 NMAC;
- (2) disposition procedures for incoming special wastes;
- (3) procedures for notifying the department in the event wastes either fail the tests listed in 20.9.8.11 NMAC or prove not to be one of the listed special wastes;
- (4) the tracking system to be used to:
 - (a) compile and record the amounts and types of wastes received;
 - (b) identify the area or disposal coordinates where the waste was placed in the disposal cell; and
 - (c) complete the manifest requirements of 20.9.8.19 NMAC;
- (5) emergency and mitigation measures in case of a spill or leak; and
- (6) a description of procedures to meet applicable requirements in 20.9.8.12-17 NMAC.

CRLF is currently permitted to accept three non-hazardous special wastes:

- (1) Sludge
- (2) Industrial solid waste (ISW)
- (5) Petroleum contaminated soils (PCS)

A detailed description of the management of these wastes is provided in the updated waste-specific Special Waste DMPs (Volume II, Section 8), addressing the requirements of 20.9.3.9.C NMAC for each of these wastes.

D. Applicants shall identify any types of material not within the definition of solid waste that the owner or operator seeks to dispose.

CREC is not seeking to dispose of materials at CRLF that do not conform to the definition of solid waste.

20.9.3.10 ADDITIONAL PERMIT APPLICATION REQUIREMENTS FOR CONSTRUCTION AND DEMOLITION LANDFILLS

Any person seeking a permit for a construction and demolition landfill shall submit the following information in addition to that required under 20.9.3.8 NMAC:

A. site plans and cross-sections of the proposed facility, drawn to scale, indicating the location of:

- (1) the tipping areas;
- (2) fencing and gates;
- (3) entrances, exits and access roads;
- (4) locations of buildings within 500 feet of the facility:
- (5) public water supply wells and private wells within 1000 feet of the facility; and,
- (6) borrow and fill areas;

CRLF will dispose of construction and demolition debris and will do so in compliance with its municipal solid waste landfill operations as described in the Permit Application. Construction and demolition waste will be received on a daily basis and disposed of at the daily fill face along with the daily waste receipts. Some select material (e.g., crushed aggregate) may be used for construction of temporary on-site haul roads or as daily cover.

B. frequency of construction and demolition debris disposal; and

C&D will be disposed of at the CRLF on a daily basis during normal hours of operations. Further discussions of daily operations are detailed in the Plan of Operations (Volume II, Section 2).

C. if recycling operations are conducted, the method of diversion and storage of the recyclable materials, the frequency of collection for reuse from the facility, method of transport, and destination; the recycling operation shall comply with 20.9.3.29 NMAC.

Limited recycling operations are conducted at the CRLF (select white goods, tires, and polypipe) as detailed in the Plan of Operations (Volume II, Section 2). CREC will keep NMED apprised of additional waste diversion and recycling opportunities and initiatives.

20.9.3.13 ADDITIONAL PERMIT APPLICATION REQUIREMENTS FOR SOLID WASTE FACILITIES THAT ACCEPT SPECIAL WASTE

Any person seeking a permit to accept special waste at a solid waste facility shall submit the following information in addition to that required under 20.9.3.8 NMAC:

A. a list of the types of wastes to be accepted and the anticipated sources of such wastes;

CRLF is currently permitted to accept three non-hazardous special wastes (i.e., sludge, ISW, and PCS). The potential sources of these special wastes are anticipated

to come from within Doña Ana County and the southwest NM region, although special waste may also originate from other areas of NM or from out-of-state (e.g., Texas or Mexico). Additional sources of special wastes will be identified and details regarding processing/disposal will be submitted to NMED as new markets are identified.

B. the anticipated amount and frequency of receipt of the wastes, including the anticipated amount of each type of special waste expected to be accepted over the life of the permit;

It is anticipated that CRLF will receive the quantities of special wastes at the estimated frequencies provided in Table I.3-1.

Table I.3-1
Anticipated Special Waste Receipts

Special Waste Type	Current Anticipated Annual Amount ^{1, 2}	Anticipated Annual Amount at End of 20-Year Permit Term ^{1, 2}
(1) Sludge ³	3,000 tons	4,000 tons
(2) ISW	15,000 tons	15,000 tons
(3) PCS ³	600 tons	1,000 tons

¹ Estimated rates only. Rates subject to change.

C. a description of the method of handling, including, but not limited to, disposal, processing, or transformation;

Each special waste delivery is recorded and inspected; and documentation is maintained at the CRLF Administration Center. A detailed description of management methods is provided in the Special Waste DMPs (Volume II, Section 8).

D. a general disposal management plan, in accordance with 20.9.8 NMAC, for each type of special wastes proposed to be accepted at the facility; and

A generic Special Waste DMP is provided in Volume II, Section 8, as well as waste-specific DMPs for each type of special waste.

E. emergency and mitigation measures in case of a spill or leak.

In the event that there is a spill of special waste on the haul road to the landfill or other areas of the site, emergency response procedures as outlined in the Contingency Plan (Volume II, Section 3) will be immediately implemented and NMED will be notified of the spill, and any corrective measures.

Actual special waste receipts will be documented in the CRLF Facility Operating Record and in the Annual Reports to NMFD

³ Assumed average annual increase of 1%.

20.9.3.14 ADDITIONAL PERMIT APPLICATION REQUIREMENTS FOR COMPOSTING FACILITIES THAT ACCEPT SOLID WASTE

Any person seeking a permit for a composting facility that accepts solid waste shall submit the following information in addition to the information required by 20.9.3.8 NMAC.

Not applicable. Composting operations are not currently performed at CRLF.

20.9.3.16 PERMITTING PROCEDURES

A. The permitting procedures in 20.9.3.8 - 20.9.3.25 NMAC supplement the permitting requirements in the Solid Waste Act and Permitting Procedures - Environment Department, 20.1.4 NMAC.

CREC will comply with the permitting requirements of 20.9.3.8 – 20.9.3.25, the Solid Waste Act [74-9-22] and 20.1.4 NMAC NMED Permitting Procedures (i.e., Public Involvement).

- B. A permit shall be issued only after a public hearing as required by NMSA 1978 Section
- 74-9-24 A of the Solid Waste Act. If a public hearing is held for a permit application, modification, renewal, or petition, the applicant shall pay one-half the actual cost of:
 - (1) court reporting services, including the cost to provide a copy of the transcript to the department;
 - (2) any translation or interpretation services; and
 - (3) providing the facility where the public hearing is held, including any security and ancillary costs.

CREC agrees to pay half the cost of the administrative permitting tasks listed in 20.9.3.16.B NMAC.

C. The department shall submit an invoice to the applicant for payment. Payment shall be made before action on a permit will be finalized. A public entity may seek a waiver of payment for its share of hearing costs if it demonstrates to the secretary that payment would impose a financial hardship to the entity.

CREC will duly pay its applicable portion of the Public Hearing costs when presented with an invoice from the Department pursuant to 20.9.3.16.C NMAC.

20.9.3.17 PERMIT APPLICATION REVIEW

A. The applicant shall submit three copies of the initial permit application for approval. Upon receipt of an application for a permit, the department shall review the application to determine if additional information is necessary or shall determine the application administratively complete. The department shall issue a notice of administrative completeness or a notice that additional information is necessary within 120 days after receipt of the application and within 90 days of any subsequent responses to requests for further information. The secretary may extend the time for good cause.

CREC will initially submit three copies of its CRLF Permit Modification and Renewal in accordance with 20.9.3.17 NMAC for the Department's review. CREC understands that it has 120 days to respond to the Department's first requested additional information (RAI), and 90 days to respond to the Department's subsequent RAIs. CREC also understands that the Secretary may extend these timelines for good cause.

B. In the event the department requests additional information, the applicant shall submit any information requested within 120 days of receipt of the first request, and 90 days of receipt of subsequent requests, or the application may be denied without prejudice. The secretary may extend the response time for good cause, and set up an alternative permit review schedule. When submitting the information in response to a request for additional information, the applicant shall submit three copies. If the permit application is not administratively complete after two requests for additional information, the secretary may deny the permit application without prejudice. This subsection is not intended to limit informal informational exchanges during the permit review period or prior to submission of an application. Denial of a renewal application under this subsection does not automatically terminate the existing permit of a facility.

CREC will submit applicable information as part of the first NMED RAI within 120 days of that request. Subsequent information requested by NMED will be submitted within 90 days as required by 20.9.3.17.B NMAC.

- C. Within 14 days after the application is deemed administratively complete, the applicant shall submit to the department:
 - (1) six complete new copies of the application; and
 - (2) an updated list of all property owners as specified in Subsection G of 20.9.3.8 NMAC; the list must be date stamped and signed by the appropriate county agent, or certified as accurate by the applicant as of the date the application is deemed complete.

CREC will submit 6 complete copies (or as requested) of the CRLF Application within 14 days after the Application has been deemed administratively complete. CREC will also submit an updated list of property owners that is stamped and signed by the appropriate Doña Ana County agent, or certified as accurate as of the date the Application is deemed complete.

D. Acceptance of the application as administratively complete allows the permit application to be processed according to the permitting procedures. Acceptance of the application as administratively complete is not an indication that the department supports the permit without conditions or that it will be approved.

No response required.

20.9.3.18 PERMIT ISSUANCE

A. The secretary shall issue a permit if the applicant demonstrates that the requirements of 20.9.2 - 20.9.10 NMAC and the Solid Waste Act are met and that neither a hazard to public health, welfare or the environment nor undue risk to property will result.

For 30 years, CRLF has dutifully worked to protect public health, welfare, and the environment

B. The secretary shall consider the information in the community impact assessment and any demonstrations made pursuant to Subsection E of 20.9.3.8 NMAC, together with other information in the record, in any decisions to issue, issue with conditions or deny the permit.

NMED's response letter regarding the site's status as a VAA is included in Attachment IV.2-B.

C. The terms and conditions of the permit or permit modification shall be specifically identified by the secretary.

CREC will work with the Department to identify and collaborate on appropriate Conditions on the Permit; and comply with those Conditions in its ongoing operations.

D. Multiple contiguous facilities may be permitted under one solid waste facility permit provided each facility meets the applicable requirements of 20.9.2 - 20.9.10 NMAC and the Solid Waste Act.

CREC is seeking a single Permit for the CRLF.

20.9.3.19 PERMIT DENIAL OR REVOCATION

- A. In addition to the causes for denial or revocation listed in Subsections A and B of 749-24 of the Solid Waste Act and 20.9.3.18 NMAC, the secretary may deny or revoke a permit during its term for:
 - (1) a material violation of any term or condition of the permit, any requirement of 20.9.2 20.9.10 NMAC, or any requirement of the Solid Waste Act by the owner or operator, after taking into consideration the seriousness of the violation, any good faith efforts to comply with the applicable requirements and other relevant factors:
 - (2) failure of the applicant in the application or during the permit issuance process to disclose fully all material facts;
 - (3) misrepresentation by the owner or operator of any material facts at any time;
 - (4) a determination that the permitted activity endangers public health, welfare or the environment;
 - (5) failure of the owner or operator to demonstrate the knowledge and ability to operate a facility in accordance with 20.9.2 20.9.10 NMAC; and
 - (6) a history of non-compliance by the owner or operator with environmental regulations or statutes at another facility.

CRLF has been operating in compliance with its current Solid Waste Permits [SWM-030738 and SWM-030738(SP)] and Permit Conditions, the applicable Solid Waste Rules 20.9.2-20.9.10 NMAC, and the applicable requirements of the Solid Waste Act for over 30 years.

B. A permit shall be revoked in accordance with the procedures set forth in Adjudicatory Procedures - Environment Department, 20.1.5 NMAC. Construction, modification and operation, if any, shall cease upon the effective date of the revocation.

No response required.

20.9.3.20 EFFECT OF PERMIT

A. Any terms or conditions of the permit shall be enforceable to the same extent as a regulation of the board.

B. The existence of a permit issued under 20.9.2 - 20.9.10 NMAC shall not constitute a defense to a violation of 20.9.2 - 20.9.10 NMAC or the Solid Waste Act.

CREC will comply with terms and Conditions of the Permit and will not use the issuance of a Permit as a defense.

20.9.3.21 PERMITED FACILITIES; DUTIES PRIOR TO OPERATION

A. At least 14 days prior to the start of solid waste facility construction, the owner or operator shall provide the department with a major milestone schedule.

A schedule of major milestones for CRLF solid waste facility unit construction will continue to be submitted to the Department a minimum of 14 days prior to the start of new construction (i.e., liner installation) as is the current practice.

- B. After a permit is granted for a solid waste facility or for the expansion of a solid waste facility, and at least 14 days prior to disposal, processing, or transforming of any solid waste at the solid waste facility or expansion, the owner or operator shall:
 - (1) provide to the department a written notice of construction completion with "as built" construction drawings signed and sealed by a registered professional engineer; and
 - (2) for landfills, provide the department a quality assurance/quality control report, certified by a registered professional engineer licensed in New Mexico and experienced in liner installation, for construction of the liner and leachate collection system.

CREC will continue to provide the Department with a written notice of construction completion with "as-built" construction drawings signed and sealed by a professional engineer registered in New Mexico and experienced in liner installation. A sealed "Engineering Certification Report" documenting the liner and leachate collection system construction will be submitted to NMED at least 14 days prior to disposal activities in each constructed cell.

C. The owner and operator shall prohibit the disposal, processing, or transformation of solid waste at a new or modified portion of a solid waste facility until the department has either inspected the solid waste facility or modified portion and determined that the site has been developed in accordance with the permit or permit modification, 20.9.2 - 20.9.10 NMAC and the Solid Waste Act, or the department fails to inspect the solid waste facility within 30 calendar days of receipt of written notice of construction completion and any quality

assurance/quality control report or engineer's certification that the facility or modification has been constructed in accordance with the permit or permit modification, 20.9.2 - 20.9.10 NMAC and the Solid Waste Act, and that a quality assurance/quality control report is being prepared.

CREC will continue to prohibit the disposal of solid waste in new or modified portions of CRLF until the Department has either inspected the solid waste facility or modified portion and made a determination has been made that the site was developed in accordance with the Permit; or for 30 days, whichever comes first.

D. The owner and operator shall prohibit the disposal, processing, or transformation of solid waste at a new or modified portion of a solid waste facility until the owner or operator has secured financial assurance and has submitted appropriate documentation to the department prior to the initial receipt of waste at a new or modified portion of a solid waste facility.

Current Financial Assurance documentation is provided in Volume VI, Section 1 . Revised C/PC cost estimates corresponding to the updates in this Permit Application are provided in Volume VI, Section 1, and as part of the C/PC Plan in Volume II, Section 5. Once the new Permit is granted, CREC will provide updated Financial Assurance corresponding to the new approved C/PC costs.

20.9.3.22 PERMIT OR FACILITY MODIFICATION

A. Any owner or operator of a solid waste facility who seeks to modify such facility or permit conditions shall obtain a permit modification prior to making any modifications. A permit modification shall not extend the initial term of any permit.

CREC is submitting this Application prior to making modifications in compliance with 20.9.3.22 NMAC.

B. An application for a modification shall demonstrate compliance with the portions of 20.9.2 - 20.9.10 NMAC that pertain to such a modification.

This Application demonstrates compliance with the pertinent portions of 20.9.2-20.9.10 NMAC.

C. The secretary may initiate the modification of permit conditions or require modification of the facility if:

- (1) changes occur after permit issuance which justify permit conditions that are different from or are not included in the existing permit;
- (2) the secretary has received information that was not in the record at the time of permit issuance and would have justified the application of different permit conditions at the time of issuance;
- (3) the standards or regulations on which the permit was based have changed by statute, through promulgation of new or amended standards or regulations, or by judicial decision after the permit was issued;
- (4) the secretary determines good cause exists for modification, such as an act of God, strike, flood, or materials shortage, or other events over which the permittee has little or no control and for which there is no reasonable remedy.

CREC understands that the Secretary may initiate the modification of permit conditions or require the modification of the facility if any of the items listed in 20.9.3.22.B(1-4) NMAC are warranted.

D. All permit modifications, whether initiated by the owner or operator or by the secretary, shall be subject to Permit Procedures - Environment Department, 20.1.4 NMAC and permitting procedures in this part.

Included in this Application are enhancements to the engineering design and operational updates. The proposed modifications will not be implemented until a Permit is granted by the Secretary; subject to Permit Procedures - Environment Department, 20.1.4 NMAC and permitting procedures in this part of the Rules and the Solid Waste Act.

20.9.3.24 PERMIT REVIEW

No later than 60 days before a permit review is required by Section 74-9-24 of the Solid Waste Act, the owner or operator shall submit to the department a complete description of the following: facility operations;

- A. compliance history;
- B. environmental monitoring results, releases, and any remediation;
- C. changes in information from the disclosure forms:
- D. any other technical requirements requested by the secretary;
- E. financial assurance;

- F. any behavior or incidents of the nature described in Subsection B of 74-9-24 of the Solid Waste Act; and
- G. proof of public notice of the review provided in accordance with Section 74-9-22 of the Solid Waste Act and 20.9.2 20.9.19 NMAC.

Once CRLF's Application for Permit Modification and Renewal has been granted, and a permit review is required by Section 74-9-24 of the Solid Waste Act, CREC will comply with the requirements of 20.9.3.9.24.A-H NMAC, and the required information will be submitted to the Department in a timely manner, no later than 60 days before the review is required.

20.9.3.25 PERMIT RENEWAL

A. To renew a permit, the owner or operator of a solid waste facility shall file a permit renewal application no later than 12 months prior to the expiration date of the facility permit. A permit renewal application shall include a complete description of the following:

The current CRLF Permit expires on 7/24/2028; therefore, the CRLF Permit Renewal Application is due to NMED by 7/24/2027 (one year prior to expiration). CREC has elected to address both the Permit Modification and Renewal in a single Permit Application as described herein.

(1) facility operations;

CRLF will continue to operate in compliance with 20.9.2-20.9.10 NMAC. Operations at CRLF are described in Volume I, Section 5 of this Permit Application, and a narrative and tabular presentation of operating practices is provided in the Plan of Operations, Volume II, Section 2.

(2) compliance history;

CRLF is operated in compliance with its current Solid Waste Permits [SWM-030738 and SWM-030738(SP)], and the applicable Solid Waste Rules 20.9.2-20.9.10 NMAC. Volume I (Permit Application Text) of this Application addresses the applicable requirements of the most current (08/2007) Rules, and has been organized in the same order and format as 20.9.2-20.9.10 NMAC for ease of reference. A summary of site inspections is provided as Attachment I.3-D including a description of NMED comments and responses from CREC.

(3) environmental monitoring results, releases, and any remediation;

Environmental monitoring results for LFG, leachate, and groundwater are discussed in Volume II, Section 6 (Landfill Gas Management Plan), Volume II, Section 7

(Leachate Management Plan), and Volume V, Section 2 (Groundwater Monitoring Plan). Environmental monitoring results are submitted to the Department along with each Annual Report for CRLF. In addition to the Annual Report, as identified in the aforementioned Plans, environmental monitoring results are submitted to NMED consistent with the following schedules:

- Landfill gas within 45 calendar days of each quarterly monitoring event
- Leachate levels within 30 calendar days of each monitoring event

(4) changes in information from the most recent disclosure forms filed with the department;

Updated disclosure documentation has been provided by CRLF under separate, confidential cover, as referenced in Volume VI, Section 3.

(5) any other technical requirements requested by the secretary;

CRLF is currently operated under its Solid Waste Permits SWM-030738 and SWM-030738 (SP). In response to the Department's review and comments of this Permit Application, CRLF will provide additional pertinent information as requested by the Secretary.

(6) financial assurance;

Financial Assurance documentation is provided in Volume VI, Section 1. Once the Permit is issued, CRLF will provide updated Financial Assurance in support of the closure/post-closure costs provided in Volume VI, Section 1 to reflect current conditions.

(7) any behavior or incidents of the nature described in Subsection B of 74-9-24 of the Solid Waste Act;

CREC, the owner and operator of the CRLF, (1) has not knowingly misrepresented a material fact in application for a permit; (2) has not refused to disclose or failed to disclose the information required under the provisions of Section 74-9-21 NMSA 1978; (3) has not been convicted of a felony or other crime involving moral turpitude within ten years immediately preceding the date of the submission of the permit application; (4) has not been convicted of a felony, within ten years immediately preceding the date of the submission of the permit application, in any court for any crime defined by state or federal statutes as involving or being restraint of trade, price-fixing, bribery or fraud; (5) has not exhibited a history of willful disregard for environmental laws of any state or the United States; and (6) has not had any permit revoked or permanently suspended for cause under the environmental laws of any state or the United States.

(8) compliance demonstrations under Subsection A of 20.9.4.9 NMAC; and

Siting compliance is detailed in Volume IV, Section 1. The first public notice for the CRLF facility was issued in association with the 1991 Permit Application. On the date of the first public notice, per 20.9.4.9.A NMAC, no portion of the proposed CRLF disposal area was in conflict with the siting criteria, as confirmed by NMED in the 2008 Permit.

For the current Permit Modification and Renewal, CRLF is not proposing a lateral expansion of the solid waste facility boundary. Therefore, new field studies (e.g., biology, cultural resources, geology, etc.) are not required as part of this Permit Application, but nevertheless have been completed in order to adequately characterize the site. These studies include drilling and geotechnical work specific to Unit 4.

(9) proof of public notice of the renewal application provided in accordance with Section 74-9-22 of the Solid Waste Act.

Proof of public notice of the Application will be provided in accordance with Section 74-9-22 of the Solid Waste Act and documented in Volume VI, Section 2.

- B. A solid waste facility may continue to operate under the terms and conditions of the existing permit until the renewal permit is issued or denied provided that:
 - (1) the owner and operator are in compliance with the existing permit, 20.9.2 20.9.10 NMAC, the Solid Waste Act, and any federal regulations which apply;
 - (2) a permit renewal application was submitted in a timely fashion in accordance with this section; and
 - (3) the owner or operator submits any requested additional information by the deadline(s) specified by the secretary.

This Application was submitted more than twelve months prior to the expiration date for the current CRLF Permit (i.e., 07/24/2028).

C. The secretary may establish new deadlines for the permit renewal application if the application is denied under 20.9.3.17 NMAC. The secretary may issue an order for the revocation of the existing permit if the provisions in Subsection B of 20.9.3.17 NMAC are not met.

No response required.

20.9.3.26 PERMIT EXPIRATION; AUTOMATIC CLOSURE

A. A permit shall automatically expire when the secretary verifies that the closure and any post-closure care plan, including corrective action, have been completed.

An updated Closure/Post-closure (C/PC) Care Plan is included as part of this Application and is provided in Volume II, Section 5. Closure is not anticipated in the near future.

B. If a permitted facility begins operation, and thereafter suspends operation in full for at least five years, authorization to accept waste is suspended and closure activities shall begin.

CREC does not anticipate suspension of CRLF operations for an extended period of time. If operations were to be suspended in full for at least five years, CREC will comply with the requirements to initiate closure activities.

20.9.3.27 REGISTRATION OF RECYCLING AND COMPOSTING FACILITIES THAT ACCEPT ONLY SOURCE SEPARATED RECYCLABLE OR COMPOSTABLE MATERIALS, COLLECTION CENTERS AND AIR CURTAIN INCINERATORS LAW ENFORCEMENT PHARMACEUTICAL INCINERATORS

Not applicable; CREC does not currently operate composting or recycling programs at CRLF. CRLF may accept source–separated recyclables in the future from self–haul customers at the Public Convenience Station based on need as determined by CREC, but at a rate that does not qualify it as a "Recycling Facility".

20.9.3.28 ADDITIONAL REGISTRATION REQUIREMENTS FOR COMPOSTING FACILITIES THAT ACCEPT GREATER THAN 25 TONS PER DAY COMPOSTABLE MATERIAL OR GREATER THAN 5 TONS PER DAY OF MATERIAL THAT WOULD OTHERWISE BECOME SPECIAL WASTE

Not applicable.

20.9.3.38 CONFIDENTIALITY OF INFORMATION

A. Permit applicants, owners or operators, or commercial haulers who submit information to the department may claim such information as

confidential. Any claim of confidentiality must be asserted at the time of submittal.

- B. To claim confidentiality of information in a submittal, the submitter must clearly mark each page in the document on which the submitter claims there is confidential information, and submit to the department a written description of the basis for the claim of confidentiality at the time of submission. The department shall review the claim of confidentiality based on the written submittal and determine whether the information may be maintained as confidential pursuant to the Inspection of Public Records Act, NMSA 1978, Sections 14-2-1, et seq. If the department determines that information in a submittal is confidential, the department may require submission of redacted copies of the submittal for the public record.
- C. If no claim of confidentiality is made at the time of submission, any such claims are deemed waived and the department may make the information available to the public without further notice.
- D. Information that is determined by the department to be confidential may be disclosed to officers, employees, or authorized representatives of the United States concerned with implementing RCRA, or when relevant in any proceedings under the Solid Waste Act or this chapter.

CREC will submit "disclosure" documentation, as appropriate, under separate, confidential cover. CREC is not making any claims of confidentiality for the information included in this application.

20.9.3.39 FEE SCHEDULE

- A. Fees are required from applicants for all permit applications, modifications, and applications for permit renewals. Fees shall be paid by the applicant at the time of application and are non-refundable. Fees for individual facility types shall be cumulative if more than one type is included in the permit application.
- B. For a municipal or special waste landfill which receives, based on the projected operational rate:
 - (1) 20 tons or less of waste per day, annual average, the permit application fee shall be \$6,000;
 - (2) more than 20 tons of waste per day, annual average, the permit application fee shall be \$10,000;

(3) special waste, in addition to the facility permit application fee, an additional \$1000 per type of special waste, up to \$10,000 shall be paid.

The total Permit Application fee of \$18,000 has been submitted with this Permit Application for the CRLF, modification (\$5,000), renewal (\$10,000) and for the three special wastes (i.e., \$1,000 each).

- C. For a construction and demolition landfill, the permit application fee shall be \$5,000.
- D. For a processing facility, the permit application fee shall be \$5,000.
- E. For a transformation facility, the permit application fee shall be \$10,000.
- F. For a transfer station, the permit application fee shall be \$5,000.
- G. For a recycling facility or composting facility that accepts solid waste, the permit application fee shall be \$2,000.
- H. For a commercial hauler registration, the registration fee shall be \$100 if the hauler registers two trucks or fewer and hauls no special waste, and shall be \$300 if the hauler registers three trucks or more or hauls any special waste.

Not applicable.

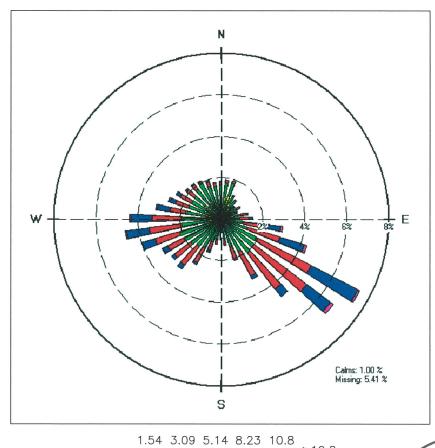
Fees for permit modifications shall be half of the stated permit application fee for that type facility.

The fee for Permit Modification for CRLF is \$5,000 (see above).

I. Fees for permit renewals shall be the same as for new facilities.

The permit renewal fee for CRLF is \$10,000 for a landfill that receives more than 20 tons per day of municipal or special waste (see above).

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 WINND ROSE REPRODUCED FROM STATION NO. 23044 EL PASO INTERNATIONAL AP, TX 2016.

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WIND ROSE

CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO

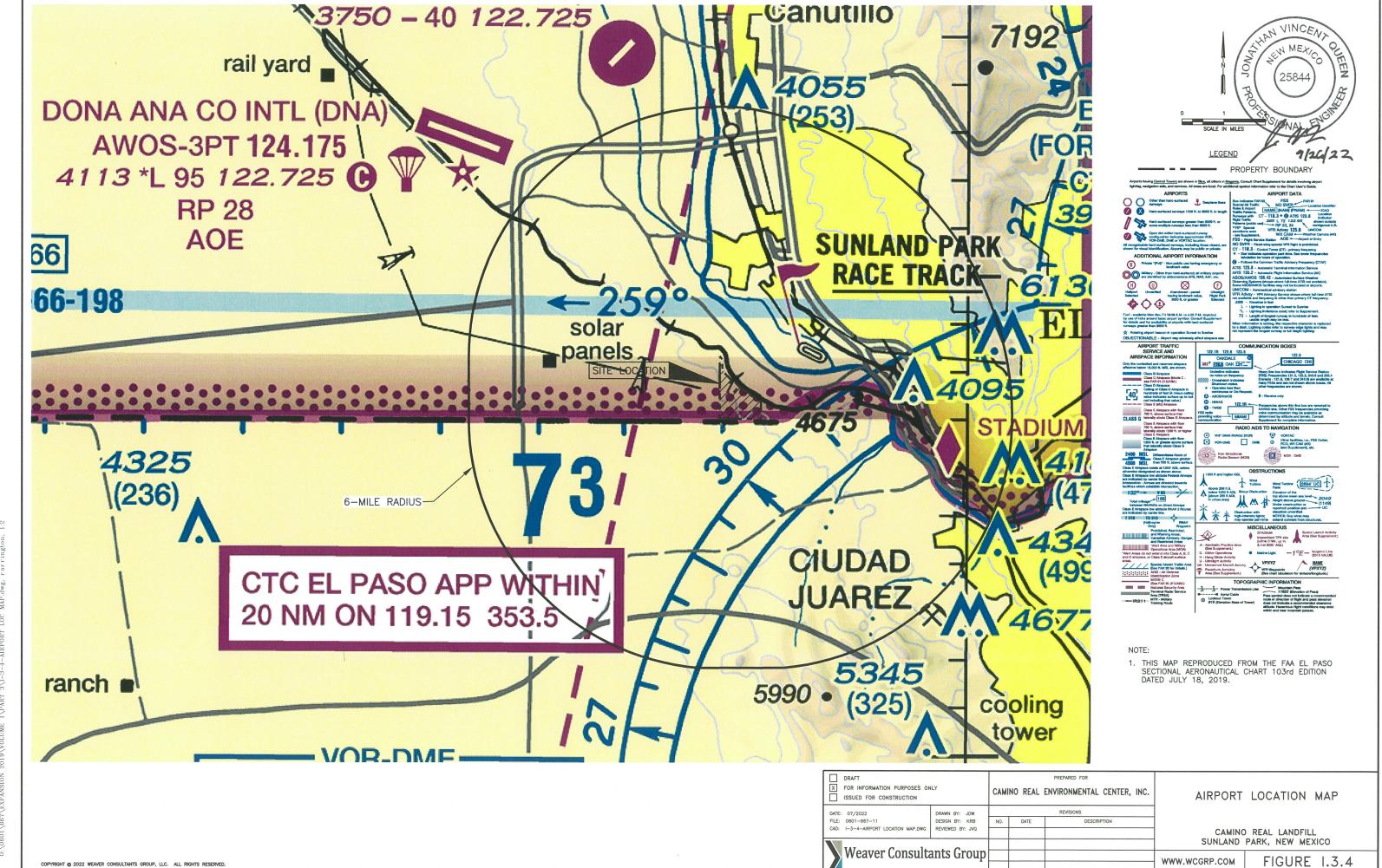


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Weaver Consultants Group

DRAWN BY: JDW DATE: 07/2022 FILE: WIND ROSE
REVIEWED BY: JVQ CAD: 0601-667-11 FIGURE 1.3.2

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ATTACHMENT I.3-A LEGAL DESCRIPTION

SKYLINE ENGINEERING P.O. BOX 20 SANTA TERESA, NEW MEXICO 88008 (505) 589-5481

475.908 ACRE PARCEL

BITUATE WITHIN

BECTIONS 12 AND 13

TOWNSHIP 29 SOUTH, RANGE 3 EAST

NEW MEXICO PRINCIPAL MERIDIAN

CITY OF SUNLAND PARK

DONA ANA COUNTY, NEW MEXICO

A certain parcel of land situate within Sections 12 and 13, Township 29 South, Range 3 East, New Mexico Principal Meridian, City of Sunland Park, Dona Ana County, New Mexico, and being more particularly described by metes and bounds as follows:

Beginning at a set 5/8 inch rebar with yellow cap No. 5948, said rebar marking the Section Corner common to Sections 11, 12, 13, and 14, Township 29 South, Range 3 East, whence a found 2 inch iron pipe bears west 0.64 feet;

THENCE, along the section line common to Sections 11 and 12, N $00^{\circ}-05'-20$ "E, a distance of 1317.94 feet to a point, whence a found 5/8 inch rebar bears, N $89^{\circ}-57'-27$ "W, a distance of 0.89 feet;

THENCE, N 00°-05'-20"E, a distance of 1320.79 feet to a point, said point being the West 1/4 corner to Section 12; whence a found 5/8 inch rebar bears N 89°-59'-07"W, a distance of 0.72 feet;

THENCE, N 00°-05'-20"E, a distance of 2150.30 feet to a set 5/8 inch rebar with yellow cap, said rebar marking the point of intersection of the section line common to Sections 11 and 12 with the Southwesterly boundary line of the abandoned Southern Pacific Railroad south line;

THENCE, following the southwesterly boundary line of the abandoned Southern Pacific Railroad south line, (150 foot right-of-way) the following calls, 969.27 feet along the arc of a curve bearing to the right, having a central angle of 53°-05′-32″, a radius of 1046.01 feet and a long chord which bears S 22°-45′-30″E, a distance of 934.96 feet to a set 5/8 inch rebar with yellow cap;

THENCE, S 03°-52'-44"W, a distance of 396.71 feet to a set 5/8 inch rebar with yellow cap, said rebar being a point of curve;

THENCE, 964.66 feet along the arc of a curve bearing to the left, having a central angle of $44^{\circ}-21'-30"$, a radius of 1246.01 feet and a chord which bears S $18^{\circ}-25'-52"$ E, a distance of 940.75 feet, to a set 5/8 inch rebar with yellow cap;

THENCE, S 43°-48'-56"E, a distance of 1502.20 feet to a set 5/8 inch rebar with yellow cap;

THENCE, leaving said southwesterly boundary line of the abandonded Southern Pacific Railroad south line (150 foot right-of-way) the following calls; S 28°-10'-43"W, a distance of 1542.45 feet to a set 5/8" rebar with yellow cap;

THENCE, S $78^{\circ}-51'-41$ "E, a distance of 414.81 feet to a set 5/8" rebar with yellow cap;

THENCE, S $72^{\circ}-24'$ -46"E, a distance of 363.41 feet to a set 5/8" rebar with yellow cap;

THENCE, N 22°-25'-12"E, a distance of 169.07 feet to a set 5/8" rebar with yellow cap;

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THENCE, N $36^{\circ}-40'-25''E$, a distance of 157.63 feet to a set 5/8'' rebar with yellow cap;

THENCE, N 39°-01'-23"E, a distance of 142.90 feet to a set 5/8" rebar with yellow cap;

THENCE, N $39^{\circ}-25'-27$ "E, a distance of 120.36 feet to a set 5/8" rebar with yellow cap;

THENCE, N 43°-43'-32"E, a distance of 483.66 feet to a set 5/8" rebar with yellow cap on said southwesterly boundary line of the abandoned Southern Pacific Railroad south line (150 foot right-of-way);

THENCE, following said southwesterly boundary line of the abandoned Southern Pacific Railroad south line the following 3 calls; S 43°-48'-56"E, a distance of 403.76 feet to a set 5/8" rebar with yellow cap, said rebar being a point of curve;

THENCE, 373.89 feet along the arc of a curve, bearing to the left, having a central angle of $10^{\circ}-39'-30"$, a radius of 2009.91 feet, and a long chord which bears S $56^{\circ}-59'-38"$ E, a distance of 373.35 feet to a set 5/8 inch rebar with yellow cap;

THENCE, S 61°-59'-33"E, a distance of 2637.57 feet to a set 5/8 inch rebar with yellow cap, said rebar marking the point of intersection of the southwesterly boundary line of the abandoned Southern Pacific Railroad south line (150 foot right-of-way) with the section line common to Section 13, Township 29 South, Range 3 East, and Section 18, Township 29 South, Range 4 East; whence, a found Brass Cap marking the Section Corner common to Sections 12 and 13, Township 29 South, Range 3 East and Sections 7 and 18, Township 29 South, Range 4 East, bears N 00°-00'-03"E, and a distance of 884.78 feet;

THENCE, leaving the southwesterly boundary line of the abandoned Southern Pacific Railroad south line (150 foot right-of-way) and following the section line common to Section 13, Township 29 South, Range 3 East, and Section 18, Township 29 South, Range 4 East, S 00°-00′-26"W, a distance 2261.06 feet to a found 5/8 inch rebar, said rebar marking the intersection of the said common section line and the north edge of a 60 feet wide International Buffer Zone between the UNITED STATES OF AMERICA AND THE REPUBLIC OF MEXICO;

THENCE, along the 60 feet wide International Buffer Zone between the UNITED STATES OF AMERICAN and the REPUBLIC OF MEXICO, and paralleling the International Border of the UNITED STATES OF AMERICA and the REPUBLIC OF MEXICO, 5287.92 feet along the arc of curve bearing to the right having a central angle of 00°-00′-32", a radius of 33,803,595.94 feet and a long chord which bears N 89°-59′-50"W, a distance of 5287.90 feet to a set 5/8 inch rebar with yellow cap, said rebar being the intersection point of 60 feet wide International Buffer Zone between the UNITED STATES, REPUBLIC OF MEXICO INTERNATIONAL boundary with the section line common to Sections 13 and 14, Township 29 South, Range 3 East;

THENCE, leaving the north edge of the 60 feet wide International Buffer Zone between the UNITED STATES OF AMERICA and THE REPBULIC OF MEXICO, and following the Section line common to Sections 13 and 14, Township 29 South, Range 3 East, N 00°-02'-58"E, a distance of 510'.95 feet to a found 5/8 inch rebar, said rebar marking the 1/4 corner to the above mentioned Section line;

Page 2 of 3

475.908 Acres Parcel (continued)

THENCE, N 00°-02'-58"E, a distance of 1320.00 feet to found 5/8 inch rebar;

THENCE, N $00^{\circ}-03'-00''$ E, a distance of 1321.83 feet to the point of beginning of the parcel herein described and containing 475.908 acres (20,730,550 square feet) MORE OR LESS.

"CERTIFICATE"

I, Romanda Surveyor, hereby certainly that this Legal Description was prepared by me or under my direct surveyor from field notes of an actual survey, and that such is true and correct to the best of my knowledge and belief.

Ronald, Williams, No. 5948
July 5, 1995
Job #975-044

SKYLINE ENGINEERING

P.O. BOX 20 SANTA TERESA, NEW MEXICO 88008 (505) 589-5481

3.637 ACRE PARCEL
SITUATE WITHIN
SECTION 12, TOWNSHIP 29 SOUTH, RANGE 3 EAST
NEW MEXICO PRINCIPAL MERIDIAN
DONA ANA COUNTY, NEW MEXICO

Being a certain parcel of land between the abandoned Southern Pacific Railroad northern right-of-way and the existing Santa Fe Railroad Southern right-of-way, Section 12, Township 29 South, Range 3 East, New Mexico Principal Meridian, Dona Ana County, New Mexico, and being more particularly described by metes and bounds as follows:

Commencing at a found brass cap marking the corner common to Sections 12, and 13; Township 29 South, Range 3 East, and Sections 7 and 18, Township 29, Range 4 East, New Mexico Principal Meridian, Dona Ana County, New Mexico;

THENCE, N 89°-55'-22"W, a distance of 2642.51 feet along the section line between Section 12 and Section 13 to a found 1 1/2" pipe for quarter corner;

THENCE, N 00°-04'-31"E, a distance of 768.18 feet along the quarter ction line to a point on the northern right-of-way line of the abandoned Southern Pacific Railroad; said point being the TRUE POINT OF BEGINNING of the parcel herein described;

THENCE, N 43°-44'-43"W, a distance of 1012.14 feet along the northerly right-of-way line of the abandoned Southern Pacific Railroad to a point where the northerly right-of-way line of the abandoned Southern Pacific Railroad and the southerly right-of-way line of the existing Santa Fe Railroad intersect, said point being the most westerly point of the herein described parcel and a point of curvature;

THENCE, 238.14 feet along the arc of a curve to the left and the southerly right-of-way line of the existing Santa Fe Railroad having a central angle of 02°-58'-35", a radius of 4584.31 feet and a chord that bears S 49°-36'-10"E, a distance of 238.11 feet to a point on the southerly right-of-way line of the existing Santa Fe Railroad;

THENCE, S 51°-05'-28"E, a distance of 1202.72 feet along said southerly right-of-way line of the existing Santa Fe Railroad to a point, said point being a point of curvature;

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ENGINEERING. LAND SURVEYING. UTILITY CONSTRUCTION

3.637 Acts Parcel (Continued)

THENCE, 946.13 feet along the arc of a curve to the left and along the southerly right-of-way line of the existing Santa Fe Railroad, curve has a central angle of 08°-30'-15", a radius of 6374.43 feet and a chord that bears \$55'-20'-35"E, a distance of 945.26 feet to a point where the southerly right-of-way line of the existing Santa Fe Railroad and the northerly right-of-way line of the abandoned Southern Pacific Railroad intersect;

THENCE, N 62°-03'-22"W, a distance of 919.66 feet along the northerly right of way line of the abandoned Southern Pacific Railroad to a point, said point being a point of curvature;

THENCE, 345.99 feet along the arc of a curve to the right and along the northerly right-of-way line of the abandoned Southern Pacific Railroad, curve has a central angle of 10°-39′-30″, a radius of 1859.91 feet and a chord that bears N 56°-59′-38″W, a distance of 345.49 feet to a point on the southerly right-of-way lline of the abandoned Southern Pacific Railroad;

THENCE, N 43°-44'-43"W, a distance of 134.15 feet, continuing along said northerly right-of-way line of the abandoned Southern Pacific ailroad to the "TRUE POINT OF BEGINNING" of the parcel herein ascribed containing 158,426 Sq. Ft. or 3.637 acres of land MORE OR LESS.

"CERTIFICATE"

T. Romand W. King, New Mexico Registered Land Surveyor, hereby certify that this Legal Description was prepared by me or under my direct supervision from field notes of an actual survey, and that such is true and correct to the best of my knowledge and belief.

Rongla Wir King

N.M.P. P. W& L.S. NO. 5948

October 27, 1995

V HO.

Job #975-050

Page 2 of 2

ATTACHMENT I.3-B USGS 7.5 MINUTE QUADRANGLE MAP

ATTACHMENT I.3-C PERMIT CONDITIONS SUMMARY



Attachment I.3-C **CRLF Permit Application for Application for Permit Modification and Renewal Permit Conditions Summary**

		Final Order (July 2008)	Camino Real Landfill Response
	1.	The Applicant will comply with all applicable requirements of the Solid Waste Management Regulations, the Solid Waste Act, and any other conditions set forth in the permit, and shall construct and operate the Landfill in accordance with the permit application. This condition is to remind the Applicant that all applicable requirements and application statements must be complied with throughout the life of the Landfill.	Condition acknowledged.
	2.	At least 30 days prior to the start of new cell construction, the Applicant will furnish the Department with a major milestone schedule. This condition is to ensure that the Department is given timely notice to effectively monitor new construction at the landfill.	The following cells have been constructed since issuance of these conditions; 10A, 10B-1, 10B-2, and 3.1A. The CRLF provided official notification and proposed major milestone schedules to the NMED for Cell 10A on April 7, 2010, Cell 10B-1 on February 4, 2016, Cell 10B-2 on February 8, 2017 and Cell 3.1A on April 25, 2019.
	3.	The Liner Construction Certification Report must be submitted to and approved by the Department prior to disposal of any solid or special waste in any new cell. Any new disposal area must be inspected by a representative of the Solid Waste Bureau prior to waste disposal. A letter from the Department must be received authorizing acceptance of waste prior to disposal. This condition is to ensure that the liner is constructed in accordance with the permit and regulations.	The Engineering Certification Report for Cell 10A was submitted to NMED on August 25, 2020 and was approved by the NMED in a letter dated September 7, 2010. A Liner Construction Certification Report was submitted to the NMED for Cell 10B-1 on June 27, 2016 and was approved by the NMED in a letter dated July 19, 2016. Cell 10B-2 was constructed in two phases with two separate submittals provided to the NMED. The Phase 1 submittal was dated May 24, 2017 and a letter approving the report and authorizing acceptance of waste in Phase 1 of Cell 10B-2 was documented by an NMED letter dated
	amenoshall l of ma issuar	Vaste Inspection and Screening Program (Volume II, Section 2, Part 4.4, of the Permit Application) shall be ded prior to implementation at the Landfill to indicate that no less than three random waste screening inspections be conducted during each operating day. One of the required daily load inspections shall be conducted upon a load quiladora waste, unless no loads of such waste were received during the operating day. Within 30 days of permit nice, the Waste Inspection Screening Program shall be updated and items as specified by the Department shall be led. The Screening Program shall include:	
4.	a.	Inspection documentation that specifies the identity, by name and title, of the persons completing the inspection.	The applicable amendments to the Waste Inspection and Screening Program were provided in the updated Plan of
	b.	A statement that staff shall inspect loads from the ground and not just from heavy equipment.	Operations submitted to the NMED on August 22, 2008.
1110000	c.	Details on how the inspections will be completed, such as how many staff well undertake the inspections, what equipment will be used, what methods will be used to check the loads (i.e., ripping bags open using rakes), what personal protective equipment will be used, and any other information necessary.	
	d.	Information that addresses the procedures in place regarding maquiladora deliveries, such as identifying the number of waste totes inspected from maquiladora trucks and other details regarding the selection of these loads for inspection.	
	5.	beneficial use plan, with a completed field evaluation of Category II ADCs including Auto Fluff/Automotive	The Plan of Operations and the Special Waste Disposal Management Plan were updated on multiple occasions since issuance of these conditions with the most recent NMED approval on October 1, 2012. In addition, the CRLF submitted a "Pilot Field Program for Auto Shredder Residue" on October 24, 2011 with subsequent NMED approval on November 28, 2011.
	6.	As a result of public comments regarding dust generation from CRLF, within 60 days of issuance of the permit the Applicant shall install a weather station at a location on-site that will accurately reflect the site's meteorological conditions. The capabilities of the station shall include, at a minimum, wind speed, wind direction, humidity, barometric pressure, temperature, and a precipitation gauge. The station shall be able to monitor wind speed (hourly peak wind speed) and wind direction at two different elevations, at eye level (5-6 feet from the surface of the landfill and at a height between 10-20 feet.) The Applicant shall install a system that is able to record data hourly and maintain records via a computer or other technology. The data should be compiled on a monthly basis and the records maintained on-site for review by Department staff. Weather data shall be obtained for a minimum of five years. The Department has confirmed that Dave Nolan, 505-589-3972, NOAA – National Weather Service Forecast Office, Santa Teresa, New Mexico, will provide technical assistance regarding equipment, placement, and data sharing. The goal of this condition is to obtain five years of site specific data to assist and enhance the evaluation of air particulate monitoring data.	The CRLF installed a weather station on September 17, 2008 that collected meteoroidal data on a monthly basis in accordance with this condition. CRLF notified the NMED of installation of the weather station via a letter dated September 22, 2008.

Attachment I.3-C (Continued) CRLF Permit Application, Landfill Configuration, and Permit Renewal Permit Conditions Summary

		Final Order (July 2008)	Camino Real Landfill Response
	7.	The Applicant shall submit a Plan to the Department within 90 days of permit issuance that explores options to minimize particulate matter from the fleet of on-site heavy equipment and for the El Paso Disposal, a wholly-owned subsidiary of Waste Connections. This plan applies only to equipment or vehicles used on-site or to deliver wastes to CRLF.	The CRLF submitted a Particulate Emissions Reduction Plan to the NMED on October 21, 2008 which was approved by the
	3.	To facilitate ongoing public involvement, the Applicant shall continue to assess community concerns, gauge the effectiveness of mitigation measures undertaken by owners of CRLF, and provide information regarding operation of the facility for the residents of Sunland Park, the Applicant shall hold at least one public meeting within one year. A report summarizing the comments from the meeting shall be provided to the Department within 30 days of the date of the meeting.	The CRLF coordinated and hosted a Community Involvement Meeting (CIM) on July 16, 2009. The CRLF also prepared a CIM Report which was submitted to the NMED on August 17, 2009 and approved on October 9, 2009. The CIM Report was
(€.	Upon issuance of the permit, the owner shall operate this facility in accordance with all applicable requirements of Title 20, Chapter 9, Parts 2-10.	The CRLF continues to operate in accordance with the applicable requirements noted in this condition.
1	0.	The Applicant shall dilute any leachate collected and place it on lined cells only but shall not place leachate on any other portion of the landfill, including access roads or other unlined areas. Prior to disposal of leachate at a Public Owned Treatment Works or permitted liquids management facility, the Applicant shall receive approval from the Department.	The Plan of Operations and Leachate Management Plan were updated to address this specific leachate management directive and subsequently approved on June 4, 2010. The CRLF continues to operate the facility in accordance with the approved Plans.
1	1.	A view shed analysis of the proposed final elevation in comparison with the surrounding mesa shall be completed for Unit 3 within one year. The analysis must visually show a representation of the elevation from all directions.	A view shed analysis was prepared for the CRLF and submitted to the NMED on July 23, 2009 with subsequent approval on October 14, 2009. A copy of the view shed analysis was also placed in the Sunland Park Library at the request of the NMED.
1	2.	Additional vegetative screening shall be established at this facility as specified in the CIA within one year.	The CRLF submitted documentation to the NMED that addressed vegetative screening improvements on August 22, 2008. The submittal was approved by the NMED on August 14, 2009.
	Three imple	revisions shall be made to the Contingency Plan and submitted to the Bureau for approval prior to mentation.	
	a.	It shall be revised to correctly identify the contact information for the landfill's emergency coordinator. The Contingency Plan shall be updated any time there is a material change in circumstances affecting the Contingency Plan.	
	b.	The site plan shall be revised to show the location of the newly registered recycling center located adjacent to the landfill office.	The Contingency Plan was updated and submitted to the NMED initially on August 22, 2008 with additional modifications
13.	c.	The description of emergency response coordination should include the name of each agency; the date and location of coordination; the primary points of contact for each agency; a description of the equipment, expertise, and assistance that the agency will provide in the event of an emergency; the agency's estimated response time to the landfill, if applicable; an indication of whether unaccompanied access after hours would be granted to the agency through the sharing of keys or codes or other means; acknowledgment that the agency was apprised of potential contaminants and the type of incidents that could occur at the landfill; and, when applicable, the agency's failure or unwillingness to participate with the landfill regarding the contingency plan and related coordination efforts.	submitted in response to Requests for Additional Information with NMED approval on August 17, 2011. The Contingency Plan was updated again on July 23, 2012 to include modifications resulting from the construction of the Scale Plaza. The updated Plan was subsequently approved by the NMED on October 1, 2012.

Note: Unable to locate Milestone Letter for Cell 2A.

ATTACHMENT I.3-D NMED INSPECTION SUMMARY



Attachment I.3-D Summary of Inspections Camino Real Landfill

Inspection Date	Purpose of Inspection	Description of NMED Comment(s)	Camino Real Landfill Response
1998-2006	Documentation of NM 2008.)	IED inspections conducted between 1998 and 2006 was prov	Documentation of NMED inspections conducted between 1998 and 2006 was provided in the 2008 Permit Application (permits issued on July 24, 2008.)
2008-2012	Documentation of NM on May 23, 2013.	Documentation of NMED inspections conducted between 2008 and 2012 was provided in the 2013 Interim Review Report submitted to NMED on May 23, 2013.	rided in the 2013 Interim Review Report submitted to NMED
2013-2017	Documentation of NM on May 28, 2018.	Documentation of NMED inspections conducted between 2013 and 2017 was provided in the 2018 Interim Review Report submitted to NMED on May 28, 2018.	rided in the 2018 Interim Review Report submitted to NMED
06/06/2018	Routine	"No violations observed" "Has not accepted recycling since 2015"	N/A
3/21/2019	Routine	"No violations" Recycling Facility "has not been in use for approximately 4 years"	N/A
2/28/2020	Other	"No violations observed"	N/A
11/30/2021	Routine	"No violations observed"	N/A

Acronyms: NMED = New Mexico Environment Department HWB = Hazardous Waste Bureau

LFG = Landfill Gas SWB = Solid Waste Bureau Weaver Consultants Group, LLC Rev. 0, 8/15/22

CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738(SP)

APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

VOLUME I – PERMIT APPLICATION TEXT SECTION 4 – SOLID WASTE FACILITY MAXIMUM SIZE, SITING CRITERIA, AND DESIGN CRITERIA

Prepared for Camino Real Environmental Center, Inc.

September 2022



Prepared by

Weaver Consultants Group, LLC 6420 Southwest Boulevard, Suite 206 Fort Worth, Texas 76109 817-735-9770 IKG, LLC 24 Tejon Canon Rd. Placitas, NM 87043 505-301-2026

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FIGURES

Figure I.4.1 Site Location Map



The New Mexico (NM) Solid Waste Rules, specifically 20.9.4.9.A NMAC, state that "no municipal, construction and demolition, or special waste landfill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is [not in compliance with the siting criteria]".

The most recent public notice for the CRLF facility was issued in association with the Permit Application prepared by Gordon Environmental/PSC. in 2008. On the date of the first public notice, per 20.9.4.9.A NMAC, no portion of the proposed CRLF disposal area was in conflict with the siting criteria, as approved by NMED in the 2008 Permit.

For the current Application for Permit Modification and Renewal, CRLF is not proposing an expansion of the solid waste facility boundary. Therefore, new field studies (e.g., biology, cultural resources, geology, etc.) are not required as part of this Application. General siting updates provided in detail in Volume IV, Section 1 include current siting maps, and review of current literature for water wells, seismic impact zones, flood zones, etc.

20.9.4.8 MAXIMUM SIZE

The secretary shall not issue a permit for any solid waste facility larger than 500 acres.

The CRLF "solid waste facility" footprint (20.9.2.7.S(11) NMAC) encompasses approximately 480 acres in Sections 12 and 13, Township 29 south, Range 3 East, NMPM, Sunland Park, New Mexico, as shown on Figure I.4.1. The CRLF does not exceed 500 acres.

20.9.4.9 SITING CRITERIA FOR MUNICIPAL, OR SPECIAL WASTE, CONSTRUCTION AND DEMOLITION LANDFILLS, AND MONOFILLS

A. No municipal, construction and demolition, or special waste landfill or monofill shall be located where, on the date of the first public notice as required in 20.9.3 NMAC, any portion of the proposed disposal area is:

The CRLF is not located in any of the restricted areas listed in 20.9.4.9 NMAC. Volume IV is devoted to siting and land use, and Volume V is devoted to hydrogeology and groundwater.

(1) in a floodplain, within 500 feet of a wetlands, or within 200 feet of a watercourse unless the watercourse has been altered pursuant to an approval from the army corps of engineers or other appropriate authority;

A floodplain is defined in 20.9.2.7.F(2) NMAC as:

"the lowland and relatively flat areas adjoining inland and coastal water that are inundated by the 100 year flood. The 100 year flood has a one percent chance of recurring in any given year or a flood or a flood of magnitude equaled or exceeded once in 100 years on the average over a significantly long period."

Based on data available from the Federal Emergency Management Agency (FEMA), the CRLF permit boundary is located over 250 feet from the 100-year floodplain as shown on Figure 4.5 in Volume III, Section 8 and discussed in Volume IV, Section 1.

Wetlands are defined in 20.9.2.7.W(5) NMAC as:

"those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."

The site is not located within 500 feet of a regulated wetland, as demonstrated by the U.S. Department of Interior Wetlands Inventory Map provided as Figure 6 in Attachment IV.1-A and discussed in Volume IV, Section 1.

Watercourse is defined by 20.9.2.7.W(2) NMAC as:

"any river, creek, arroyo, canyon, draw, or wash, or any other channel having definite banks and beds, with visible evidence of continuous or intermittent flow of water."

CRLF is not within 200 feet of a watercourse. Inspection of aerial photography, site topographic maps, and ground reconnaissance of the property indicates that water courses are not present on or near the facility (see Figure 3 in Attachment IV.1-A).

(2) where the top of the uppermost aquifer will be closer than 100 feet to the bottom of the fill, or for construction and demolition landfills that do not accept more than 25 tons per day annual average, where the top of the uppermost aquifer will be closer than 50 feet to the bottom of the fill;

CRLF has a groundwater monitoring network that has been used to establish groundwater elevation on at least a semi-annual basis since 1989. Waste disposal units at the CRLF are designed with a minimum depth to groundwater separation of 160 feet. A groundwater contour map is provided as Figure V.2.2. Additional detail regarding depth to groundwater at the site is provided in Volume V, Section 2.

(3) where new, abandoned, or exploration subsurface mines registered with the New Mexico department of energy, minerals

and natural resources a may pose a risk of subsidence or instability;

There are no subsurface mines in the vicinity of CRLF property. The Mines Location Map (Figure IV.1.3) confirms the absence of mines in the vicinity of the facility.

(4) within 200 feet of a fault that has had a displacement within Holocene time (i.e., the past 11,000 years), unless the owner or operator demonstrates to the secretary that an alternative setback of less than 200 feet will prevent damage to the structural integrity of the facility and will be protective of public health, welfare and the environment;

Based on published regional data, the CRLF facility is not located within 200 feet of a fault that has experienced displacement within Holocene time, as documented in the Quaternary Faults and Folds Map (Figure IV.1.3) prepared by the USGS.

(5) within historically or archaeologically significant sites, unless in compliance with the Cultural Properties Act, NMSA 1978, Sections 18-6-1 to 18-6-23 and the Prehistoric and Historic Sites Preservation Act, NMSA 1978, Sections 188-1 to 18-8-8;

Volume IV, Section 1 provides the results of three focused studies that involved rigorous site reconnaissance and data review. All surveys have met the requirements of state regulations, and reports were provided to the State Historic Preservation Office (SHPO) for review. In 1988, the Office of Contract Archeology (OCA) at the University of New Mexico surveyed approximately 260 acres of CRLF property as part of a much larger Cox Ranch Exchange archaeological survey. In 1995, the OCA conducted a survey on CRLF property focused on the Permit Renewal Area. In October 2005, the Quivera Research Center conducted a 140-acre survey that included the Unit 3 area and perimeter zones.

As part of this Application for Permit Modification and Renewal, Goshawk Environmental, Inc. performed an archaeological survey for the entire CRLF site on December 27 and 28, 2019. The archaeological report (NMCRIS Activity #145264), included as Attachment IV.1-D, provides the results of the survey conducted for the 19.52 hectares (48.24 acres) site. As part of the 100 percent pedestrian survey, two previously recorded prehistoric archaeological sites (LA 67691 and LA 67692) were revisited. Additional information regarding the results of the 2019 survey is included in Volume IV, Section 1.

Volume IV, Section 1 also includes an August 27, 2020 response from the NMHPD recommending that a testing/data recovery plan be written and submitted for review regarding the two sites identified by the Survey and located in Unit 4. Prior to development of Unit 4, CREC will submit the required testing/data recovery plan

to the NMHPD for review and approval. In the interim, the referenced archeological sites will be protected with fencing.

- (6) within 1,000 feet of a public water supply well or a private drinking water supply well with a sustainable yield of 100 gallons per minute or more, unless, in the case of registered unpermitted landfills, the well was constructed after the landfill began operations;
- (7) within 350 feet of a public water supply well or private well with a maximum sustainable yield of less than 100 gallons per minute, unless the well was constructed after the landfill began operations or the well was installed by the landfill owner or operator for operational use;

The CRLF site is located more than 1,000 feet from any known public or private water supply well. According to the WATERS database developed by the New Mexico Office of the State Engineer, the closest well is located approximately 0.5 miles north of the site. Hydrogeology and Groundwater (Volume V) provides a more detailed description of the groundwater conditions in the local area.

(8) within the distance to airports set by the federal aviation administration unless the landfill owner or operator demonstrates that the federal aviation administration does not object to construction and operation of the landfill at the proposed site;

The CRLF is not located within distance to a public use airport as set by the FAA. The nearest active airport, Doña Ana County Airport at Santa Teresa, NM, is 7.5 miles northwest of the site. An Airport Location Map is provided as Figure IV.1.5.

(9) within 50 feet of the facility property boundaries nor within 500 feet of a permanent residence, school, hospital, institution or church, or unless, in the case of registered unpermitted landfills, the permanent residence, school, hospital, institution or place of worship was constructed after the landfill began operations;

As depicted on the Land Use Setbacks aerial photo provided as Figure IV.1.6, the CRLF disposal areas are not located within 500 feet of a permanent residence, school, hospital, institution, or church. In addition, disposal areas are located at least 50 feet from the CRLF site boundary. Additional details regarding facility setbacks is provided in Volume IV, Section 1.

(10) in an active alluvial fan (i.e., areas being currently aggraded by either permanent or intermittent streams;

The CRLF facility is not located in an area of active alluvial fans as demonstrated by site topography and lack of indicative drainage features. The absence of alluvial fans at the site is consistent with regional data and detailed site inspections. Additional information regarding alluvial fans is provided in Volume IV, Section 1.

(11) within areas that will result in the destruction or adverse modification of the critical habitat of endangered or threatened species as identified in either 50 CFR Part 17 or by the New Mexico department of game and fish in its most recent biennial review;

Based on threatened and endangered species fields survey conducted in 1995 by Weaver Boos Consultants, LLC–Southwest, in October 2005 by Metric Corporation, and in January 2020 by Goshawk Environmental Consulting, Inc., the CRLF is not located where any portion of the disposal area is within areas that will result in the destruction or adverse modification of the critical habitat of threatened and endangered species. Additional details regarding critical habitat of endangered or threatened species is provided in Volume IV, Section 1.

(12) within seismic impact zones, unless the owner or operator demonstrates that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site; or

Based on the current (USGS 2014) Seismic Impact Zone Map, provided as Figure IV.1.7, the CRLF is located within a potential seismic impact zone as defined by 20.9.2.7.S(4) NMAC. Slope stability analysis calculations provided in Volume III, Section 3 demonstrate that each of the environmental containment structures is designed in accordance with NMED engineering requirements for defined seismic impact zones. Additional details regarding seismic impact zones are provided in Volume IV, Section 1.

(13) within an unstable area, unless the owner or operator demonstrates that engineering measures have been incorporated into the landfill design to ensure that the integrity of the structural components of the landfill will not be disrupted.

Unstable areas include poor foundation conditions, areas susceptible to mass movements, and Karst terrain areas (20.9.2.7.U NMAC). CRLF is not located within an unstable area based on subsurface investigations of the site and review of the regional geologic database. Volume IV, Section 1 provides additional information regarding unstable areas.

B. Category 3 landfills that cannot make the demonstration specified in Paragraph (1) of Subsection A of this section pertaining to floodplains or Paragraph (8) of Subsection A of this section pertaining to airports, or Paragraph (13) of Subsection A of this section, pertaining to unstable areas, shall close in accordance with the closure and post-closure provisions in 20.9.6 NMAC.

Not applicable.

20.9.4.13 DESIGN CRITERIA FOR MUNICIPAL LANDFILLS, SPECIAL WASTE LANDFILLS AND MONOFILLS

- A. Except as specified in 20.9.2.14 NMAC and Subsection C of this section, all new municipal and special waste landfills and lateral expansions to existing municipal and special waste landfills shall provide a containment layer beneath the solid waste which is constructed:
 - (1) with a composite liner consisting of two components;
 - (a) the upper component shall consist of a minimum 30-mil flexible or a 60-mil high density polyethylene (HDPE) geomembrane liner or equivalent material; the geomembrane component shall be installed in direct and uniform contact with the lower component; and
 - (b) the lower component shall consist of a geosynthetic clay liner (GCL) or a minimum 24-inch thick layer of compacted soil having a saturated hydraulic conductivity of no more than 1x10⁻⁷ centimeters per second (cm/sec) throughout its thickness; the soil must be free of particles greater than one inch in any dimension; or
 - (2) with an alternative liner in accordance with a design, which provides protection equivalent to the composite liner defined in Paragraph (1) of this subsection.

The CRLF currently uses a liner design, as approved by NMED, that meets the requirements of this section. The permitted liner design consists of the following components (from top to bottom):

- 60-mil HDPE geomembrane
- Geosynthetic clay liner (GCL)
- 6-inch-thick prepared subgrade

The permitted liner design will continue to be constructed at the CRLF in concurrence with the Construction Quality Assurance (CQA) Plan (Volume II, Section 4).

- B. When approving an alternative liner design under this section, the secretary shall consider at least the following factors:
 - (1) the climatic factors of the area; and
 - (2) the volume and physical and chemical characteristics of the leachate.

CRLF is not proposing an alternative liner design as part of this Permit Application.

C. Asbestos waste monofills and scrap tire monofills may be exempted from the design criteria in this section if the owner or operator demonstrates to the secretary in the permit application that the waste will not generate leachate which poses a threat to groundwater quality, but shall still comply with Subparagraph (h) of Paragraph (1) of Subsection A of 20.9.6.9 NMAC.

Not applicable.

D. Scrap tire monofills shall be designed with trenches not to exceed a maximum depth of 15 feet, a maximum width of 50 feet, and a maximum length of 100 feet. A distance of 40 feet shall be maintained between trenches. Trenches shall be filled to original grade.

Not applicable.

- E. The design and construction of all liners shall conform to the following criteria:
 - (1) general requirements:
 - (a) all liners must be able to withstand the projected loading stresses and disturbances from overlying waste, waste cover materials, and equipment operation;

The engineering design calculations provided in Volume III include demonstrations that the liner and leachate collection system can withstand stresses and conditions in excess of those projected for CRLF. The two-foot thick protective soil layer installed above the HDPE liner is an essential provision for protection of the liner's integrity. The Construction Quality Assurance (CQA) Plan (Volume II, Section 4), and the Plan of Operations (Volume II, Section 2), specify the operating procedures designed to protect the liner during and following its installation.

(b) all liners shall incorporate a leachate collection system that meets the requirements of 20.9.4.15 NMAC; and

Each proposed municipal solid waste disposal cell is equipped with a composite liner and leachate collection system that meets or exceeds the requirements of 20.9.4.15 NMAC (Leachate Collection Systems for Landfills). Provisions for leachate collection, extraction, and management are provided in the Leachate Management Plan, Volume II, Section 7 and shown on the Permit Plans.

(c) all liners must be constructed with a minimum two percent slope to promote positive drainage and facilitate leachate collection;

The minimum design slope of the liner and base grades and the design leachate collection piping is 2.0 percent.

- (2) requirements for geosynthetic components:
 - (a) geosynthetic components of a liner system must be compatible with the waste to be contained; they must be able to resist chemical attack from the waste or leachate; this shall be demonstrated by means of manufacturer's test reports, or laboratory analyses;

The Compatibility Documentation (Volume III, Section 4) provides demonstrations that the geosynthetic materials specified in the design withstand chemical conditions characteristic of the CRLF waste stream and the leachate it may produce, which is consistent with historic field experience at the site.

(a) any geosynthetic materials installed on slopes greater than 25 percent, or on any slope where waste is projected to be more than 100 feet deep, must be designed to withstand the calculated tensile forces acting upon the geosynthetic materials; the design must consider the maximum friction angle of the geosynthetic with regard to any soil-geosynthetic or geosynthetic-geosynthetic interface and must ensure that overall slope stability is maintained; and

The maximum design slope of the liner system for the MSW Landfill is 25% (Permit Plans) and exceeds 100 feet deep. Slope stability calculations have been performed for all design conditions and the results of the calculations show that all interface zones will be secure (Volume III, Section 3).

(b) field seams in geosynthetic material shall be oriented parallel to the line of maximum slope (i.e., oriented along, not across the slope); the number of field

seams in corners and irregular shaped areas shall be minimized; there shall be no horizontal seam within five feet of the toe of the slope;

The CQA Plan (Volume II, Section 4) provides detailed specifications for the installation of geosynthetics, including:

- Field seams will be oriented parallel to the line of maximum slope.
- Minimizing the number of field seams in corners and irregularly shaped areas.
- No horizontal seams within five feet of the toe of slope.
- Horizontal seam locations will be approved by Engineer prior to deployment.
 - (3) requirements for the soil component of all liners:

The only soil component of the composite liner system designed for the CRLF is the compacted soil subgrade, which serves as the foundation for the bottom GCL layer in the MSW landfill liner system. This natural soil horizon, or select imported soils, will be compacted and prepared as detailed in the CQA Plan (Volume II, Section 4) for the subgrade layer.

(a) the bottom geosynthetic layer, shall be placed on a prepared subgrade consisting of, at a minimum, of a 6-inch layer of in-situ soil or select fill compacted to 90 percent standard Proctor density;

As specified in the CQA Plan (Volume II, Section 4), the GCL will be placed over a prepared soil subgrade consisting of either re-compacted in-situ material or compacted select on-site soils. The top six inches of the subgrade layer will be compacted and confirmed to meet the 90% Standard Proctor Dry Density requirement.

(b) the surface of the soil upon which a geosynthetic liner will be installed must be free of stones greater than 1/2-inch in any dimension, organic matter, local irregularities, protrusions, loose soil, and any abrupt changes in grade that could damage the geosynthetic liner; and

As specified in the CQA Plan (Volume II, Section 4), the subgrade beneath the GCL will be free of:

- Angular stones that may damage the liner
- Organic matter
- Local irregularities

- Protrusions
- Loose soil
- Abrupt changes in grade

Rigorous inspections of the subgrade are performed to verify that this horizon is suitable prior to deployment of the GCL. Documentation regarding subgrade inspection results will be included with the Engineering Certification Reports prepared for each constructed liner segment, sealed by a NM Professional Engineer experienced in soils and geosynthetics design and construction, and submitted to NMED for approval prior to landfilling.

- (c) the soil component of the composite liner defined in Subparagraph (b) of Paragraph (1) of Subsection A of this section shall be compacted to a minimum of 90 percent standard Proctor density and shall have the following physical characteristics unless otherwise specifically approved by the department:
 - (i) plasticity index greater than 10 percent;
 - (ii) liquid limit between 25 percent and 50 percent;
 - (iii) portion of material passing the No. 200 sieve (0.074 mm and less fraction) greater than 40 percent (by weight); and
 - (iv) clay content greater than 18 percent (by weight);

The composite liner design substitutes the preferred GCL option in lieu of the soil barrier layer.

- (4) all liners shall have a top protective cover of at least two feet of granular soil or other material specifically approved by the department; the protective cover shall, in addition to providing physical protection for the liner, facilitate the collection of leachate in the leachate collection system; materials used to construct the protective cover must ensure the hydraulic leachate head on the liner does not exceeds one foot; the soil material shall be free of any organic matter and have the following physical characteristics unless otherwise specifically approved by the secretary:
 - (a) portion of material passing the No. 200 sieve (0.074 mm and less fraction) no greater than 5 percent by weight; and
 - (b) uniformity coefficient (Cu) less than 6 where Cu is defined as D60/D10.

The liner design for CRLF MSW cells includes a protective soil layer (PSL) with a minimum thickness of two feet. This layer will be comprised of on-site and/or

imported granular soil free of organic matter from pre-qualified sources, as approved by the Engineer. The protective soil layer (PSL) for CRLF will consist of the following:

- $\leq 10\%$ passing the No. 200 sieve by weight
- Uniformity coefficient (Cu) ≤ 7.5 where Cu = D60/D10
- Minimum thickness of 24 inches, as documented by survey blunt probe measurements, construction cones, or other approved methods.

Approval for these alternative criteria for the protective soil layer is demonstrated in the approved CQA Plan (Volume II, Section 4). The CQA Plan (Volume II, Section 4) specifies the testing procedures, frequencies, pass/fail criteria, etc. for documenting compliance with each of the above criteria. HELP Modeling (Volume III, Section 9) results show that available materials meeting these specifications will result in less than twelve inches of fluid accumulation on the liner floor at any point except the sumps, consistent with the requirements specified by NMED's April 1, 1998 HELP Modeling Guidance Document.

20.9.4.14 TESTING AND QUALITY CONTROL FOR LINERS AND FINAL COVERS

A. All testing of geosynthetic and soil materials shall be performed in accordance with applicable American society of testing materials (ASTM) standards.

The CQA Plan (Volume II, Section 4) and the Final Cover Construction Quality Assurance (CQA) Plan (Volume II, Attachment II.5-E) list the applicable ASTM test standards that will be used to confirm compliance of geosynthetic and soil materials, as well as construction procedures for materials used at the CRLF.

- B. The construction and installation of all liners and final covers shall be done in accordance with a quality control plan approved in the permit. All testing and evaluation of liners shall be certified by a professional engineer licensed in New Mexico and experienced in liner installation, and shall be completed prior to the placement of the protective cover. All field testing of liners and final covers shall be the responsibility of an individual experienced in liner or cover installation and soils or geotextile engineering, as appropriate. The quality control plan shall:
 - (1) define the procedures required for obtaining samples and testing and reporting the test results for the installation of the liner and final cover;

- (2) describe and illustrate to operating personnel all necessary procedures for maintaining the integrity of the liner, leachate collection systems, and final cover;
- (3) for the soil component, prescribe the following minimum frequency of testing for the soil component of all liners and final covers, unless otherwise specifically approved by the department:
 - (a) soil from the borrow source shall be tested as follows:
 - (i) grain size shall be tested once every 1,000 cubic yards;
 - (ii) Atterberg limits shall be tested once every 5,000 cubic yards;
 - (iii) Proctor compaction moisture-density curve conformance shall be tested once every 5,000 cubic yards; and
 - (iv) laboratory permeability shall be tested once every 5,000 cubic
 - (v) yards; and
 - (b) during construction of the liner or cover, the soil shall be tested as follows:
 - (i) density and moisture content tested by nuclear densiometer shall be tested four times per acre per lift;
 - (ii) laboratory or in-situ permeability shall be tested once per 2 acres and laboratory samples shall be undisturbed or recompacted to the site-specific field conditions; and
 - (iii) total thickness (by survey) shall be tested once per acre (on grid);
- (4) for the protective cover component of liners, when used to facilitate leachate drainage, prescribe the following minimum frequency of testing of the granular drainage layer, unless specifically approved by the department:
 - (a) grain size of the soil shall be tested once every 1,500 cubic yards; and
 - (b) total thickness of the drainage layer shall be tested five times per acre; and
- (5) for the geomembrane component of all liners and final covers as defined in Subsection A of 20.9.4.13 NMAC and Subsection A of 20.9.6.9 NMAC, all testing, both shop and field, shall be as recommended by the manufacturer unless otherwise specifically approved by the department; the minimum frequency of taking seam samples for destructive testing shall be one per 500 feet of

seam length, with a portion of each test sample tested in the field and another in the laboratory; seam samples shall be tested for peel adhesion and bonded seam strength; non-destructive testing shall be performed for all seams, seam repairs, and liner repairs.

The CQA Plan for the liner (Volume II, Section 4) and the final cover provided as Attachment II.5-E to the C/PC Plan are "quality control plans" as defined in this section. The CQA Plan identifies the mandatory procedures for testing, reporting, and protecting the liner system. Test specifications which comply with 20.9.4.14 NMAC are:

- Type of test
- Testing frequency and requirements
- ASTM designation
- Recordkeeping requirements

The installation of the environmental control systems for CRLF is subject to construction observation by the Site CQA Manager. Upon completion of each constructed liner segment, the registered Professional Engineer (CQA Officer), who is an expert on soils and geosynthetics construction, will submit a sealed Engineering Certification Report to NMED documenting compliance.

20.9.4.15 LEACHATE COLLECTION SYSTEMS FOR LANDFILLS

- A. Except as specified in 20.9.2.14 NMAC and Subsection C of 20.9.4.13 NMAC, all new municipal and special waste landfills and lateral expansions shall include a leachate collection system, which shall be designed by a professional engineer licensed to practice in New Mexico, and which shall incorporate a piping collection network comprised of perforated pipe having a minimum diameter of 6 inches and a minimum wall thickness of schedule 80 PVC or equivalent and shall be designed and constructed to:
 - (1) maintain less than a one-foot depth of leachate on the liner;
 - (2) maintain a minimum of two percent slope throughout the system, within the lined landfill cell; an alternate slope may be specifically approved by the secretary for leachate conveyance piping outside the disposal cell footprint;
 - (3) withstand chemical attack from waste and leachate; and
 - (4) withstand the loads, stresses, and disturbances from overlying waste, waste cover materials, and equipment operation.

Each disposal cell at CRLF is equipped with a leachate collection system that meets or exceeds the requirements of 20.9.4.15 NMAC (see Permit Plans). Each leachate collection system conforms to the following minimum criteria:

- 1. Leachate collection pipes will be a minimum of 6-inch diameter SDR 13.5 HDPE perforated or slotted pipe.
- 2. The leachate collection system shown in the Permit Plans will maintain the leachate head at \leq twelve (12) inches on the liner under the worst case scenario using conservative assumptions.
- 3. As shown on the Permit Plans, the design slope at any point in the leachate collection system piping network is two (2) percent or greater.
- 4. The Compatibility Documentation (Volume III, Section 4) provides demonstrations that the geosynthetic materials specified in the design have been proven to withstand chemical conditions characteristic of CRLF waste stream and the leachate it may produce, which is consistent with historical field experience at the site and industry standards.
- 5. Pipe Loading Calculations (Volume III, Section 5) provide data that demonstrate the capability of the piping system to withstand site-specific design loads. The CQA Plan (Volume II, Section 4) and the Plan of Operations (Volume II, Section 2) prescribe specific measures designed to protect the piping during and following installation.
- B. Any geosynthetic materials such as geonets and geotextiles, if used as components of the leachate collection system, must have a hydraulic conductivity, transmissivity and chemical and physical qualities that will not be adversely affected by waste placement, equipment, operation, or leachate generation. These geosynthetics, if used and operating in conjunction with the soil protective cover for the liner as described in Paragraph (4) of Subsection E of 20.9.4.13 NMAC, must have a hydraulic conductivity and transmissivity designed to ensure the hydraulic head on the liner never exceeds one foot.

Geotextiles are included as cushions and filter layers for the leachate collection system for CRLF. Specifications for these are included in the CQA Plan (Volume II, Section 4). Chemical and physical compatibility specifications are addressed in Volume II, Section 4.

- C. A written leachate management plan shall be submitted for approval by the secretary. The plan shall describe anticipated amounts of leachate, duration of generation and final disposal options for the leachate and shall include:
 - (1) a description of the means of analysis; and
 - (2) a description of the type of treatment and proposed disposal method.

An updated Leachate Management Plan is provided as Volume II, Section 7. This plan addresses:

- 1. Projected amounts and rates of leachate generation.
- 2. Expected duration of leachate generation.
- 3. Leachate monitoring.
- 4. Means of analysis.
- 5. Proposed treatment and disposal methods.

Volume III, Section 10 provides calculations based on HELP modeling that establish the basis for leachate projections.

D. Leachate storage and collection ponds shall be designed to meet the requirements of 20.9.4.13 NMAC. A pond may be designed to maintain greater than one foot of leachate, provided it is equipped with a double, composite liner as specified in 20.9.4.13 NMAC, or an alternative design providing equivalent protection and approved in the permit.

Information regarding proposed beneficial use of leachate is detailed in Volume II, Section 7.

20.9.4.16 LANDFILL GAS CONTROL SYSTEMS

- A. Owners and operators of landfills who install a landfill gas control system in order to conform with the requirements of Subsection B of 20.9.5.9 NMAC shall submit a description of the physical and chemical characteristics of expected condensates or residues that are generated and a plan for their disposal. The disposal plan shall be submitted with a permit application or as a request for a specific approval. In addition, if the gas control system is not subject to the Air Quality Control Act, NMSA Sections 74-2-1, et seq., the owner or operator shall include the following information in its submission:
 - (1) the design of the system, indicating the location and design of vents, barriers, collection piping and manifolds and other control measures that will be installed; and
 - (2) if gas recovery is proposed, the design of the proposed gas recovery system and the major on-site components of the system including storage, transportation, processing, treatment or disposal measures required in the management of the generated gases, condensates or other residues.

Demonstration of compliance with the requirements of this section is provided in Volume II, Section 6 – Landfill Gas (LFG) Management Plan. The LFG Management Plan provides a description of the existing, permitted landfill gas collection and control system (GCCS) and future system expansions.

B. If a gas processing system is proposed, it shall be designed:

- (1) so that it will not interfere with activities on the site or required control measures; and
- (2) so that it will not create a nuisance, endanger or cause harm to persons or property.

If the site elects to use a gas processing system, it will be designed and operated in accordance with this rule.

C. If a gas disposal system is proposed, it shall be designed:

- (1) so that it will not interfere with activities on the site or required control measures;
- (2) so that it will not create a nuisance, endanger or cause harm to persons or property; and
- (3) with active forced ventilation, using vents located at least one foot above the landfill surface at the location of each gas vent.

The gas collection piping system conveys the extracted LFG from the collection points (i.e., vertical wells and horizontal collectors) to the flare and/or gas to energy facilities.

A detailed summary of operational specifications and safety features of the disposal system is included in the Landfill Gas Management (Volume II, Section 6).

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CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738(SP)

APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

VOLUME I – PERMIT APPLICATION TEXT SECTION 5 – SOLID WASTE FACILITY AND REGISTERED FACILITY OPERATING REQUIREMENTS

Prepared for

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September 2022



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20.9.5.8 GENERAL OPERATING REQUIREMENTS FOR ALL SOLID WASTE FACILITIES

A. Owners and operators of each solid waste facility shall:

(1) operate the facility in a manner that does not cause a public nuisance or create a potential hazard to public health, welfare or the environment;

The primary objective of the Plan of Operations provided as Volume II, Section 2 is to ensure the protection of the public health, welfare, and the environment. Modern landfill technology, as conducted specific to the Camino Real Landfill (CRLF), is designed to reduce or eliminate potential impacts resulting from operations.

The Camino Real Environmental Center, Inc. (CREC) operates CRLF in a manner that does not cause a nuisance or create a potential hazard to public health, welfare, or the environment. This is demonstrated by its successful historic operations since April 1987 and compliance with 20.9.4.9 NMAC siting criteria. The following engineered measures employed in the design provide further mitigation:

- setbacks and buffer zones
- liners and leachate collection systems
- stormwater management systems with detention and sedimentation control
- monitoring programs for groundwater and landfill gas
- visual and noise screening created by selective operational sequencing and below-grade landfilling
- daily, intermediate and final cover
- operations below-grade and screened by previous fill deposits

(2) control and mitigate odor and litter; and

Five primary factors that reduce the potential for odors include:

- 1. Waste characteristics
- 2. Operating procedures
- 3. Site location and arid climate
- 4. Mode of delivery
- 5. Low precipitation

Litter is controlled at CRLF through both preventative and maintenance techniques. Operational practices implemented at CRLF for odors and litter are detailed in Volume II, Section 2.

(3) post signs to indicate the location of the site, the hours of operation, emergency telephone numbers, disposal instructions, and that fires and scavenging are prohibited.

CREC has posted signs at the gated entrance to the CRLF which clearly indicate the site location, hours of operation, emergency telephone numbers, disposal instructions, etc., and additional on-site signage state that fires and scavenging are prohibited at the Landfill (Figure II.2.5).

- B. Owners and operators of a solid waste facility shall:
 - (1) have a certified operator or representative present at all times while the facility is operational;

Full-time supervisory personnel employed at CRLF are encouraged to obtain certification as required by 20.9.5.8.B(1) NMAC. These individuals are required to demonstrate familiarity with:

- Rules applicable to CRLF, and specifically 20.9.2-20.9.10 NMAC.
- The Permit Application, Permit Plans, and the Landfill Management Plans.
- The New Mexico Environment Department (NMED) Permit and related Permit Conditions.

Documentation regarding each current employee's Operator Certification status is maintained and updated in the Facility's Operating Record. The current NMED Certified Operators are listed in Volume I, Section 7, and copies of their Certificates are included as Attachment I.7-A. These data are also included in Volume II, Section 2. Training is provided to facility employees upon hire, and at least annually thereafter.

- (2) implement a plan approved by the secretary to inspect loads to detect and prevent the disposal of unauthorized waste, including:
 - (a) inspection frequency;
 - (b) inspection personnel;
 - (c) method of inspection; and
 - (d) a training program for the facility employees in the identification of unauthorized waste, including hazardous waste, hot waste, and PCBs;

- (3) maintain a written operating record in compliance with 20.9.5.16 NMAC;
- (4) notify the department both orally and in writing within 24 hours of an occurrence of a spill, fire, flood, explosion, mass movement of waste, or similar event;
- (5) upon discovery of the receipt of unauthorized waste:
 - (a) notify the department, the hauler, and the generator in writing within 48 hours;
 - (b) restrict the area from public access and from facility personnel; and
 - (c) assure proper cleanup, transport and disposal of the waste;
- (6) ensure that copies of contingency plans are readily accessible to employees on duty; and
- (7) train employees when hired and at least annually thereafter on when and how to implement contingency plans and document in the operating record that such training has been conducted.

CRLF employs a Waste Screening and Inspection Plan, developed in accordance with 20.9.5.8.B(2-7) NMAC, to prevent the disposal of regulated hazardous waste, prohibited and unauthorized wastes, poly-chlorinated biphenyls (PCBs), and materials deemed incompatible with the Landfill's operation. The updated Waste Screening and Inspection Plan is included as Volume II, Section 10 to this Permit Application. Additional special waste screening details are provided in the Special Waste Disposal Management Plans (Volume II, Section 8).

As material is being unloaded, the inspection frequency of incoming loads is continuous by the equipment operators and other facility personnel. Incoming waste is also randomly scrutinized a minimum of once per day or one percent of incoming loads, whichever is greater. Landfill inspection personnel are trained (at least upon hire and annually thereafter) to identify suspicious wastes based on visual and olfactory characteristics. Some of the indications that they are trained identify include:

- Hazardous placarding or markings
- Liquids
- Powders or dusts
- Sludges
- Large bright or unusual colored containers or commercial size containers
- "Chemical" odors

• Infectious waste (i.e., red plastic bags)

Whenever a suspicious waste is identified, the Landfill inspection personnel follow specific procedures that may include:

- Segregating suspicious waste in a separate area over a lined area to protect health and safety of landfill employees and the public.
- Flagging, barriers, and signs shall be used to limit human exposure potential.
- Identifying the unacceptable waste by characteristic, estimated quantity, transport vehicle, and the names and addresses of those associated with the waste load.
- Questioning the driver of the vehicle.
- Contacting the possible source and notifying the generator of waste within 24 hours, pursuant to the Rules.
- Notifying the hauler upon discovery of the receipt of unauthorized waste per 20.9.5.8 NMAC.
- Contacting NMED Solid Waste Bureau or Hazardous Waste Bureau within 24 hours, whichever is applicable, as required.
- Using protective equipment (i.e., PPE) if necessary.
- Contacting laboratory support or outside contractors if necessary.
- Calling emergency response assistance, if required.

Emergency response agency and contact information are posted in prominent locations at the Facility for reference as detailed in the CRLF Contingency Plan (Volume II, Section 3). The Contingency Plan (Volume II, Section 3) is readily accessible to employees on duty at CRLF.

Subsequent waste deliveries made by a transportation company or service that has previously delivered suspect waste to the facility will be scrutinized with additional care. An example Load Inspection Form is provided as Figure II.2.6. CRLF maintains a written operating record in compliance with 20.9.5.16 NMAC.

C. The secretary may order temporary changes in operation or facility design in emergency situations when the secretary determines there is an imminent danger to public health, welfare or the environment.

CREC understands that the Secretary may authorize temporary changes in operation, or facility design, in emergency situations, if there is imminent danger to public health, welfare or the environment.

D. If recyclable materials such as used oil, antifreeze, paint, or similar materials are diverted from the waste stream at a solid waste facility, the materials shall be stored for no longer than twelve months and shall

be maintained in a covered area, not exposed to the weather, with secondary containment.

At this time, CREC does not divert recyclable materials such as used oil, antifreeze, paint, or similar materials at CRLF. CREC will comply with the storage requirements should they elect to divert these types of recyclable materials.

20.9.5.9 ADDITIONAL MUNICIPAL, SPECIAL WASTE, AND MONOFILL LANDFILL OPERATING REQUIREMENTS

All municipal and special waste landfill owners and operators shall:

- A. utilize the principles of sanitary engineering to:
 - (1) confine the working face to the smallest practical area;
 - (2) compact the solid waste to the smallest practical volume; and
 - (3) minimize exposure of landfill employees and the public to animal carcasses and offal, and immediately cover such wastes when they are received;

The Plan of Operations (Volume II, Section 2) addresses daily fill face activities in detail. The prescribed procedures which have proven effective at confining the working face to the smallest practical area, and achieving maximum compaction of the waste, include:

- Establish fill face width adequate for peak hourly traffic flow (i.e., 100-200 feet).
- Install waste lifts in thin layers (2 3 feet), with slopes no steeper than 4:1.
- Consolidate waste with repeated passes of specialized waste compaction equipment.
- Apply cover throughout the working day to reduce the surface area of exposed waste.
- Take precautions to protect installed liner systems, piping, monitoring points, etc.
- B. prevent the generation and lateral migration of methane such that:
 - (1) the concentration of methane generated by the facility does not exceed 25 percent of the lower explosive limit (LEL) for methane in facility structures (excluding gas control or recovery system components); and
 - (2) the concentration of methane does not exceed the LEL at the facility property boundary;

The Landfill Gas Management Plan (Volume II, Section 6) describes the quarterly monitoring program that will be used to ensure continued compliance with 20.9.5.9.B NMAC. The Landfill Gas Management Plan (Volume II, Section 6) also prescribes notification requirements and contingency measures in the event regulatory thresholds are exceeded.

C. implement a routine methane monitoring program to ensure that the requirements of Paragraphs (1) and (2) of Subsection B of this section are met;

The Landfill Gas Management Plan (Volume II, Section 6) outlines routine monitoring protocol and the procedures to be implemented in the event that methane is detected at concentrations in excess of applicable regulatory levels. CRLF operations were initiated in 1987, and historical monitoring results have consistently demonstrated that lateral LFG migration is not occurring at or above regulatory thresholds.

(1) the type and frequency of monitoring shall be determined based on the following conditions:

(a) soil conditions;

The site's composite liner system is a barrier which precludes gas flow into the soil environment either laterally or vertically. In addition, site topography and the extremely low rate of landfill gas generation/pressure virtually eliminate the potential for subsurface lateral migration.

(b) the hydrogeologic conditions surrounding the facility;

The hydrogeology of the site (Volume V, Section 1), with relatively horizontal intervening layers of both fine-grained and coarse-grained soils, would inhibit vertical (downward) migration of gas. In addition, LFG constituents are almost entirely lighter than air. Therefore, the permanent probes and screen designs that are positioned at the point of compliance would intercept potential lateral migration.

(c) the hydraulic conditions surrounding the facility; and

Existing and proposed perimeter LFG probes are positioned at locations that are not impacted by engineered and natural stormwater drainage and retention features and maintain a minimum depth to groundwater of 160 feet. Hydraulic conditions surrounding the site are described in Volume V, Section 2. The Landfill Gas Management Plan is included in Volume II, Section 6.

(d) the location of facility structures and property lines;

The density and spacing of existing and proposed LFG probes allow for the earliest detection of LFG migration at the facility property boundary and within on-site structures. As shown on Figure II.6.1, the gas monitoring points are concentrated along the north perimeter corresponding to the nearest on-site and off-site

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structures. The nearest off-site structures are located more than 1,000 feet from waste deposits, with intervening railroad installations, berms, and terrain that would preclude off-site migration. On-site structures do not have basements and are protected by intervening monitoring points as well as routine monitoring to more stringent standards (i.e., 25 percent of the LEL).

the minimum frequency of monitoring shall be quarterly, except that landfills that receive less than 20 tons per day annual average, or closed prior to October 9, 1993, or monofills may be permitted for less frequent monitoring, provided on-site measurements indicate methane levels are consistently less than 25 percent of the LEL for methane; and

LFG monitoring continues to be conducted on a quarterly basis as detailed in the Landfill Gas Management Plan, Volume II, Section 6.

- (3) if methane gas levels exceed the limits specified in Paragraphs(1) and (2) of Subsection B of this section, the owner or operator shall:
 - (a) immediately take all necessary steps to ensure protection of public health, welfare and the environment and notify the secretary;
 - (b) within seven days of detection, record the methane levels detected and a description of the steps taken to protect public health, welfare and the environment; and
 - (c) within 60 days of detection, implement a remediation plan approved by the secretary for the methane releases, and notify the secretary that the plan has been implemented; the plan shall describe the nature and extent of the problem and proposed remedy;

If methane levels at the facility exceed the limits specified in 20.9.5.9.B(1) and (2) NMAC, CREC will immediately take necessary steps to ensure protection of public health, welfare, and the environment and notify the Secretary. These steps will include evacuation of structures, or "red-flagging" of unoccupied structures, until positive readings can be verified and safe conditions restored. Methane gas levels will be recorded at each monitoring point, and a description of the steps taken to protect public health, welfare and the environment will be submitted within seven (7) days of the detection. Within 60 days of detection, CREC will implement a "Remediation Plan" at CRLF to address any detected methane gas releases, and notify the Secretary that the Plan has been implemented. The Plan will describe the nature and extent of the release and proposed remedial options. A detailed description of the methane monitoring contingency measures is provided in Volume II, Section 6.

D. prevent unauthorized access by the public and entry by large animals to the active portion of the landfill through the use of fences, gates, locks, or other means;

The CRLF Facility perimeter is secured by a minimum 5-strand barbed-wire fence. Additional 6-foot-high chain-link fencing and locking gates also aid in site access control (Permit Plans). The site also has security routinely patrolling the site that includes site personnel and border patrol agents.

- E. control run-on water onto the site and run-off water from the site, such that:
 - (1) the run-on control system shall prevent flow onto the active portion of the landfill during the peak discharge from a 24-hour, 25-year storm;

Active portions of the CRLF are protected by run-on diversion systems as shown on the Permit Plans. The engineered stormwater control systems include perimeter drainageways sized to accommodate, at a minimum, the 25-year 24-hour magnitude storm (Volume III, Section 8, Drainage Calculations).

(2) the run-off control system from the active portion of the landfill collects and controls at least the water volume resulting from a 24-hour, 25-year storm; and

The engineering design for the stormwater management system is shown on the Permit Plans and calculations documenting the effectiveness of the design are provided in Volume III, Section 8. Stormwater management controls that include drainageways, culverts, and stormwater detention/sedimentation basins have been designed to meet or exceed the specifications of 20.9.5.9.E NMAC.

(3) run-off from the active portion of the landfill shall not be allowed to discharge any pollutant to the waters of the state or United States that violates any requirements of the New Mexico Water Quality Act, commission regulations and standards or the federal Clean Water Act;

Non-contact run-off from active portions of the landfill is diverted to perimeter channels that convey stormwater to the detention/sedimentation basins before discharge. Vigilant application and maintenance of daily, intermediate and final cover serve to minimize the potential for stormwater to contact waste. Water within each cell is diligently segregated into stormwater and contact water (leachate). Stormwater is pumped from temporary sumps into drainageways, and potential contact water is managed as leachate and used for dust control over lined areas or reintroduced into fill areas that are lined but not yet closed. The stormwater detention/sedimentation basins may be used as surface water sampling points and to demonstrate compliance with the National Pollutant Discharge Elimination System (NPDES) permit requirements.

F. prohibit scavenging;

Scavenging is strictly prohibited at CRLF, as posted on the site entrance sign (Figure II.2.5). Constant vigilance by site personnel and access control serve to prevent scavenging.

G. provide adequate means to prevent and extinguish fires;

Fire prevention is accomplished by diligent identification and segregation of "hot loads" and waste characteristics that may cause ignition (i.e., incompatible materials). The primary fire control method within the Landfill disposal cells is the proximate stockpiling of daily cover soil for use to spread on a fire using the operating equipment at the landfill. A list of fire-fighting equipment is provided as part of the updated Contingency Plan (Volume II, Section 3). As part of the facility's routine training program, solid waste personnel are trained in fire prevention and control methods. The additional emergency response provisions are addressed in the Contingency Plan (Volume II, Section 3). Measures to prevent and control fires are summarized on Table I.5-1.

Table I.5-1
Fire Prevention and Control

Fire Prevention Measures

Training of equipment operators to identify suspect ("hot") loads and measures for mitigation (e.g., covering smoldering waste with stockpiled soil).

Routine cleaning of debris from equipment radiators.

Random inspections of incoming loads at the Gate House to prevent unauthorized waste acceptance.

H. direct the deposit of hot waste at a specific location at the facility which is remote from the operating area; the hot waste shall be immediately spread out for cooling and extinguished if on fire; the hot waste shall not be mixed with the regular solid waste stream until it reaches a temperature that will not support combustion;

Arriving shipments will be monitored at the Scalehouse and working face for evidence of smoke or smoldering. In the event that a "hot load" is identified, the waste will be directed to a separate area within the Landfill and spread out. If the waste is burning, soil will be used to extinguish the hot load. The location of the hot load area will change as the development of the Landfill progresses so that it is not located far from established roadways or the working face. Once the waste has cooled and confirmed by inspection that it does not present a fire risk, it will be deposited within the working face and compacted in a routine manner.

I. provide and maintain access roads at the facility site, such that traffic can enter and exit the site safely, will flow smoothly, and will not be interrupted by inclement weather;

CRLF on-site roads are either paved or constructed of caliche, crushed aggregate, or select C&D waste, which will continue to be maintained such that traffic will be able to enter and exit the site safely, flow smoothly, and will not be interrupted by inclement weather. Road conditions have not been a deterrent to daily operations in the history of CRLF operations. Additional paved roads may be installed in the future for permanent access routes. CREC may elect to close CRLF operations under high-wind conditions, and will notify primary haulers to seek alternatives.

On-site access roads to the fill areas, sedimentation basin, etc., are constructed of on-site soil and/or select demolition debris. The roads will continue to be watered as necessary for dust control, and graded on a regular basis. In the event of inclement weather, the operating fill face is maintained at a location in close proximity to an established access road if practical. These procedures will ensure the safe flow of truck traffic that is not interrupted by inclement weather.

J. provide sufficient unloading areas to meet demands of peak periods;

The width of the daily fill face is the key constraint in limiting the turn-around time at the Landfill. A fill face width of 150 feet to 300 feet has proven to be adequate to meet peak demand at the rate of projected waste receipts. The Public Convenience Station is designed to manage self-haul peak flows, which significantly reduces landfill traffic and enhances safety at the fill face.

K. measure leachate head on the liner and sump pump as necessary, and except as otherwise allowed in Paragraph (9) of Subsection A of 20.9.2.10 NMAC, 20.9.2.14 NMAC and Subsection C of 20.9.4.13 NMAC, collect and treat leachate by a method approved by the secretary and maintain records on a quarterly basis of leachate generation and treatment;

CRLF is equipped with leachate collection and removal systems as shown on the Permit Plans. Additional operational and monitoring details are provided in the Leachate Management Plan, Volume II, Section 7. Dedicated or portable sump pumps are used to extract leachate when fluid level measurements meet specified compliance depths. The leachate is pumped from the sump to a water truck or water wagon (or similar equipment) for transfer to the active fill face or previous fill deposits for recirculation or application to on-site roads (over lined areas only) for dust control. The leachate is subject to evaporation, and any residue will be retained within the lined footprint.

L. control litter, disease vectors, dust and odors;

Blowing litter is controlled by a number of both preventive and maintenance techniques. When the fill operation is conducted below the adjacent ground or surrounding fill level, the sidewalls function as windbreaks. Additional preventive litter control techniques include confining the working face to the smallest practical area, consolidating waste with repeated passes of specialized compaction equipment, and continuous application of daily cover soil or ADCs. Intermediate fencing is also utilized on-site to control blowing litter as described in the Plan of Operations (Volume II, Section 2).

Litter collected on the fences and other areas is disposed of in the daily active face within 24-hours of collection. It is CRLF management and staff's responsibility to supervise landfill personnel to ensure that litter has been contained by the end of each working day. In case of adverse weather conditions (e.g., high wind), the facility may be temporarily closed, and the priority for litter collection will be off-site collection first.

Litter and debris are collected and disposed of on a daily basis. However, there may be times when such a practice is impractical. Such an instance may occur at the end of the working day when the active face is closed. In such an instance, the debris will be temporarily placed in containers/bags or covered (e.g., tarps, soil) and disposed of at the active face at the beginning of the next working day. All vehicles entering the site to dispose of refuse must be enclosed, covered, tarped, or be delivering waste materials not susceptible to wind.

The modern landfilling process employed at the CRLF is proven to prevent vectors. The routine application of daily cover materials and general movement of heavy equipment serves to eliminate vector habitats. The appropriate professionals will be contacted to provide additional assistance, if necessary.

Landfill odors generally result from trace-level gases produced during the decomposition of putrescible waste. Methane and carbon dioxide, which together comprise over 99 percent of landfill gas, are odorless. Occasionally an incoming load of waste may exhibit a unique odor based on its content. The immediate application of soil cover is generally satisfactory to control these occasional odorous loads. Waste types with known odor-producing characteristics will not be accepted at the facility. Several other features incorporated into the CRLF design assist in the reduction and control of odors. These are:

- leachate collection that prevents liquid accumulation within the waste
- routine landfill gas monitoring at the perimeter locations and within facility structures
- setbacks of the active fill area from property lines of at least 50 feet and >500 feet from the nearest residence
- landfill sequencing of the working face with consideration for wind direction and odor dispersion

Prevailing winds in the area are from the southeast and west (Figure I.3.2).

M. notify the department prior to installing exploratory borings for the purpose of waste characterization or mapping or removing waste for routine maintenance on gas collection and control or venting systems, unless the event involves less than 120 cubic yards of solid waste;

CRLF will notify the Department prior to any installation of exploratory borings for waste characterization or LFG controls involving more than 120 cubic yards.

- N. cover the active face with a six-inch layer of earth or specifically approved alternate daily cover at the conclusion of each day's operation or more often as conditions may dictate, except that for landfills that receive less than 20 tons of waste per day annual average or monofills, the permit may allow alternate frequencies to the daily cover requirements; when permitting a reduced frequency, the secretary shall:
 - (1) consider the unique characteristics of small communities;
 - (2) consider climatic and hydrogeologic conditions;
 - (3) consider measures to prevent vector harborage and animal intrusion; and
 - (4) determine that the approved frequency will be protective of human health and the environment;

The active face of the daily MSW cell is covered with a six-inch layer of on-site soil or an approved alternative daily cover (ADC) at the conclusion of each day's operation or more often as conditions may dictate. Cover application continues throughout the working day in order to confine the surface of exposed waste to the smallest practical dimensions.

- 0. provide intermediate cover which shall be:
 - (1) at least one foot thick, or other specifically approved thickness:
 - (2) placed on all areas of a landfill that have not received waste for 60 days or longer, or have not reached final elevation;
 - (3) stabilized with vegetation or other specifically approved method on any areas that have been inactive for more than two years; and
 - (4) constructed and maintained to prevent erosion and infiltration; and

In areas which will not receive additional waste placement for a period of time greater than 60 days, intermediate cover will be installed over the daily cover to create a combined minimum thickness of 12 inches. This intermediate cover will be graded to promote positive drainage and limit erosion and infiltration.

The intermediate cover shall be inspected and maintained until additional waste placement occurs or final cover is constructed. If additional waste placement is to occur, the intermediate cover may be removed to facilitate the flow of leachate and landfill gas. If the area is to remain inactive for more than two years, it will be stabilized with vegetation, or other approved methods. A description of proposed methods for alternative intermediate and final cover stabilization is provided in Attachment II.2-E.

P. if diversion of recyclable materials is conducted:

- (1) perform the diversion in a sanitary manner, with storage confined to an area remote from the operating area of the landfill, and in a manner which does not interfere with or delay the operation of the landfill or create a nuisance, litter problem, vector harborage, or public health hazard;
- (2) remove all recyclable materials from the facility in a timely manner such that the area does not become a permanent storage area; and
- (3) store recyclables in such a manner that the area is clean, materials are separated by type, and the potential for contamination is minimized;

Diversion of recyclables is conducted in a manner consistent with the requirements of 20.9.5.9.P(1-3) NMAC:

- Storage areas for recyclables are remote from the operating area of the landfill.
- Recyclables are removed in a timely manner so as not to create a nuisance, vector harborage, or public health hazard.
- Recyclables are separated in bins or piles and these areas are kept clean and organized.
- Q. owners or operators of municipal or special waste landfills permitted after the effective date of these regulations to accept 25,000 tons per year or more, shall, prior to commencing operations, install scales at the landfill and weigh incoming waste;
- R. owners or operators of municipal or special waste landfills permitted or registered before the effective date of these regulations to accept 25,000 tons per year or more, shall no later than five years after the effective date of these regulations, install scales at the landfill and weigh incoming waste;

CRLF operations include a scale to weigh incoming loads and waste receipts which are reported to NMED annually in tons.

S. owners and operators of scrap tire monofills shall accept no solid waste for disposal other than baled scrap tires;

CREC does not own or operate a scrap tire monofill.

T. a landfill permitted as a special waste landfill may accept municipal waste and construction and demolition waste if approved in its permit.

CRLF receives municipal solid waste, including C&D, per its current (2008) Permit. CRLF also has approval to accept three non-hazardous special wastes, as detailed in Volume II, Section 8.

20.9.5.10 ADDITIONAL CONSTRUCTION AND DEMOLITION LANDFILL OPERATING REQUIREMENTS

All construction and demolition landfill owners and operators shall:

A. minimize the on-site population of disease vectors through the periodic application of cover material or other techniques as appropriate so as to protect public health, welfare and the environment;

Not applicable, as CRLF does not own or operate a separate Construction and Demolition Landfill.

B. apply and compact soil or apply other suitable material over disposed construction and demolition debris at the end of each operating day or at such frequencies and in such a manner as to reduce the risk of fire and impede vectors' access to the waste;

Not applicable

- C. prevent the generation and lateral migration of methane such that:
 - (1) the concentration of methane generated by the facility does not exceed 25 percent of the lower explosive limit (LEL) for methane in facility structures (excluding gas control or recovery system components); and
 - (2) the concentration of methane does not exceed the LEL at the property boundary; and

Not applicable.

D. limit public access so as to not expose the public to potential health and safety hazards at the facility.

Not applicable.

20.9.5.15 CONTINGENCY PLAN FOR EMERGENCIES

A. 20.9.5.15 NMAC applies to owners and operators of all solid waste facilities except as otherwise provided.

CREC has developed and maintains a Contingency Plan for CRLF emergencies, provided herein as Volume II, Section 3. The Contingency Plan approved with the original Permit Application, and subsequent updates, have proven effective at addressing unplanned events throughout the history of CRLF operations.

B. The owner or operator shall maintain a current contingency plan at each solid waste facility. The contingency plan shall be designed to minimize hazards to public health, welfare or the environment from fires, explosions, or any release of contaminants or hazardous constituents to air, soil, surface water or groundwater.

The Contingency Plan is reviewed annually and updated after a significant event that required its implementation. The updated Contingency Plan is provided in Volume II, Section 3.

C. A copy of the contingency plan shall be kept at the facility and copies shall be provided to the emergency response authority of the local emergency management center.

Copies of the Contingency Plan are maintained in a readily accessible location at the CRLF Administration Center. In addition, copies of the updated Plan will be provided to the Doña Ana County Emergency Management Office, which is the lead agency responsible for coordinating contingency response under the Homeland Security Act.

Each of the parties listed in Table II.3-1 will be contacted by CREC and invited to visit CRLF for the purposes of inspecting the facility. Whenever significant changes to the Contingency Plan are made, revised copies of the Plan will replace existing onsite copies, and the NMED and Doña Ana County Emergency Management Office will be provided with the Plan updates. A documentation form for contacting the parties listed in Table II.3-1 is provided as Attachment II.3-B.

D. The provisions of the contingency plan shall be carried out immediately whenever there is a fire, explosion, or release of contaminants or hazardous constituents which could pose an immediate or imminent threat to public health, welfare or the environment.

CREC will comply with this requirement whenever there is a fire, explosion, or release of contaminants or hazardous constituents which could pose an immediate

or imminent threat to public health, welfare or the environment (Contingency Plan, Volume II, Section 3).

- E. The contingency plan shall be amended immediately, if necessary, whenever:
 - (1) the facility permit is renewed or modified;
 - (2) the plan fails in an emergency;
 - (3) the facility's design, operations, maintenance, or other circumstances change in a way that increases the potential for fires, explosions, or releases of hazardous constituents, or necessitate changes to the planned emergency response;
 - (4) the list of emergency coordinators changes; or
 - (5) the list of emergency equipment changes.

CREC will amend its Contingency Plan for CRLF when the Plan fails in an emergency, there is a significant change to the design or operations of the facility, the list of emergency coordinators changes, or the list of emergency equipment changes significantly (Volume II, Section 3).

- F. The contingency plan for emergencies shall, if applicable:
 - (1) describe the actions facility personnel should take in response to fires, explosions, or releases of contaminants or hazardous constituents to air, soil, surface water, or groundwater;
 - (2) describe arrangements with local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services;
 - (3) list the name(s) and telephone numbers of the emergency coordinator(s); if more than one person is listed, one must be named as the primary emergency coordinator;
 - (4) include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems and decontamination equipment), along with the location, physical description, and a summary of the capabilities of each item;
 - (5) include an evacuation plan for facility personnel which describes signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes in cases where the primary routes could be blocked by fire or releases of wastes:

- (6) include an evaluation of potential contaminants, potential media contaminated, and procedures for investigation, containment, and correction or remediation;
- (7) indicate when the contingency plan must be amended;
- (8) instruct the emergency coordinator or his designee, in case of an imminent or actual emergency situation, to immediately:
 - (a) activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and
 - (b) notify appropriate state and local agencies with designated response roles if their assistance is needed;
- (9) instruct the emergency coordinator, whenever there is a release, fire, or explosion, to as quickly as possible identify the nature, source, amount, and extent of any release by means of observation, review of facility records or manifests, or if necessary, by chemical analysis;
- (10) instruct the emergency coordinator to assess possible hazards to public health, welfare or the environment that may result from the release, fire, or explosion;
- (11) instruct the emergency coordinator to provide for monitoring for leaks, pressure buildup, gas generation or rupture in valves, pipes, or equipment, if appropriate;
- (12) instruct the emergency coordinator to provide for appropriate treatment, storage, or disposal of recovered waste, or any other material that results from a release, fire, or explosion at a facility, after the emergency situation is under control; and
- (13) instruct the emergency coordinator to ensure that waste which may be incompatible with the released material is not treated, stored, or disposed until cleanup procedures are complete.

The Contingency Plan (Volume II, Section 3) for CRLF addresses the items listed in 20.9.5.15.F NMAC.

20.9.5.16 RECORD KEEPING AND ANNUAL REPORTS.

- A. Owners and operators of solid waste facilities shall make and maintain an operating record during the active life of the facility, for each day that operations, monitoring, or closure occurs, including:
 - (1) the type (including special waste) and weight or volume of each load of solid waste received;

- (2) the country (if other than the United States), state, county, and municipality in which the solid waste originated (i.e. the origin);
- (3) the business name of any commercial hauler of solid waste for each load of the solid waste if it can be reasonably obtained;
- (4) type and weight or volume of non-solid waste materials, as referenced in Paragraph (9) of Subsection S of 20.9.2.7 NMAC, received;
- (5) a record of load inspections, including:
 - (a) date and time of inspection;
 - (b) business name of the commercial hauler and driver name:
 - (c) vehicle license number and description;
 - (d) origin of the waste; and
 - (e) any pertinent observations made during the inspection;
- (6) a description of solid waste or special waste handling problems or emergency disposal activities;
- (7) a record of deviations from the approved design or operational plans;
- (8) for a transfer station, the origin of and destination of the solid waste if transported out of state;
- (9) all monitoring and testing results;
- (10) plans for operations, contingencies, detection and identification of unauthorized waste, and any other plans required by 20.9.2 20.9.10 NMAC;
- (11) documentation of the implementation of required plans;
- (12) copies of special waste manifests required under 20.9.8.19 NMAC;
- (13) copies of certificates of processing, transformation, or disposal of special wastes required under 20.9.8.13 NMAC;
- (14) financial assurance information, including a copy of the current standby trust document, current estimates for closure, post-closure care, phase I and phase II assessments and a copy of the financial assurance mechanism being utilized;
- (15) a complete and current copy of the facility permit, final order issuing the permit, and any approvals granted by the secretary under 20.9.2 20.9.10 NMAC;
- (16) a daily log of construction activities; and

(17) for landfills, any demonstration made to the secretary under Paragraphs (12) and (13) of Subsection A of 20.9.4.9 NMAC regarding seismic impact areas and unstable areas.

CREC will continue to maintain a Facility Operating Record during the active life and post-closure care period of the facility, for each day that operations, monitoring, closure, or post-closure activity occur, and select data may be archived electronically. Table I.5-2 lists the components that will be retained in the Facility Operating Record. The Operating Record will be maintained on-site at CRLF during the active mode of operations (at the Administration Center) and at another location identified to NMED following closure.

B. A copy of the operating record for the current month and the previous twelve months, at a minimum, shall be kept on site, unless the facility no longer accepts solid waste, after which time it shall be kept in a place where is can be made available to the department.

The CRLF Operating Record for the current month and the previous year is maintained on-site.

Table I.5-2
Facility Operating Record – List of Components

Applications for Permit (Final)
Approved Engineering Drawings
Permits issued by NMED (including any Permit Conditions)
Health and Safety Forms
Landfill Gas Monitoring Forms
Groundwater Monitoring Reports
Leachate Monitoring Forms
Site Inspection Forms
Closure Forms
CQA Reports (i.e., cell construction)
Daily and Annual Operating Records
Special Waste Acceptance Records
Personnel Training Records
Operator Certification Records

C. Owners and operators of solid waste facilities shall make and maintain an operating record during the post-closure period of the facility for

each day that monitoring, corrective action, or other post-closure activity occurs, including:

- (1) a record of any deviations from the approved post-closure care plan;
- (2) all monitoring and testing results;
- (3) documentation of the implementation of required plans and any exceptions to those plans;
- (4) financial assurance information, including current estimates for closure, post-closure care, phase I and phase II assessments and a copy of the financial assurance mechanism being utilized;
- (5) a complete and current copy of the facility permit, final order issuing the permit, and any approvals granted by the secretary under 20.9.2 20.9.10 NMAC; and
- (6) any other information specifically required by the secretary.

CREC will maintain an operating record during the CRLF post-closure care period as discussed in the C/PC Plan (Volume II, Section 5).

- D. Owners or operators of solid waste facilities shall submit an annual report to the department for each facility or operation, within 45 days from the end of each calendar year, describing the operations of the past year. The reports must be certified as true and accurate by the owner or operator and shall include:
 - (1) the type and weight or volume of waste materials received each month and the country (if other than the U.S.), state, county, and municipality in which the waste originated;
 - (2) the type and weight or volume of solid waste received from each commercial hauler that delivered waste to the facility;
 - (3) for a landfill, a description of the capacity used in the previous year and the remaining capacity;
 - (4) for a landfill, a description of the acreage used for disposal, the acreage seeded, the acreage where vegetation is permanently established and a description of the progress in implementing the closure plan;
 - (5) the weight or volume of each type of special waste received at the solid waste facility in the previous year;
 - (6) a summary of all monitoring results (not including the results required under 20.9.9.10 NMAC);

- (7) written notice to the secretary if any change in operation has occurred that will reduce the active life of the facility by 25 percent or more;
- (8) type and weight or volume of materials recycled during the year;
- (9) final disposition of materials not stored or recycled;
- (10) amount of leachate generated and treated or recirculated;
- (11) an annual financial assurance certification on forms supplied by the department;
- (12) the latitude and longitude of the geographical center of the existing or proposed facility (as approved by the department) in NAD-83 or equivalent; and
- (13) any other information requested by the secretary.

CREC will continue to submit Annual Reports to the Secretary summarizing operations and results for the past year, within 45 days from the end of each calendar year, unless otherwise directed by NMED. The Reports will contain the information detailed in Section 20.9.5.16.D NMAC, as listed on the applicable sections of the most current "NMED Solid Waste Facilities Annual Report." A copy of the most recent CRLF Annual Report (2021), which tabulates the information requested, is provided as Attachment I.5-A.

E. All records and plans required by 20.9.2 - 20.9.10 NMAC shall be furnished upon request and made available at all reasonable times for inspection by the secretary.

For the period that the Facility accepts waste, records, including plans, will be maintained at CRLF as part of the Facility Operating Record and will be made available to the Secretary for inspection upon request.

F. Operating records and copies of annual reports for solid waste facilities shall be retained by the owner or operator through the post-closure period.

CREC will retain copies of CRLF operating records and annual reports for the duration of the 30-year post-closure care period. These records will be maintained at a location to be disclosed to NMED following completion of closure activities.

This complete Application for Permit Modification and Renewal will be maintained on-site at CRLF at least until operations have ceased and closure is completed. The Facility Operating Record will include this Application, Permit Conditions, and related submissions to the Department, etc.

I.5-21

ATTACHMENT I.5-A CRLF 2021 ANNUAL REPORT



New Mexico Environment Department Solid Waste Bureau Facility Annual Report

FACILITY

ID		Facility Type	County	Address	City	State	Zip	Contact	Phone	Ext.	Email	Phys. Location	Status
	Camino Real Landfill	Landfill - permitted	Dona Ana	PO Box 580	Sunland Park	NM	1 (575- 589- 9440		JuanT@wcnx.org	1000 Camino Real BLVD Sunland Park, NM 88063	Open

FACILITY OPERATOR

Name	Address	City	State	Zip
Camino Real Environmental Center Inc	PO Box 580	Sunland Park	NM	88063

FACILITY OWNER

Name	Address	City	State	Zip
Camino Real Environmental Center, Inc.	P.O. Box 580	Sunland Park	NM	88063

LAND OWNER

Name	Address	City	State	Zip
Camino Real Environmental Center Inc	1000 Camino Real BLVD PO Box 580	Sunland Park	NM	88063

LANDFILL CAPACITY/MONITORING

Used (cu	Pamaining	Remaining	available for future	reducing life 25% or	lused for	lintermediate	seeded	Total acres with final cover
1676815	45253173	47	0	0	193	100	50	50

MATERIAL AND SOLID WASTE

Material Type	Method	In-State Material Received	Out-of- State Material Received	Landfilled or Treated	Composted or Mulched	Beneficially Used	Treated, Disposed, Incinerated	Recycled, Mulched, Composted	Beneficially Used	Sent to Facility
Bio-Solids	Weighed	2627.60	109.91	2737.51	0.00	0.00	0.00	0.00	0.00	
Brush/Green Waste	Weighed	114,70	9592.68	9707.38	0.00	0.00	0.00	0.00	0.00	
C and D	Weighed	.00	59549.31	59549.31	0.00	0.00	0.00	0.00	0.00	
Industrial Waste	Weighed	.00	8740.79	8740.79	0.00	0.00	0.00	0.00	0.00	
MSW	Weighed	26947.87	376531.82	403479.69	0,00	0.00	0.00	0.00	0.00	
Other Special Waste	Weighed	726.42	67.64	0.00	0.00	794.06	0.00	0.00	0.00	
Scrap Tires	Weighed	.00	239,58	239.58	0.00	0,00	0.00	0.00	0.00	
	·	30416.59	454831.73	484454,26	0	794.06	0	0	0	

RECYCLABLE MATERIALS

Material Type	Method	In-State Material Received	Out-of-State Material Received	Beneficially Used	Recycled, Mulched, Composted	Beneficially Used	Sent to Facility
Aluminum		.00	.00	.00.	.00.	.00.	
Cardboard (OCC)		.00	.00	.00.	.00.	.00	
Plastics	Weighed	.00	.00	.00	.00.	.00.	
		0	0	0	0	0	

CERTIFIED OPERATORS

Camino Real Environmental Center Inc

DOCUMENTS

Environmental Monitoring Summary
Environmental Monitoring Summary
Environmental Monitoring Summary
Financial Assurance
Environmental Monitoring Summary
Environmental Monitoring Summary
Landfill Capacity Worksheet
Environmental Monitoring Summary
Environmental Monitoring Summary
Environmental Monitoring Summary
Financial Assurance
Environmental Monitoring Summary
Financial Assurance
Environmental Monitoring Summary
Annual Reporting Information
Landfill Capacity Worksheet
Annual Reporting Information
Environmental Monitoring Summary
Financial Assurance
Environmental Monitoring Summary
Landfill Capacity Worksheet
Environmental Monitoring Summary
Environmental Monitoring Summary
Environmental Monitoring Summary



New Mexico Environment Department Solid Waste Bureau Facility Annual Report

FACILITY

ID	Facility Name	Facility Type	County	Address	City	State	Zip	Contact	Phone	Ext.	Email	Phys. Location	Status
RFR-	Camino Real Recycling	Recycling	Dona	PO Box	Sunland Park	NM	88063	Carlos	575- 589- 9440		juant@wcnx.org	Lat:310 47' 00" Long: 106 35'10"; 1000 Camino Real Blvd., Sunland Park, NM	Open

FACILITY OPERATOR

Name	Address	City	State	Zip
Camino Real Environmental Center Inc	PO Box 580	Sunland Park	NM	88063

FACILITY OWNER

Name	Address	City	State	Zip
Camino Real Environmental Center, Inc.	P.O. Box 580	Sunland Park	NM	88063

LAND OWNER

Name	Address	City	State	Zip
Camino Real Environmental Center Inc	1000 Camino Real BLVD PO Box 580	Sunland Park	NM	88063

LANDFILL CAPACITY/MONITORING

	Capacity Used (cu yd) Capacity Remainin (cu yd)	Remaining	reducing life 25% or	llused for	Intermediate	seeded	Total acres with final cover
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MATERIAL AND SOLID WASTE

	WATERIAL AND GOLD WAGE									
Material Type	Method	In-State Material Received	Out-of- State Material Received	Landfilled or Treated	Composted or Mulched	Beneficially Used	Treated, Disposed, Incinerated	Recycled, Mulched, Composted	Beneficially Used	Sent to Facility
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RECYCLABLE MATERIALS

Material Type	Method	In-State Material Received	Out-of-State Material Received	Beneficially Used	Recycled, Mulched, Composted	Used	Sent to Facility
Aluminum		.00	.00	.00			
Cardboard (OCC)	Weighed	.00.	.00	.00	.00		
Plastics	Weighed		.00	.00	.00	.00	
1 1831103							
		0	0	0	0	0	

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Camino Real Environmental Center Inc

DOCUMENTS

CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738(SP)

APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

VOLUME I – PERMIT APPLICATION TEXT SECTION 6 – SOLID WASTE FACILITY AND COMPOSTING FACILITY CLOSURE AND POST-CLOSURE REQUIREMENTS

Prepared for

Camino Real Environmental Center, Inc.

September 2022



Prepared by

Weaver Consultants Group, LLC 6420 Southwest Boulevard, Suite 206 Fort Worth, Texas 76109 817-735-9770 IKG, LLC 24 Tejon Canon Rd. Placitas, NM 87043 505-301-2026

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20.9.6.8 GENERAL REQUIREMENTS FOR CLOSURE AND POST CLOSURE CARE

A. Closure and post-closure care plans are required of all solid waste facilities that operated on or after May 14, 1989. The owner or operator of a solid waste facility that has closed but not submitted a closure and post-closure care plan shall submit such a plan within 180 days of the effective date of these regulations. The submitted plan shall meet the requirements of 20.9.6 NMAC.

The initial Closure/Post-closure (C/PC) Plan for the Camino Real Landfill (CRLF) was submitted and approved as part of the original 1997 Permit in accordance with the New Mexico Solid Waste Management Rules in effect at that time, i.e., 20 NMAC 9.1, 10/27/1995). The C/PC Plan provided in Volume II, Section 5 of this Permit Modification and Renewal (Permit Application) has been updated in compliance with the current Solid Waste Rules (08/2007).

B. The owner or operator of the solid waste facility shall prepare a written closure and post-closure care plan that describes the steps necessary for closure and post-closure care of the solid waste facility and any anticipated future uses of the property following closure.

The updated C/PC Plan, included as Volume II, Section 5, describes the steps necessary to complete closure of the CRLF when final grade is reached, or the entire open area in the case of premature closure. The C/PC Plan also enumerates the procedures necessary to maintain and monitor the facility during the 30-year post-closure care period. The C/PC Plan is a "written closure and post-closure care plan" pursuant to 20.9.6.8.B NMAC and addresses the applicable requirements of 20.9.6.8 – 20.9.6.10 NMAC.

C. Closure and post-closure care plans are required in the application for a permit or permit modification. One initial copy of the plan and two copies of the completed plan shall be submitted to the department.

CREC is submitting an updated C/PC Plan (Volume II, Section 5) for approval in conjunction with this Application and will submit the requisite number of copies.

D. The owner or operator of the solid waste facility shall notify the secretary in writing of the intent to close at least 90 days before closure occurs and shall notify the secretary in writing within 14 days after becoming a locked facility.

CREC will notify the Secretary in writing of its intent to close CRLF at least 90 days before closure occurs, and will also notify the Secretary in writing within 14 days after CRLF becomes a locked facility.

E. Closure and post-closure care plans for new solid waste facilities and modifications to existing facilities shall be approved as part of the facility permit.

Closure and post-closure care plans for the CRLF are provided in Volume II, Section 5, and are being submitted for approval in conjunction with this Application.

F. All closure and post-closure care plans shall be approved by the secretary and may be subject to conditions.

CREC is requesting Department approval of the updated C/PC Plan (Volume II, Section 5), and will comply with applicable Conditions imposed by the Permit.

G. Closure and post-closure care plans for existing non-permitted landfills that seek to close rather than continue to operate, shall be submitted for approval by the secretary within one year after the effective date of this part. The closure and post-closure care plan shall meet the requirements of 20.9.6 NMAC. After determining that the plan is complete, the secretary shall provide public notice of the plan in a newspaper of general circulation in the county where the facility is located. A non-adjudicatory hearing will be held if significant public interest warrants it. Approved closure and post-closure plans for unpermitted category 2 and 3 landfills shall be enforceable as a permit or regulation for purposes of 20.9.2 - 20.9.10 NMAC and the Solid Waste Act. Any landfill that operates after the effective date of these regulations shall have a closure and post-closure care plan approved as part of the permit, or shall seek approval of a closure and postclosure care plan.

Not applicable. CRLF is a permitted Solid Waste Facility.

H. Responses to the secretary's requests for additional information concerning a proposed closure and post-closure care plan shall be made within 90 days of receipt of such a request. The secretary may extend the response time for good cause.

CREC will respond to the Secretary's requests for additional information within 90 days of receiving such requests, or other timeframe specified by the Department.

I. Post-closure inspection and maintenance shall not be required of the facility if the owner or operator demonstrates to the secretary that all solid waste has been removed, requirements of the closure plan have been met, and following the removal of such wastes, a demonstration is made that the soil and groundwater have not been contaminated.

Not applicable.

J. All landfills, regardless of category, except construction and demolition debris landfills, which close after October 9, 1991, shall comply with the final cover requirements contained in 20.9.6.9 NMAC in addition to other closure requirements in effect at the time of closure.

CREC will comply with the requirements of 20.9.6.9 NMAC for final cover, as detailed in the C/PC Plan (Volume II, Section 5) and Permit Plans.

K. The length of the post-closure care period may be decreased by the secretary if the owner or operator demonstrates that the reduced period is sufficient to protect public health, welfare, and the environment, or it may be increased by the secretary if the secretary determines that a longer period is necessary to protect health, welfare, and the environment. The time period for application of the provisions for financial assurance as defined in 20.9.10 NMAC shall be coincident with the time period of the post-closure care period. Any reduction or extension of the post-closure care period as described in this section shall be accompanied by an identical reduction or extension of the financial assurance provisions.

CREC understands that the length of the post-closure care period may be decreased by the Secretary if CREC demonstrates that the reduced period is sufficient to protect public health, welfare, and the environment and understands that it may be increased by the Secretary if the Secretary determines that a longer period is necessary to protect public health, welfare, and the environment.

- L. The owner or operator shall submit a closure report to the department within 60 days after closure completion. The report shall include:
 - (1) a summary of closure activities: and
 - (2) a certification by a New Mexico registered professional engineer that the closure of the solid waste facility has been completed and all conditions of the approved closure plan have been satisfied.

CREC will comply with this requirement as described in Volume II, Section 5. The closure report will be submitted to NMED within 60 days after closure completion and will include a summary of closure activities and a certification by a New Mexico (NM) Professional Engineer experienced in landfill engineering that closure of the CRLF was completed and conditions of the approved C/PC plan were satisfied.

M. The active life of the facility terminates, and post-closure care begins, upon written verification by the department that the facility has been closed in accordance with the closure plan approved by the secretary.

CREC acknowledges this requirement.

- N. The owner or operator shall submit a post-closure report to the department within 60 days after the post-closure period expires. The report shall include:
 - (1) a summary of post-closure activities: and
 - (2) a certification by a New Mexico registered professional engineer that the post-closure requirements, and if applicable, any corrective action requirements have been completed and all conditions of the approved post-closure care plan have been satisfied.

CREC will comply with this requirement as described in Volume II, Section 5. The Post-closure Report will be submitted to NMED within 60 days after the post-closure period expires. The Post-closure Report will include a summary of post-closure activities and a certification by a NM Professional Engineer experienced in landfill engineering that post-closure care of the CRLF was completed and conditions of the approved C/PC plan were satisfied.

O. The post-closure care period for the facility terminates upon written verification by the secretary that the requirements of the approved post-closure care plan have been satisfied. If the secretary does not issue a verification, the secretary shall notify the owner or operator in writing that the activities required under 20.9.6 NMAC and 20.9.9 NMAC have not been conducted satisfactorily, and specify the reasons for such determination.

CREC acknowledges this requirement.

P. The secretary may require the owner or operator to amend the postclosure care plan if the secretary believes that the present or future implementation of the plan may cause a threat to human health or the environment.

CREC acknowledges this requirement.

20.9.6.9 CLOSURE AND POST-CLOSURE REQUIREMENTS FOR MUNICIPAL AND SPECIAL WASTE LANDFILLS, AND MONOFILLS

The C/PC Plan (Volume II, Section 5) provided in this Application addresses in detail each of the requirements of 20.9.6.9 NMAC.

- A. Owners and operators of municipal landfills and special waste landfills shall begin closure within 30 days after the landfill receives the final receipt of waste or within 30 days after approval of the closure and post-closure care plan, whichever is later.
 - (1) Owners and operators shall install a final cover system which consists of the following:
 - (a) for municipal and special waste landfills (except monofills) that are not lined and which never received more than 7,300 tons of waste (i.e., an average of 20 tons or less per day annual average) during any calendar year, an infiltration layer comprised of a minimum of 18 inches of earthen material having a saturated hydraulic conductivity no greater than 1 x 10⁻⁵ cm/sec;

Not applicable. The waste receipts for CRLF exceed an average of 20 tons or less per day annual average.

for municipal landfills which exceed the tonnage (b) requirements of Subparagraph (a) of this paragraph and for all special waste landfills (other than monofills), an infiltration layer comprised of a minimum of 18 inches of earthen material having a saturated hvdraulic conductivity less than or equal to the saturated hydraulic conductivity of any bottom liner system or natural subsoils present, or a saturated hydraulic conductivity no greater than 1 x 10⁻⁵ cm/sec., whichever provides for less infiltration:

Not applicable. CREC is requesting continued NMED approval for their currently permitted alternative final cover design and approval of a second alternative final cover design (Closure Turf®) for CRLF. Both alternative designs include 12 inches of intermediate cover.

(c) a layer for minimizing erosion consisting of a minimum of six inches of earthen material that is capable of sustaining native plant growth;

The erosion (i.e., vegetative) layer for the permitted final cover system is comprised of 36 inches of on-site material. The vegetative layer for the proposed alternate final cover system is comprised of Closure Turf material, a synthetic turf with a soil in-fill which is designed to provide aesthetic enhancement of the site and to minimize erosion.

(d) any necessary gas vents provided they are sealed to assure no water infiltration;

Any necessary gas vents installed in the final cover system for CRLF will be sealed to prevent water infiltration.

(e) finished grades over filled areas which shall not exceed 25 percent (four feet horizontal to one foot vertical), or be less than five percent for new landfills and lateral expansions permitted for construction, operation, and closure after the effective date of these regulations or two percent for all other landfills;

The final cover contours for CRLF have been designed to enhance slope stability, to promote drainage, and to blend in with the natural terrain. When completed, the design final slopes will range from 5% (minimum) to 25% (maximum).

(f) run-off controls designed for a peak discharge of a 24-hour, 25-year storm;

The run-off controls for the CRLF final cover have been designed for the peak discharge of a 24-hour, 25-year storm event. Refer to Volume III, Section 7 for detailed drainage calculations.

(g) cover material compacted to no less than 75 percent and no more than 85 percent standard proctor density unless otherwise approved in the permit, closure plan or by specific approval; and

The 2008 Permit approved cover material barrier layer is compacted to 90% standard Proctor density as shown in the Final Cover Construction Quality Assurance (CQA) Plan (Volume IV, Section 4B).

(h) for closure of a cell containing only regulated asbestos waste or scrap tires, the owner or operator shall cover with 30 inches of compacted native soils and 6 inches topsoil on top of the 30-inch cover, to provide

a 36-inch final cover to the original grade and implement measures where necessary to control erosion and rodent intrusion.

Not applicable as CRLF does not have any cells containing only regulated asbestos waste or scrap tires.

- (2) The secretary may permit an alternative final cover design that includes:
 - (a) an infiltration layer that achieves an equivalent reduction in infiltration as specified in Subparagraph (a) or (b) of Paragraph (1) of this subsection, as applicable; and
 - (b) an erosion layer that provides equivalent protection from wind and water erosion as the erosion layer specified in Subparagraph (c) of Paragraph (1) of this subsection;
 - (c) for landfills that stopped accepting waste prior to the effective date of this part, finished grades different from those specified in Subparagraph (e) of Paragraph (1) of this subsection, provided a demonstration is made that the alternate grades will prevent erosion and will provide equivalent reduction in infiltration; and
 - (d) for landfills accepting waste after the effective date of this part and lateral expansions permitted after the effective date of this part, finished grades different than those specified in Subparagraph (e) of Paragraph (1) of this subsection, provided no grade is greater than 33 percent and a demonstration is made in the closure plan or permit or modification application that the alternate

grades will prevent erosion and will provide equivalent reduction in infiltration.

CREC is requesting NMED approval of the following final cover system (from top down) which was previously permitted as part of the 2008 Permit Application:

- 6-inch-thick vegetative layer
- 30-inch-thick barrier (infiltration) layer
- 12-inch-thick intermediate cover

As part of this Permit Application, CREC is requesting approval of the following alternative final cover system (from top down):

- 0.5-inch-thick sand infill
- Synthetic grass turf
- 12-inch-thick intermediate cover

HELP modeling performed for both final cover systems is included in Volume III, Section 10 and demonstrates compliance with the requirements of this section.

- (3) The written closure plan, at a minimum, shall include the following information:
 - (a) a schedule for completion of all activities necessary to meet the closure criteria specified in this part;
 - (b) a report that includes:
 - (i) a description of the local geology;
 - (ii) a description of the hydrogeology of the landfill site, including maps and cross-sections illustrating subsurface features;
 - (iii) well locations, depths to groundwater, and, if available, groundwater quality, flow direction and gradient shown on a topographic map; and
 - (iv) a description of the landfill, including: a) the date operations commenced and the date of final receipt of waste; b) the types of waste accepted at the landfill; c) the total volume of waste disposed; d) a topographic map that shows the size and dimensions of fill areas; e) a topographic map that shows structures, drainages, and water wells in the area of the landfill; and f) a topographic map that shows methane monitoring points and methane concentrations along the landfill property boundary and within structures located on landfill property;

The CRLF C/PC Plan (Volume II, Section 5) includes documentation addressing the requirements of 20.9.6.9.A(3) NMAC including a schedule of completion of closure activities, a report including local geology and hydrogeology, well information, and a description of CRLF addressing the requirements of 20.9.6.9.A.(3)(b)(iv) NMAC.

- (c) a description of the final cover and its placement, including:
 - (i) thickness and saturated hydraulic conductivity;
 - (ii) source of the cover material:
 - (iii) a construction quality assurance/construction quality control plan for placement of the final cover that meets the requirements of 20.9.4.14 NMAC;
 - (iv) equipment that will be utilized to apply the final cover and ensure it is adequately compacted to obtain the appropriate proctor density; and
 - (v) a map that shows final contours that meet the requirements of Subparagraph (e) of Paragraph (1) of this subsection;

The CRLF C/PC Plan includes a description of the final cover soils, placement, and construction quality assurance (CQA) procedures. The Permit Plans show the proposed final cover contours for the CRLF.

- (d) a vegetation plan, including:
 - (i) the seeding method to obtain proper growth density; and
 - (ii) species of vegetation to be planted, including grasses or local seed mix as recommended for the area by the natural resources conservation service for permanent soil stabilization and to minimize wind and water erosion:

The CRLF C/PC Plan includes a vegetation plan, including a description of the planting methods and seed mix recommended by the Natural Resource Conservation Service (NRCS) Las Cruces, New Mexico field office.

(e) a plan to prevent unauthorized access by the public and entry by large animals to the landfill through the use of fences, gates, locks, or other means;

The CRLF C/PC Plan describes the fences, gates, and locks utilized to prevent unauthorized access by the public and large animals.

(f) a plan to remove structures, unless otherwise approved by the secretary;

The CRLF C/PC Plan includes a description of the plan to remove or re-use on-site structures.

(g) a description of the signs indicating that the site is a closed landfill and no dumping is permitted; all signs shall include the name and telephone number of the landfill owner; and

The CRLF C/PC Plan includes a description of the signs that will be posted once the site is closed.

- (h) a post-closure care plan, including:
 - (i) a monitoring and repair plan that describes methods to be used to ensure cover integrity, including but not limited to settlement, ponding, water erosion, wind erosion, and inadequate drainage, to ensure the final cover meets the slope requirements of 20.9.6.9 NMAC, and to maintain adequate vegetation during the post-closure period;
 - (ii) a methane monitoring plan in compliance with Subsections B and C of 20.9.5.9 NMAC;
 - (iii) a groundwater monitoring plan; and
 - (iv) a leachate collection system plan, if applicable:

The CRLF Post-closure Care Plan (Volume II, Section 5) includes a monitoring and repair plan for the site, landfill gas (LFG) monitoring, a groundwater monitoring plan, and a leachate collection system plan. The updated Landfill Gas Monitoring Plan is provided as Volume II, Section 6; the updated Groundwater Monitoring Plan is included in Volume V, Section 2; and the updated Leachate Plan is provided as Volume II, Section 7.

(4) prior to beginning closure of a landfill, the owner or operator shall notify the secretary that a notice of the intent to close the landfill has been placed in the operating record:

As stated in the C/PC Plan (Volume II, Section 5), prior to initiating closure of CRLF, CREC will notify the Secretary that a notice of intent to close CRLF has been placed in the operating record.

(5) the owner or operator shall complete closure activities in accordance with the closure plan within 180 days following the beginning of closure, unless otherwise approved in the closure plan; extensions of the closure period may be granted by the secretary if the owner or operator demonstrates that closure will, of necessity, take longer than 180 days and has taken and

will continue to take all steps necessary to prevent threats to public health, welfare and the environment;

As stated in the C/PC Plan (Volume II, Section 5), CREC will complete closure activities for the CRLF in accordance with the approved C/PC Plan within 180 days following the beginning of official closure, unless otherwise approved.

- (6) upon completion of closure, a detailed description of the location of areas of waste disposal at the facility, including a plat signed by a registered surveyor, shall be filed with the appropriate county land recording agent; the description and the plat shall be filed so that it will be found during a title search and proof of the filing shall be submitted to the secretary; the description shall perpetually notify any potential purchaser of the property that:
 - (a) the land has been used as a landfill facility;
 - (b) its use is restricted as described in the post-closure care plan; and

CREC will comply with this requirement upon completion of closure. As stated in the C/PC Plan (Volume II, Section 5), once closure is complete, a detailed description of the location of areas of waste disposal at the CRLF, including a plat map signed by a registered surveyor, will be filed with the appropriate Doña Ana County agent. Proof of the filing will also be submitted to the Secretary. The recorded description will notify any potential purchaser of the property that the land has been used as a landfill and that its use is restricted as described in the CRLF C/PC Plan.

(7) the owner or operator may request permission from the secretary to file a revised description if all wastes are removed from the facility.

CREC acknowledges this requirement.

B. Landfill owners or operators shall submit reports of monitoring performance and data to the secretary within 45 days after the end of each calendar year.

As stated in the C/PC Plan (Volume II, Section 5), CREC will continue to submit Annual Reports including monitoring data to NMED within 45 days after the end of each calendar year.

C. The post-closure care period for a landfill shall be 30 years.

CREC understands that the post-closure care period for the CRLF will be 30 years, as described in Volume II, Section 5, unless properly amended by the Secretary.

D. The owner or operator may amend the post-closure care plan, provided the amendment is not a permit modification, by submitting a request to the secretary at least 30 days prior to the proposed change. No proposed amendment shall be effective unless first approved in writing by the secretary.

CREC understands that the CRLF C/PC Plan may be amended by submitting a request to the Secretary at least 30 days prior to the proposed change, as long as it is not a Permit Modification. CREC will not implement changes to the C/PC Plan until approved by the Secretary in writing.

E. The secretary may require the owner or operator to modify or amend the post-closure care plan if the secretary determines that the present or future implementation of the plan may cause a threat to public health, welfare and or the environment.

CREC understands that the Secretary may require an amendment to the C/PC Plan if it is determined that the implementation of the Plan may cause a threat to public health, welfare, or the environment.

20.9.6.10 CONSTRUCTION AND DEMOLITION LANDFILL CLOSURE AND POST-CLOSURE REQUIREMENTS

CREC is not planning to operate a construction and demolition (C&D) Landfill (i.e., dedicated disposal cell) within its current solid waste footprint (Permit Plans). Therefore, the requirements of this section are not applicable.

CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738(SP)

APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

VOLUME I – PERMIT APPLICATION TEXT SECTION 7 – SOLID WASTE FACILITY AND REGISTERED FACILITY OPERATOR CERTIFICATION

Prepared for

Camino Real Environmental Center, Inc.
September 2022



Prepared by

Weaver Consultants Group, LLC 6420 Southwest Boulevard, Suite 206 Fort Worth, Texas 76109 817-735-9770 **IKG, LLC**24 Tejon Canon Rd.
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505-301-2026

WCG Project No. 0601-667-11-06

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ATTACHMENTS

Attachment

I.7-A Operator Certificates



20.9.7.8 GENERAL PROVISIONS

A. Owners and operators of landfills and transformation facilities shall require the managers of those facilities to attend, at least once every three years, a training program offered by the department or department certified training program on the subject of environmental justice.

The Certified Operators of the Camino Real Landfill (CRLF) are responsible for managing the operations at the disposal site. The following is a current list of Certified Operators at CRLF.

Certified Operator	Expiration Date
Juan Carlos Tomás	9-11-22

Note: Certified Operators list is subject to change.

Copies of the current certificates will be maintained in the Facility Operating Record and are included as Attachment I.7-A. In the event of future changes in personnel, CREC will ensure that CRLF supervisors/operators are certified in accordance with applicable regulations.

- B. To become a certified operator an individual shall:
 - (1) complete a certification training course offered by the department or its designated agent, or equivalent training approved by the department;
 - (2) pass an examination approved by the department;
 - (3) have at least one year of experience in the operation of a facility of the same type as that for which certification is sought;
 - (4) file an application with the department on a form provided by the department;
 - (5) meet the requirements of the Parental Responsibility Act, NMSA 1978, Sections 40-5A-1 to 40-5A-13 (1998 Cum. Supp.);
 - (6) for operators of municipal waste incinerators, also meet the training requirements of New Mexico Municipal Waste Combustion rule, 20.2.62 NMAC; and
 - (7) for operators of biomedical waste incinerators, also meet the training requirements of New Mexico Biomedical Waste Combustion rule, 20.2.63 NMAC.

Certified Operators at CRLF meet the requirements of 20.9.7.8.B NMAC.

C. Operator certification is valid for three years from date of issuance.

No response required.

D. The department may certify an operator with alternate training. Alternate training shall be equivalent to or more extensive than the department's course work, and shall be approved by the department. It shall be the applicant's responsibility to submit any documentation the department may require to evaluate the equivalency of alternate training.

Should CREC elect to certify an Operator with alternate training, CREC will submit to the Department information on an alternate training curriculum for confirmation that such training is equivalent or more extensive than that of the Department. Submittal shall be made prior to taking the alternate training to allow for the Department's review and confirmation of a course's equivalency.

E. A person holding certification in a particular facility type may operate any facility of that type.

CREC acknowledges this requirement.

20.9.7.9 OPERATOR CERTIFICATION TRAINING COURSES

- A. All operator certification training courses, with the exception of the transformation facility operator training course, will be offered by the department or other approved authority at least once every twelve months.
- B. All operator certification training courses shall, at a minimum, address:
 - (1) composition of wastes;
 - (2) facility design;
 - (3) facility staffing and operations;
 - (4) transportation requirements;
 - (5) traffic flow control:
 - (6) environmental monitoring;
 - (7) handling of special wastes;
 - (8) identification of unauthorized wastes, including hot waste, hazardous wastes and materials, and PCB's;
 - (9) environmental health and safety;
 - (10) waste diversion;

- (11) applicable laws and rules;
- (12) the permitting process;
- (13) documentation, including manifests, operating records, and reports;
- (14) pollution prevention; and
- (15) environmental justice.
- C. In addition to the requirements of Subsection B of this section, the landfill operator training course shall address:
 - (1) interpretation and use of engineering plans;
 - (2) surveying techniques;
 - (3) waste decomposition:
 - (4) basic geology and hydrology;
 - (5) landfill gas generation and control;
 - (6) leachate generation and control;
 - (7) landfill cover systems;
 - (8) closure and post-closure care;
 - (9) vector control; and
 - (10) odor control.

Personnel designated by CREC to obtain Operator Certification will have completed a training course that will address, at a minimum, the areas outlined under 20.9.7.9.B and C NMAC and that are acceptable to NMED.

20.9.7.10 EXAMINATION

- A. A written examination shall be administered at the conclusion of each training course. Certification requires a score of at least 70 percent on the examination.
- B. Results of the examination shall be forwarded to the trainee within 60 days after the date of the examination. A certificate shall be forwarded to the trainee within 60 days after the trainee provides documentation that he has met all the applicable requirements of Subsection B of 20.9.7.8 NMAC.

CREC acknowledges this requirement.

20.9.7.11 RECIPROCITY

The department may issue certificates without examination to applicants who hold valid certificates or licenses issued by any state, territory, or foreign jurisdiction, provided, the department determines the requirements for such certification are equivalent to those set forth in 20.9.7.8 - 20.9.7.10 NMAC.

When CREC employs an operator at CRLF with certification from another state or the Solid Waste Association of North America (SWANA), it will submit required information for that certification and training to NMED for approval.

20.9.7.12 RECERTIFICATION

A. To maintain certification, certified operators shall apply for recertification at least 30 days prior to the expiration date of their certification.

The required requests will be submitted to the Department 30 days prior to the expiration date of certifications for its Operators.

- B. Recertification shall be obtained by making application to the department and successfully completing:
 - (1) an operator certification training course offered by the department or its designated agent;
 - (2) an alternate training course which has been approved by the department; or
 - (3) 24 hours of course work which has been approved by the department.

CRLF Certified Operators will comply with the requirements of 20.9.7.12.B NMAC.

20.9.7.13 SUSPENSION OR REVOCATION OF CERTIFICATION

- A. An operator's certification may be suspended or revoked by the secretary for:
 - (1) failure to comply with the terms or conditions of a solid waste facility permit or a facility registration;
 - (2) fraud, deceit or submission of inaccurate qualification information;
 - (3) violation of the Solid Waste Act or 20.9.2 20.9.10 NMAC by the certified operator; or
 - (4) failure to comply with the Parental Responsibility Act, NMSA 1978, Sections 40-5A-1 to 40-5A-13 (1998 Cum. Supp.).

ATTACHMENT I.7-A OPERATOR CERTIFICATES



Juan C. Tomas

Operator ID # 180

has met the standards and criteria adopted by the Environmental Improvement Board for Certification as a Landfill Operator

Presented by

State of New Mexico Environment Department

William Schueler, Certification Officer, Resource Protection Division

September 11, 2022

Expiration Date

CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738(SP)

APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

VOLUME I – PERMIT APPLICATION TEXT SECTION 8 – SPECIAL WASTE REQUIREMENTS

Prepared for

Camino Real Environmental Center, Inc.

September 2022



Prepared by

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20.9.8.8 **GENERAL**

The generator of a special waste shall assure that the special waste is disposed of in a solid waste facility permitted to accept the special waste or treated at a permitted facility, prior to disposal, to render it a non-special waste.

Camino Real Environmental Center, Inc. (CREC) is requesting New Mexico Environment Department (NMED) approval to continue to accept three non-hazardous special wastes for disposal at the Camino Real Landfill (CRLF):

- Sludge
- Industrial solid waste (ISW)
- Petroleum contaminated soils (PCS)

The Special Waste Permit, SWM-030738(SP) was issued on 7/24/2008 and expires on 7/24/2028. CREC is seeking a Permit Renewal (20.9.3.25 NMAC) and a Permit Modification (20.9.3.22 NMAC) for the CRLF to modify the existing permitted landfill configuration and renew the current permit (i.e., through 2041). CRLF is constructed, operated, monitored, and inspected in compliance with the Solid Waste Facility Permits granted by the NMED Solid Waste Bureau (SWB) pursuant to the Rules (20.9.2-20.9.10 NMAC).

Special wastes to be disposed of at the CRLF will be subjected to a rigorous Waste Profile process that includes laboratory testing to verify the waste's non-hazardous character. Vehicles delivering special wastes will be enclosed or tarped, and the wastes will be covered immediately after unloading if there is a potential for wind-blown dispersion. Exposure of the public and site personnel to wastes are minimized through procedures included in the respective operating plans:

- Plan of Operations (Volume II, Section 2)
- Special Waste Disposal Management Plans (Volume II, Section 8)

20.9.8.9 RESTRICTIONS

A. No solid waste facility shall accept special waste unless the facility owner or operator has been issued a permit to accept that type of special waste for disposal, transfer, processing, or transformation.

CRLF is currently approved to accept:

- Sludge
- Industrial solid waste (ISW)
- Petroleum contaminated soils (PCS)

A General Disposal Management Plan (DMP) as well as waste-specific DMPs are provided in Volume II, Section 8. These DMPs identify disposal and management practices for each type of special waste.

B. No person may incinerate infectious waste except in an infectious waste incinerator permitted under 20.9.2 - 20.9.10 NMAC.

Infectious waste will not be accepted for disposal or incineration at CRLF.

C. A hauler of special waste shall not deliver special waste to any place or person except to a facility that has been issued a permit to accept that type of special waste for disposal, transfer, processing or transformation.

CRLF will not accept unapproved special wastes from haulers. CRLF will only accept permitted special wastes in accordance with NMED approval and the DMPs in Volume II, Section 8.

20.9.8.10 GENERAL REQUIREMENTS FOR SPECIAL WASTE

A. Any person who stores a special waste shall assure that the special waste is stored at designated special waste storage areas meeting the requirements of 20.9.8 NMAC.

It is not anticipated that special wastes will need to be stored at the CRLF. However, should a situation arise where storage is necessary, special wastes will not be stored at the Landfill for longer than 45 days. It is anticipated that special wastes will be disposed of in the appropriate location the same day as received.

B. No person who stores special waste shall store the waste for longer than 90 days from the date the waste is placed in storage awaiting transportation, processing, or final disposal, unless otherwise approved by the department, except no person other than the generator shall store infectious waste for over seven days without refrigeration at or below 45 degrees Fahrenheit.

CREC does not plan to store special wastes at CRLF for an extensive timeframe. However, should temporary storage of any of these wastes be necessary, they will not be stored on-site for longer than 45 days, unless otherwise approved by NMED. Stored special waste will be placed in leak-proof containers which will be clearly marked with labels identifying the waste type, generator, potential hazards, and special handling instructions and stored in secure designated "Special Waste Storage Area." CRLF's temporary Special Waste Storage Area is identified on Figure II.8.1 and on the Permit Plans.

C. A generator of special waste shall assure that all containers of special waste when deemed full and placed in storage are clearly labeled or marked, indicating the name and address of the generator, contents,

date placed in storage and potential health, safety, and environmental hazards associated with the waste.

CREC acknowledges this requirement.

D. A generator of special waste shall assure that all containers of special waste that are prepared for transportation are clearly labeled or marked, indicating the name and address of the generator, contents, and potential health, safety, and environmental hazards associated with the waste.

Special wastes may be delivered in bulk using trucks and/or containers provided by the generator. If smaller containers are used, they will be labeled in a manner that clearly identifies the waste type and generator, potential hazards, and special handling instructions. An example special waste container label is provided as Attachment II.8-D in the Special Waste DMPs (Volume II, Section 8). Container labeling will be checked to ensure consistency with the information on the manifest. Additional information detailing special waste handling and disposal procedures is provided in the Special Waste DMPs provided in Volume II, Section 8.

E. A hauler of special waste shall assure that all containers of special waste are clearly labeled or marked prior to transportation, indicating the name and address of the generator, contents, date transported, and potential health, safety, and environmental hazards associated with the waste.

CREC acknowledges this requirement. CREC is not a hauler of special waste.

F. Any generator or hauler of special waste shall assure that a manifest in accordance with 20.9.8.19 NMAC accompanies each load of special waste originating in or to be disposed in New Mexico;

A Manifest prepared in accordance with 20.9.8.19 NMAC will accompany each load of special waste designated for disposal at CRLF, consistent with Department requirements. Generators will also be required to fill out a Special Waste Acceptance Application form (Attachment II.8-A).

G. A hauler of special waste shall carry an appropriate clean-up kit in each vehicle used for hauling.

CREC acknowledges this requirement. CREC is not a hauler of special waste.

20.9.8.11 REQUIRED ANALYSIS

- A. The generator of a special waste shall document the physical and chemical characteristics of all special wastes for storage, transportation or disposal, by means of:
 - (1) records of the results of analyses performed in accordance with this section as applicable; or

- (2) detailed descriptions of the generator's knowledge of specific wastes, including process, source and chemical and physical properties;
- (3) or both.

A rigorous waste profile process is employed at CRLF to verify that the physical and chemical characteristics of the special wastes proposed for disposal will not cause adverse impact to the liner and leachate collection systems or result in unacceptable risk to facility personnel or the public. Generators desiring to dispose of special wastes are required to furnish a detailed description of the process generating the waste, including laboratory analytical test results from representative samples. In addition, each generator is required to demonstrate and certify that each waste is non-hazardous as defined by 40 CFR Part 261.

In addition to the requirements listed above:

- Generators of sludge are required to demonstrate that the sludge meets the criteria of 20.9.8.16 NMAC.
- Generators of industrial solid waste (ISW) must meet the requirements specified in 20.9.8.11 NMAC.
- Generators of PCS must meet the requirements of 20.9.8.15 NMAC.
- B. All laboratory analyses shall be performed by a laboratory that follows U.S. EPA quality assurance and quality control procedures in accordance with U.S. EPA approved analytical methods or such other methods acceptable to the department.

Generators of special waste are required to utilize analytical laboratories which follow United States Environmental Protection Agency (USEPA) quality assurance and quality control procedures in accordance with USEPA-approved analytical methods, unless alternative methods are approved by the Department. CREC will verify that laboratories used for special waste analyses follow the requirements of 20.9.8.11.B NMAC.

- C. Representative sample(s) shall be analyzed in conformance with the following parameters as appropriate:
 - (1) ignitability characteristic as defined in 40 CFR Part 261;
 - (2) corrosivity characteristic as defined in 40 CFR Part 261;
 - (3) reactivity characteristic as defined in 40 CFR Part 261;
 - (4) toxicity characteristic as defined by U.S. EPA test method 1311: toxicity characteristic leaching procedure (TCLP);
 - (5) paint filter liquids test as defined by U.S. EPA Test Method 9095;

- (6) additional parameters as identified by the department;
- (7) RCRA Subtitle C listed wastes as defined in 40 CFR Part 261; and
- (8) Toxic Substance Control Act (TSCA), Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), or other applicable statutes.

The main objective of analyzing special waste is to verify that it is non-hazardous, that its physical and chemical characteristics are not detrimental to the liner and leachate collection system, and that it does not represent a potential hazard to personnel or the environment. The special waste streams disposed of at CRLF are relatively benign and are analyzed for appropriate parameters as part of the Waste Profile process. Generator knowledge and documentation of the process generating the waste is also used to supplement or streamline the protocol for laboratory testing. Information provided by the generator as part of the Waste Profile process, including corresponding laboratory analytical test results, is required to be certified and updated at least annually. Specialized third party expertise may be retained by CREC, if necessary, to confirm compliance with the Rules.

20.9.8.12 ASBESTOS WASTE

CRLF will not accept or dispose of asbestos waste.

20.9.8.13 INFECTIOUS WASTE

CRLF will not accept or dispose of infectious wastes.

20.9.8.14 ASH

CRLF will not accept or dispose of ash wastes.

20.9.8.15 PETROLEUM CONTAMINATED SOILS

- A. The generator of petroleum contaminated soil shall assure that all petroleum contaminated soils to be disposed, processed, composted, or transformed at a solid waste facility shall be tested under the requirements of 20.9.8.11 NMAC.
 - (1) All soils that are suspected to be contaminated with petroleum products shall be tested for total petroleum hydrocarbons (TPH) and other contaminants as required by the disposal management plan to determine the contaminants of the soil.

- (2) The frequency of sampling shall be one representative sample per 100 cubic yards of contaminated soil, unless an alternate frequency is permitted or
 - specifically approved by the secretary upon a demonstration that the contaminated soil is homogeneous.
- (3) Copies of the results from the laboratory analyses shall be placed in the operating record.

CREC currently holds a Special Waste Permit [SWM-030738(SP)] for PCS disposal at CRLF. CREC is requesting NMED approval to continue to accept PCS for disposal at CRLF with this Application. Additional information regarding procedures for PCS characterization, management and disposal is provided in the PCS DMP (Volume II, Section 8).

The CRLF will require all generators of petroleum contaminated soils (PCS) to test the soil according the requirements of 20.9.8.15 NMAC. The minimum analysis required of the generator will be total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and xylenes (BTEX). Supplemental analyses may be required based upon the suspected contaminant source or process generating the waste. PCS proposed for disposal will be described on a completed Waste Profile application, which includes laboratory analytical test results. Documentation of PCS approved for disposal will be placed in the Facility Operating Record and made available to the Secretary upon request. CREC may request approval of a revised frequency of sampling (i.e., >100 cubic yards) when the PCS deliveries are demonstrated to be homogenous, typically from the same project or source.

B. Petroleum contaminated soils containing free liquid shall not be accepted at a solid waste facility. When the soil can pass the paint filter liquids test, the test results shall be placed in the daily operating record and made available to the secretary upon request.

The CRLF will not accept PCS containing free liquids. PCS which are suspected to potentially contain free liquids will be subject to the paint filter test. PCS accepted will generally be processed the same day as received. Further detail on acceptance and processing of PCS is included in the Special Waste Disposal Management Plans (Volume II, Section 8).

C. Petroleum contaminated soil may be stored temporarily or remediated at a solid waste facility in a bermed area on an impermeable liner or in a manner that does not contaminate groundwater, surface water, or uncontaminated soil above regulatory limits. The method of storage, remediation, and testing shall be described in the disposal management plan. Remediation shall be complete when the following conditions are met in a soil sample:

- (1) the sum of benzene, toluene, ethylbenzene, and xylene isomer concentrations is less than 500 mg/Kg, with benzene individually less than 10 mg/Kg; and
- (2) the TPH concentration is less than 1,000 mg/Kg.

At this time, CREC does not anticipate remediation of PCS soils onsite, but plans to accept PCS that meets the laboratory requirements for disposal. Should CREC elect to remediate PCS onsite, remediation will be conducted in compliance with 20.9.8.15 NMAC. Temporary storage of PCS is not anticipated, but should it become necessary, PCS will be stored in compliance with 20.9.8.15.C NMAC.

D. Remediated petroleum contaminated soil may be disposed at a landfill authorized to accept petroleum contaminated soils. Petroleum contaminated soils that have been remediated at the landfill may be removed only if the soil complies with applicable environmental laws. Remediated petroleum contaminated soil may not be removed from the facility for beneficial use as clean fill, as the soil does not constitute clean fill as defined in Paragraph (4) of Subsection C of 20.9.2.7 NMAC.

Remediated PCS may be applied for beneficial use at the CRLF, including use as daily, intermediate and final cover soils. Alternatively, remediated PCS may be disposed of with the MSW waste stream at the daily fill face.

E. Uncontaminated or remediated soils shall not be mixed with contaminated soils.

PCS will not be mixed with uncontaminated or remediated soils.

F. The owner or operator shall provide a written report to the department documenting remediation.

CREC does not anticipate remediation of PCS onsite. PCS approval for acceptance at the CRLF will have already been remediated to the standards of 20.9.8.15.C NMAC.

G. Permitted facilities not otherwise authorized to accept petroleum contaminated soil for remediation may remediate petroleum contaminated soil generated at the facility, provided the volume of contaminated soil does not exceed 50 cubic yards and the area where the petroleum contaminated soil is remediated is restricted from public access. Remediation shall be complete when the soil meets the standards in 20.5.12.1202 NMAC or other applicable standards.

No response required.

20.9.8.16 SLUDGE

- A. The owner or operator of a landfill may dispose or use sludge as an amendment to intermediate or final cover material provided:
 - (1) the landfill owner or operator has been issued a permit to dispose of sludge or has received specific approval from the secretary to use sludge as an amendment to intermediate or final cover material, respectively;
 - (2) the sludge does not exceed the test parameters specified in Subsection D of this section; and
 - (3) the sludge contains no free liquids as determined by the paint filter liquids Test (U.S. EPA test method 9095), unless permitted to do otherwise under 20.9.4.17 NMAC.

CREC currently holds a Special Waste Permit [SWM-030738(SP)] for sludge disposal at CRLF. CREC is requesting NMED approval to continue to accept sludge for disposal at CRLF with this Application. Additional information regarding procedures for sludge characterization, management and disposal is provided in the Sludge DMP (Volume II, Section 8). CREC requires sludge generators to provide laboratory analytical test results to demonstrate that the sludge proposed for disposal meets the criteria specified by 20.9.8.16.A NMAC.

- B. The owner or operator of a solid waste facility that is authorized to accept sludge shall have an approved disposal management plan that shall, at a minimum:
 - (1) describe the methods used to:
 - (a) obtain representative samples of sludge for analysis; and
 - (b) analyze the sludge for the parameters specified in Subsection D of this section to demonstrate the sludge is non-hazardous and passes the paint filter liquids test, unless otherwise permitted under 20.9.4.17 NMAC;
 - (2) identify the laboratory used to analyze the sludge and include a certification that, to the best of the preparer's knowledge and belief, the laboratory follows quality assurance and quality control procedures in accordance with U.S. EPA approved methods;
 - (3) describe the transport method, indicate transportation routes that will be used by the transport vehicles, and demonstrate that the transport method will prevent leaks and litter:
 - (4) describe the anticipated volumes to be transported and total time period for disposal of any sludges;

- (5) describe any plans for continuation of landfill disposal of the sludge, including how often sludge will be tested and transported to the landfill and how long the sludge will be stored at the landfill prior to disposal;
- (6) provide a site map indicating the solid waste facility boundaries, the location of the sludge disposal area, and the routes of the disposal vehicles once they enter the facility; and
- (7) include the portion of the facility's contingency plan a section describing methods for clean-up if an accident should occur during transport or disposal;

The Sludge DMP addressing the requirements of 20.9.8.16.B is provided in Volume II, Section 8.

- C. In addition to the requirements of Subsection A of this section, all owners or operators that dispose of sewage sludge or use sewage sludge as an amendment to cover material at a landfill shall meet the following requirements prior to disposal or use as a cover material amendment:
 - (1) obtain at least one representative sample per 100 cubic yards of sludge for analysis of the parameters listed in Subsection D of this section, but an alternate frequency may be permitted or specifically approved by the secretary if a demonstration is made that the sludge is homogeneous;
 - (2) cover the sludge with six inches of clean earthen material or other suitable material at the end of the day in order to be excluded from the 40 CFR Part 503 pathogen reduction criteria;
 - (3) restrict the treatment area from public access until the sludge is either placed in a disposal cell and covered or until it meets the requirements of 40 CFR Part 503; and
 - (4) ensure that all sewage sludge complies with 40 CFR Part 503, Subpart B before it is used as an amendment to intermediate or final cover.

Sludge will be incorporated into a lined area already filled with MSW and distant from the daily fill face. Sludge will be immediately covered with a minimum 6 inches of MSW and/or clean soil in order to avoid potential odors. Treatment of sludge will not be performed at CRLF. Sludge requiring additional treatment will not be accepted, and each generator of sludge will be required to certify that the sludge does not require further treatment to meet the prescribed regulatory and site-specific standards.

- D. Prior to delivery of sludge to a solid waste facility for disposal, the generator shall test a representative sample for the following parameters to determine if it exceeds the specified limits below:
 - (1) no free liquids as determined by paint filter liquids test (U.S. EPA test method 9095), unless exempt in accordance with 20.9.4.17 NMAC;
 - (2) percent solids (no specified limits);
 - (3) pH, within the range of 2.0 to 12.5;
 - (4) polychlorinated biphenyls (PCB's), less than 50 mg/Kg; and
 - (5) toxicity characteristic leaching procedure (TCLP) (U.S. EPA test method 1311), for the following parameters and maximum allowable concentrations:
 - (a) arsenic, 5.0 mg/L;
 - (b) benzene, 0.5 mg/L;
 - (c) cadmium, 1.0 mg/L;
 - (d) chlordane, 0.03 mg/L;
 - (e) chromium, 5.0 mg/L;
 - (f) 2, 4-Dichlorophenoxy-acetic acid, 10.0 mg/L;
 - (g) lead, 5.0 mg/L;
 - (h) lindane, 0.4 mg/L;
 - (i) mercury, 0.2 mg/L;
 - (j) methyl ethyl ketone, 200.0 mg/L; and
 - (k) toxaphene, 0.5 mg/L.

Prior to delivery of sludge to CRLF, the generator will be required to test a representative sample to determine if it exceeds the limits specified in 20.9.8.16.D NMAC.

20.9.8.17 PACKING HOUSE AND KILLINT PLANT OFFAL

CRLF will not accept or dispose of packing house and killing plant offal.

20.9.8.18 DISPOSAL OF SPECIAL WASTE NOT OTHERWISE SPECIFIED

Any solid waste facility owner or operator who wishes to be permitted to receive special wastes that do not have specified disposal requirements shall submit a disposal management plan, as specified in Subsection C of 20.9.3.9 NMAC, to the

department for approval. In addition to sludge and petroleum contaminated soils (PCS), CRLF accepts industrial solid wastes for disposal. These solid wastes do not have specific disposal requirements; therefore, an Industrial Solid Waste Disposal Management Plan (DMP) has been prepared to address each of the requirements of this Part (see Volume II, Section 8). Most of the industrial solid wastes received at CRLF do not require special handling or disposal methods.

20.9.8.19 MANIFEST REQUIREMENTS

- A. Each generator or his authorized agent shall prepare a manifest to accompany each load of special waste, including:
 - (1) the name, address and telephone number of the generator and origin of the special waste;
 - (2) the name, address and telephone number of all haulers in the order each will be transporting the waste;
 - (3) the name, site address, telephone number and identification number of the solid waste facility to which the waste is to be delivered;
 - (4) the type and proper name of waste being shipped;
 - (5) the total weight or volume of waste prior to shipment from the generator;
 - (6) the type and number of containers in the shipment; and
 - (7) any special handling instructions.

The Manifest is the mechanism by which special wastes are tracked from the point of generation to the point of disposal. The Manifest is designed to address each of the requirements of 20.9.8.19.A and 20.9.8.19.B NMAC. CRLF requires that all authorized loads arrive at the Landfill with accurately completed Manifest Forms (i.e., Non-Hazardous Waste Manifest Form, Attachment II.8-D).

B. The generator or his authorized agent shall sign the manifest and obtain the signature of the initial transporter and date of acceptance on the manifest, and shall retain a copy of the manifest. Each hauler shall obtain the signature of the individual who accepts the special waste for storage, further transportation or disposal, retain a copy of the manifest, and provide the original manifest to the next hauler or solid waste facility operator who receives the special waste.

No response required.

C. The manifest shall accurately reflect the required information and shall be signed and dated by the generator and each hauler of the

special waste, and by the solid waste facility owner or operator, acknowledging delivery, weight or volume, and receipt of the special waste. All signatories shall be duly authorized agents of their organizations. The generator shall keep a copy of the originating manifest for three years.

Each Manifest that accompanies a load of special waste to the Landfill is checked to ensure that it accurately reflects the required information, and is signed by the generator and each commercial hauler of the waste. The Manifest is then signed by the facility operator, acknowledging delivery, quantity, and receipt of the waste. Signatures will be duly authorized agents or their respective organizations.

D. Upon discovery of any significant discrepancy including, but not limited to, factual misrepresentation on the manifest, irregularities in transportation, discharges, or any unauthorized action in regard to the shipment, delivery, or disposal of the solid waste, the person discovering the discrepancy shall notify the department, the generator, hauler, and the solid waste facility operator in writing within 24 hours.

If landfill personnel discover a significant discrepancy in the Manifest form, or any unauthorized action in regard to the shipment, discharge, delivery, or disposal of the solid waste, they will notify the owner/operator of the landfill facility, commercial hauler, the generator, and the Department within 24 hours.

E. Within 30 days of receipt of a special waste shipment at the solid waste facility, the owner or operator shall send the original signed copy of the manifest to the generator, acknowledging receipt of the shipment. The facility owner or operator shall list any discrepancies on the manifest. Other methods of return of the manifest may be allowed upon specific approval from the secretary.

CREC will send a signed copy of the Manifest to the generator acknowledging receipt of the shipment to NMED within 30 days. If any discrepancies are found they shall be noted on the Manifest before it is sent to the generator.

F. A copy of the manifest shall be retained by each hauler, and solid waste facility operator for their operating records. The generator shall retain for a period of three years both the originating copy and the returned original manifest signed by the solid waste facility owner or operator and all haulers transporting the waste. Haulers shall retain a copy of the manifest for a period of three years.

A copy of the signed Manifest is retained by CRLF in its Daily Operating Record.

G. Copies of the manifest shall be retained by the facility owner or operator throughout any post-closure period.

CREC will retain Manifests at the CRLF offices, or future acceptable to NMED, for the 30-year post-closure care period.	designated	location

CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738(SP)

APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

VOLUME I – PERMIT APPLICATION TEXT SECTION 9 – SOLID WASTE FACILITY GROUNDWATER MONITORING SYSTEM PLAN AND GROUNDWATER MONITORING PLAN; CORRECTIVE ACTION

Prepared for

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September 2022



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20.9.9.8 GROUNDWATER MONITORING APPLICABILITY

A. The owner or operator of a municipal or special waste landfill, unless it is a category

1 landfill, is waived under 20.9.2.14 NMAC, or is suspended under Subsection C of this section, shall submit, obtain approval of, and implement a groundwater monitoring system plan and a groundwater monitoring plan in accordance with the following:

(1) owners or operators of category 4 landfills and landfills seeking approval of

lateral expansions shall obtain approval of a groundwater monitoring system plan and groundwater monitoring plan in compliance with 20.9.9 NMAC prior to placement of waste in the landfill or lateral expansion, as part of their permit or permit modification; owners or operators of category 4 landfills and landfills making lateral expansions shall implement and comply with their groundwater monitoring system plan and groundwater monitoring plan as approved;

- (2) owners or operators of category 3 landfills or landfills that closed on or after October 9, 1993 shall submit and obtain approval of a groundwater monitoring system plan and groundwater monitoring plan in compliance with 20.9.9 NMAC as part of their permit or closure or post closure care plan, and shall implement and comply with the approved groundwater monitoring system plan and groundwater monitoring plan; and
- (3) owners or operators of category 2 landfills shall comply with 20.9.9 NMAC, with the exception that the groundwater sampling parameters may be limited to those approved in the closure and post-closure care plan;
- (4) the secretary may require monitoring for additional parameters as necessary to protect the public health, welfare and the environment.

An NMED-approved groundwater monitoring program has been in place at CRLF since 1989. In January 2006, CRLF submitted to NMED Solid Waste Bureau a monitoring program update (Groundwater Monitoring Program Update, Camino Real Landfill, January 2006) that included proposed assessment monitoring levels (AMLs) for all 20.9.9.20 NMAC indicator parameters for the site's existing monitoring wells (MW-A, B, D2, E, F, G, and H). The program also includes provisions for the sampling, analysis, and assessment of groundwater quality for future monitoring wells. The proposed AMLs were approved by NMED in May 2007 (Attachment V.2-D, Volume V, Section 2). To date, no statistically significant

exceedances of established AMLs have been verified for any of the 20.9.9.20 NMAC indicator parameters.

The Groundwater Monitoring Plan provided in Volume V, Section 2 provides the necessary components of a "groundwater monitoring system plan" and a "groundwater monitoring plan" pursuant to 20.9.9.8 NMAC through 20.9.9.20.

B. Construction and demolition landfills, scrap tire monofills, and asbestos monofills are not required to comply with the groundwater monitoring requirements of 20.9.9 NMAC unless required in the permit, or if the secretary orders groundwater monitoring, based on a finding that there is a potential for constituents to migrate from the facility to the uppermost aquifer. If contamination is detected at a construction and demolition landfill, scrap tire monofill or asbestos monofill, the requirements of 20.9.9 NMAC shall thereafter apply.

Not applicable.

- C. The secretary may suspend part or all of the groundwater monitoring requirements of 20.9.9.9 20.9.9.13 NMAC if the owner or operator demonstrates that there is no potential for migration of constituents referenced in 20.9.9.20 NMAC from the landfill to the uppermost aquifer during the active life or post-closure care period of the landfill. This demonstration shall be certified by a qualified groundwater scientist and presented in the permit application or a permit modification or petition (from non-permitted landfills) for approval by the secretary. For category 2 landfills that closed prior to receiving a solid waste facility permit, the demonstration shall be presented in an application for a closure and post closure care plan or an application to modify the approved closure and post closure care plan. The demonstration shall include:
 - (1) site-specific field measurements, sampling, and analysis of physical, chemical, and biological processes affecting contaminant fate and transport;
 - (2) contaminant fate and transport predictions that maximize contaminant migration and consider impacts on public health, welfare and environment; and
 - (3) a plan for periodic leak detection or vadose zone monitoring or groundwater monitoring in compliance with Subsection N of 20.9.9.9 NMAC may be implemented as a secondary monitoring approach to support approval of a monitoring suspension.

At this time, CRLF is not requesting suspension of groundwater monitoring.

D. If a suspension is granted, the secretary may require the owner or operator to conduct periodic groundwater or vadose zone monitoring and leak detection at any landfill during the active life or post-closure

care period as necessary to protect the public health, welfare or environment.

Not applicable.

E. If groundwater contamination is detected after a suspension has been granted pursuant to Subsection C of this section, the suspension is revoked and the requirements of 20.9.9 NMAC shall apply, unless the owner or operator can demonstrate that groundwater cannot be adversely affected and there is no risk to human health or the environment. If contaminants are detected in vadose zone monitoring instruments or a leak is detected after a suspension has been granted pursuant to Subsection C of this section, actions specified in the vadose zone monitoring or leak detection plan must be undertaken to respond.

Not applicable.

F. The secretary may require the owner or operator to conduct periodic groundwater or vadose zone monitoring at any landfill for which groundwater monitoring has been waived under 20.9.2.14 NMAC during the active life or post-closure care period to demonstrate the landfill is not contaminating groundwater.

CRLF is not subject to the "waiver" standards enumerated in 20.9.2.14, therefore this section does not apply.

20.9.9.9 GROUNDWATER MONITORING SYSTEMS AND GROUNDWATER MONITORING SYSTEM PLANS

- A. A groundwater monitoring system shall consist of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer that:
 - (1) represent the background quality of groundwater that has not been affected by a release from the landfill as determined under 20.9.9.10 NMAC; and
 - (2) represent the quality of groundwater passing the detection monitoring point which shall be at the waste management unit boundaries on land owned by the owner of the landfill:
 - (a) the downgradient monitoring system shall be installed at the detection monitoring point;
 - (b) when physical obstacles preclude installation of groundwater monitoring wells immediately downgradient from an existing landfills, the secretary may approve a monitoring system plan that provides for an alternative detection monitoring point at the closest practicable

distances hydraulically downgradient from the landfill that ensure detection of groundwater contamination in the uppermost aquifer.

Volume V, Section 2 provides a description of the groundwater monitoring network at CRLF. The existing groundwater monitoring well network for CRLF is comprised of the following monitoring wells:

- Two upgradient wells (MW-D2 and MW-H)
- Four downgradient wells (MW-A, MW-B, MW-F, and MW-G)
- One sidegradient well (MW-E)

The current well locations are positioned appropriately to detect a potential release from the landfill. The monitoring wells are screened in the uppermost water-bearing unit at depths appropriate to maximize the likelihood of detecting a potential release from the landfill.

Locations of existing, proposed, and decommissioned groundwater monitoring wells at CRLF are shown in Figure V.2.1. Groundwater monitoring at the site commenced in July 1989 with the semi-annual sampling and analysis of monitoring Well A (the site's water supply well) for select groundwater parameters. Wells B, C, and D were added to the network from 1990 to 1991. Well C was deleted from the monitoring program in 1997 and, consistent with prior NMED Solid Waste Bureau (SWB) approval, decommissioned on April 29, 2008. In October and November 1995, three additional wells (E, F, and G) were installed to enhance downgradient monitoring capabilities. Well D was decommissioned in accordance with SWB approval on May 29, 2019. In February 2006, Wells D2 and H were installed as a part of the focused landfill investigation program conducted for the 2008 Permit Renewal/Modification. The site transitioned to annual sampling in 2012.

Well I is planned as a third new well to monitor groundwater when the development sequence reaches Cell 3.2. A fourth future well (Well A2), intended as an eventual replacement for Well A, is planned for installation as waste filling sequences progress to the west and northwest into Cells 3.2 and 3.3. The location and specifications for Well A2 will be determined in consultation with NMED prior to development of those cells. Construction of waste cells in Unit 4 will require that Wells G and E be decommissioned and replaced. The approximate proposed locations for replacement wells G2 and E2 are shown on Figure V.2.1. Final locations for replacement wells G2 and E2 are to be determined in consultation with NMED SWB and based upon site constraints. The existing monitoring wells provide a groundwater monitoring network that encompasses the active landfill footprint under this Permit Renewal timeframe.

B. The groundwater monitoring system plan shall comply with this section and shall include a detailed plan for all wells, piezometers or other measurement and sampling devices and an explanation of the purpose and placement of each (with maps). The groundwater monitoring

system plan shall be certified that it is in compliance with this section by a qualified groundwater scientist on a form provided by the department.

A detailed groundwater monitoring system plan is provided in Volume V, Section 2, including location and explanation of placement for each well. Certification of the groundwater monitoring system is provided as Attachment V.2-G.

C. The groundwater monitoring plan shall include a description of the hydrogeologic characteristics of the site, a geologic cross-section of the site, a description of groundwater sampling and analysis procedures, and a detection monitoring plan, and shall comply with 20.9.9 NMAC. The groundwater monitoring plan shall be certified that it is in compliance with 20.9.9 NMAC by a qualified groundwater scientist on a form provided by the department.

A detailed groundwater monitoring plan is provided in Volume 5, Section 2, including location and explanation of placement for each well. Certification of the groundwater monitoring system is provided as Attachment V.2-G.

D. The owner or operator shall comply with the groundwater monitoring system plan and groundwater monitoring plan approved by the department throughout the active life and post-closure care period of each landfill subject to the requirements of 20.9.9 NMAC. The secretary may require monitoring for additional constituents, parameters and frequency as necessary to protect the public health, welfare and the environment. No change shall be made to the approved groundwater monitoring system plan or groundwater monitoring plan without a specific approval by the department.

CREC acknowledges this requirement.

E. Owners or operators shall not install or decommission any monitoring well, piezometer, or other groundwater measurement, sampling, or analytical device unless it is in accordance with an approved groundwater monitoring system plan. The owner or operator shall submit a written notice of intent to the department at least 14 days prior to the installation or decommissioning of any monitoring wells or piezometers. The notice shall include a statement, on a form provided by the department, that the installation or decommission of any monitoring well complies with this section and the approved groundwater monitoring system plan.

CREC acknowledges this requirement.

F. The owner or operator shall submit an installation report to the department within 90 days after the installation of a monitoring well or piezometer. The report shall include the following documentation.

- (1) A certification by a qualified groundwater scientist that the monitoring device has been installed in compliance with the approved groundwater monitoring system plan and 20.9.9 NMAC.
- (2) A construction and lithologic log for each monitoring well or piezometer. The lithologic log shall be drawn to a scale of one inch equals ten feet, except if the boring is greater than 200 feet, then a scale of one-half inch equals ten feet may be used, graphically depicting the initial depth at which groundwater was encountered and the soil or rock strata penetrated and describing each layer.
 - (a) If soil was encountered, the log should indicate the color, degree of compaction, moisture content plus any additional information necessary for an adequate visual description and classification of each stratum based on the unified soils classification system.
 - (b) If rock was encountered, the log should include a detailed lithologic description, including rock type, degree of induration, presence of fractures, fissility, and porosity (including vugs) plus any other information necessary for an adequate description. All field notes made by the qualified groundwater scientist shall be made available on request of the department.

CREC is not proposing to install a monitoring well or piezometer at this time but will comply with these requirements for any future wells or piezometers.

G. A copy of all construction and lithologic logs, and all sampling data from groundwater monitoring shall be placed in the operating record.

CREC acknowledges this requirement.

- H. The secretary may approve an alternate detection monitoring point in the monitoring system plan if it is located 150 meters or less from the waste management unit boundary and it is located on land owned by the owner of the landfill. When approving an alternate detection monitoring point under this section, the secretary shall consider at least the following factors:
 - (1) the hydrogeologic characteristics of the facility and surrounding land;
 - (2) the volume and physical and chemical characteristics of the leachate;
 - (3) the quantity, quality, and direction of flow of the groundwater;
 - (4) the proximity and withdrawal rate of the groundwater users;

- (5) the availability of alternative drinking water supplies;
- (6) the existing quality of the groundwater, including other sources of contamination and their cumulative impacts on the groundwater, and whether the groundwater is currently used or reasonably expected to be used for drinking water;
- (7) public health, safety, and welfare effects; and
- (8) the practicable capability of the owner or operator.

CREC is not proposing an alternate detection monitoring point at this time.

- I. The secretary may approve, in the groundwater monitoring system plan or closure and post-closure care plan, a multiunit groundwater monitoring system instead of separate systems for each landfill where the facility has several landfills, provided the multiunit system meets the appropriate requirements of this part and will be as protective of public health, welfare and the environment as individual monitoring systems for each landfill, based on the following factors:
 - (1) number, spacing, and orientation of the landfills;
 - (2) hydrogeologic setting;
 - (3) site history;
 - (4) engineering design of the landfills; and
 - (5) types of waste accepted at the landfills.

Not applicable.

- J. Unless otherwise approved by the department in the groundwater monitoring system plan or by specific approval, monitoring wells shall be constructed in such a manner that the integrity of the bore-hole and well is maintained and is in accordance with American society of testing materials method D-5092 or the following requirements:
 - (1) the bore-hole shall be drilled a minimum of 4 inches larger than the casing diameter to allow for the emplacement of sand and sealant;
 - (2) care shall be taken not to introduce contamination to the well;
 - (3) the well shall be developed so that groundwater flows freely through the screen and to decrease turbidity, and that all sediment is removed from the well;
 - (4) the casing shall, unless otherwise approved by the secretary, consist of schedule 40 or heavier threaded PVC pipe of not less than 2 inches diameter;
 - (a) the casing shall extend from the top of the screen to at least one foot above ground surface;

- (b) the casing top shall be protected by a cap and a locking shroud shall protect the exposed casing; and
- (c) the shroud shall be large enough to allow easy access for removal of the plastic cap;
- (5) the screen shall be at least a 20-foot section of machine slotted or other manufactured screen; a slot size of 0.01-inch generally is adequate for most installations; no on-site or hack-saw slotting is permitted;
- (6) if the uppermost aquifer is unconfined; the top of the screen shall be 5 feet above the water table to allow for seasonal fluctuations;
- (7) if the uppermost aquifer is confined, the top of the screen shall be at the location of the geologic boundary between the top of the aquifer and the bottom of the confining unit;
- (8) centralizers shall be placed at the top and the bottom of the screen;
- (9) an annular space from 2 feet below to 2 feet above the screen shall be packed with sand;
 - (a) the sand shall be clean and medium to coarse grained;
 - (b) the sand shall be properly sized to prevent fines from entering the well; and
 - (c) a tremmie pipe shall be used for sand placement in deeper wells when appropriate;
- (10) the annular space for at least 2 feet above the sand pack shall be grouted or sealed;
 - (a) pressure grouting with bentonite or cement using a tremmie pipe is preferred; or
 - (b) alternatively, a bentonite seal may be installed using bentonite pellets, 1/4 or 1/2 inch in size;
- (11) the annular space above the seal shall be fully sealed using grout or bentonite to within 3 feet of the ground surface;
- (12) the annular space above the cuttings shall be filled with bentonite-cement grout to within 3 feet of the ground surface;
- (13) the remaining 3 feet shall be filled with concrete (expanding cement); and
- (14) a concrete slab with a minimum 2-foot radius and a 4-inch thickness shall be poured around the shroud; the pad shall be sloped so that rainfall and run-off flows away from the shroud.

The existing groundwater monitoring wells at the CRLF were completed in accordance with the applicable requirements listed in 20.9.9 NMAC. The construction and survey details for these wells are provided in Attachment V.2-A and Table V.2-1, respectively, of the Groundwater Monitoring Plan (Volume V, Section 2). The future wells (Wells I, A2, G2, and E2) will be similarly completed, and the details of the construction and survey demonstrating conformance to 20.9.9 NMAC will be presented in monitoring well installation reports provided to the NMED upon completion.

K. The casing of each well or wells that will be used to monitor groundwater shall be surveyed, referenced to a standard grid, and subsequently mapped by a licensed surveyor. The location of the well shall be determined within one-tenth of a foot, and the height above sea level at the top of the casing shall be determined within one-hundredth of a foot. This information shall be submitted to the department with the installation report required in Subsection F of 20.9.9.9 NMAC.

The installation of Wells I, A2, G2, and E2 will be the subject of future submissions to and approvals by NMED. NMED will be notified at least 14 days prior to the installation of Wells I, A2, G2, and E2 and as-built documentation will be provided to NMED upon completion and maintained as part of the Facility Operating Record.

L. The monitoring wells, piezometers, and other measurement, sampling, and analytical devices shall be operated and maintained so that they perform to design specifications throughout the life of the monitoring plan.

CRLF will comply with the requirements of this section as they apply to the groundwater monitoring wells and analytical devices (e.g., field instrumentation). For each groundwater monitoring event, trained technicians will collect groundwater samples consistent with the protocol outlined in the Groundwater Monitoring Plan (Volume V, Section 2). In addition, the field technicians will continually evaluate the conditions of each monitoring well and note any well damage or sampling difficulties (e.g., field instrument malfunction, sample collection, etc.).

- M. The number, spacing, and depths of monitoring systems shall be based upon site-specific technical information that includes thorough characterization of:
 - (1) aquifer thickness, groundwater flow rate, and flow direction, including seasonal and temporal fluctuations in groundwater flow; and
 - (2) saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer; and materials comprising the confining unit defining the lower boundary of the uppermost aquifer; including,

but not limited to: thicknesses, stratigraphy, lithology, hydraulic conductivities, porosities, and effective porosities.

Volume V, Sections 1 and 2 provide a detailed discussion of the site's geologic and hydrologic conditions as they relate to the groundwater monitoring network. The Groundwater Monitoring Plan has been certified by Mr. Clay Kilmer, P.G., a "qualified groundwater scientist." Upon issuance of a Permit from the Department, this Application for Permit will become part of the Facility Operating Record.

- N. Vadose zone monitoring or leak detection systems, if required by the secretary pursuant to Subsections C or F of 20.9.9.8 NMAC, shall include:
 - (1) direct and indirect monitoring techniques such as:
 - (a) permanent monitoring stations such as those which utilize access tubes for neutron moderation instrumentation, time domain reflectometry (TDR) probes, capacitance probes or other permanently installed devices;
 - (b) nested piezometers when used for monitoring perched water or locally saturated portions of the vadose zone;
 - (c) soil gas measurements;
 - (d) lysimeters;
 - (e) electronic leak detectors; and
 - (f) other devices or methods as approved in the permit;
 - (2) an adequate frequency of testing and a sufficient number of sampling points at appropriate locations and depths to determine a change in soil characteristics; and
 - (3) an action plan that addresses potential vadose zone contamination and the sources of the contamination.

Not applicable.

O. Amendments to an approved groundwater monitoring system plan shall be by specific approval.

CREC acknowledges this requirement.

20.9.9.10 GROUNDWATER MONITORING PLAN; SAMPLING AND ANALYSIS; ESTABLISHING BACKGROUND CONCENTRATION LEVELS AND ASSESSMENT MONITORING LEVELS

A. Groundwater monitoring plans shall describe in detail all aspects of the landfill's proposed groundwater monitoring program. It shall include descriptions of sampling and analysis procedures to be used, proposed sampling frequencies, test methodologies, procedures that will be used

to establish background concentrations of all constituents and parameters listed in 20.9.9.20 NMAC, assessment monitoring levels (AMLs), and practical quantitation limits (PQL) for each constituent listed in 20.9.9.20 NMAC, and any other information describing the program as required by this section.

A detailed Groundwater Monitoring Plan that meets the requirements of 20.9.9.10 NMAC is provided in Volume V, Section 2.

- B. The groundwater monitoring plan shall include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of groundwater quality at the upgradient and downgradient wells. The plan shall include procedures and techniques for:
 - (1) sample collection;
 - (2) sample preservation and shipment;
 - (3) analytical procedures;
 - (4) chain of custody control; and
 - (5) quality assurance and quality control.

A semi-annual groundwater sampling and analysis program, in compliance with 20.9.9.10 NMAC for CRLF, was implemented in July 1989. With NMED concurrence, the site transitioned to annual sampling in 2012. The sampling and analysis procedures for future groundwater monitoring events will comply with the requirements of 20.9.9.10 NMAC and are outlined in the Groundwater Monitoring Plan (Volume V, Section 2).

C. The groundwater monitoring plan shall describe sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure constituents and other monitoring parameters in groundwater samples. A PQL for each constituent listed in 20.9.9.20 NMAC shall be proposed in the plan based on the proposed sampling and analytical method. A PQL will not be approved unless the level is the lowest concentration that can be reliably determined by an analytic methodology acceptable to the department. Groundwater samples shall not be field-filtered prior to laboratory analysis unless otherwise allowed under 40 CFR Part 258 and the approved groundwater monitoring plan. The owner or operator shall conduct groundwater sampling in accordance with the "EPA solid waste disposal facility criteria technical manual" (1998, EPA 530-R-93-017, revised April 13, 1998) unless otherwise approved in the groundwater monitoring plan.

Groundwater samples are collected and analyzed consistent with 20.9.9.10(C) NMAC.

D. Groundwater elevations shall be measured within one-hundredth of a foot in each well immediately prior to purging, each time groundwater is sampled. The owner or operator shall determine the rate and direction of groundwater flow each time groundwater is sampled. Groundwater elevations in wells which monitor the same waste management area shall be measured within a period of time short enough to avoid temporal variations in groundwater flow which could preclude accurate determination of groundwater flow rate and direction.

The ground surface elevation and the top of the well casing for each existing monitoring well has been surveyed by a registered land surveyor to within one-hundredth of a foot (Table V.2.1). Groundwater elevations are measured and reported as part of the existing semi-annual groundwater sampling program. A groundwater contour map is provided as Figure V.2.2 in the Groundwater Monitoring Plan (Volume V, Section 2).

- E. The owner or operator of a landfill seeking a background determination shall apply for specific approval of background groundwater quality concentrations for each constituent and parameter referenced in Subsections A and C of 20.9.9.20 NMAC, and as required in the landfill's approved groundwater monitoring plan within 14 months after any waste disposal at the landfill or lateral expansion. The application shall propose background concentrations based upon the following:
 - (1) the sampling results from at least four independent samples taken during the first semiannual sampling event and at least one additional sample during the subsequent semiannual sampling event for each individual monitoring well;
 - (2) the first sampling event shall occur prior to any waste disposal at a new landfill or lateral expansion; and
 - (3) if a constituent is not detected in the sampling used to establish background concentrations, the owner or operator shall propose the PQL approved in the groundwater quality monitoring plan as the background concentration.

Information detailing determination of background groundwater quality at CRLF is included in Volume V, Section 2.

F. The background groundwater quality concentrations and values must be approved by the department in writing. Once background groundwater quality concentrations and values for the constituents and the parameters referenced in Subsections A and C of 20.9.9.20 NMAC are approved for a landfill, an individual well comparison procedure shall be used to compare constituent concentrations and parameter values with background constituent concentrations, groundwater

protection standards and parameter values for purposes of detection and assessment monitoring. Alternatively, if it is in accordance with the approved groundwater quality monitoring plan, the background levels established from hydraulically upgradient wells may be used for comparison purposes.

Background groundwater quality has been established in the Groundwater Monitoring Program Update submitted in January 2006 and approved by NMED Solid Waste Bureau on May 17, 2007.

G. For category 4 and 5 landfills, a background determination shall be made at each monitoring well as specified in Subsection E of this section unless the owner operator demonstrates that hydrogeological conditions are such that sampling at upgradient wells will provide an indication of background groundwater quality that is as representative or more representative than that provided by making a determination at each monitoring well.

CRED acknowledges this requirement.

H. For category 2 and 3 landfills, a background determination shall be made at each individual monitoring well as specified in Subsection E of this section, except when the concentration of a hazardous constituent at an upgradient well is lower than the concentration at a downgradient well, in which case the concentration of that constituent at the upgradient well shall be used as the background concentration, unless the owner or operator demonstrates that use of the downgradient well to determine the background concentration of that constituent will provide an indication of background groundwater quality that is as representative or more representative than that provided by the upgradient well.

Not applicable.

I. The owner or operator shall identify groundwater protection standards for which a numeric standard has been established and shall apply for specific approval of proposed assessment monitoring levels (AMLs) in compliance with 20.9.9.12 NMAC for constituents listed or referenced in Subsection A of 20.9.9.20 NMAC, and for the parameter of pH, within 90 days following approval of background groundwater quality concentrations by the department. The groundwater protection standard for a constituent and for pH shall be the more stringent of the maximum contaminant level (MCL) promulgated at 40 CFR 141, or the groundwater protection standard established by the commission at 20.6.2.3103 NMAC.

CREC is in compliance with this requirement.

J. The number of samples collected to establish groundwater quality data shall be consistent with the appropriate statistical procedures determined pursuant to this section.

The number of samples to be collected to establish groundwater quality at future wells will be consistent with the statistical procedures (or approved equivalent) outlined in the 2006 Groundwater Monitoring Plan Update.

- K. The owner or operator of a landfill using an individual well comparison procedure shall use one of the following statistical methods to compare an individual compliance well constituent concentration and parameter value with background constituent concentration and parameter value or the relevant groundwater protection standard:
 - (1) a comparison using a t-interval or t-test with a type I error level of no less than 0.01 shall be made between the approved background concentration or value and any subsequent sample analysis results for each parameter or constituent from each individual well;
 - (a) background values and concentrations shall be established for each parameter or constituent for each individual well from at least four independent samples during the first semiannual sampling event and at least one additional sample during the subsequent semi-annual sampling event; and
 - (b) if the background concentration is below the practical quantitation limit (PQL), the PQL shall be used to establish background. A statistical method is not necessary for a comparison between the analytical results and the PQL; or
 - (2) another method that meets the performance standards of 40 CFR 258.53(h). The alternative must be approved in the groundwater monitoring plan, and the owner or operator must demonstrate the method meets the performance standards of 40 CFR 258.53(h).

The statistical analysis methods used to establish background groundwater quality for existing monitoring wells are included in the 2006 Groundwater Monitoring Program Update and summarized in Volume V, Section 2. A copy of the Groundwater Monitoring Program Update is maintained as part of the Facility Operating Record at the Landfill Office. Similar statistical analysis methods (or approved equivalent) will be used to establish background groundwater quality for future monitoring wells when the appropriate number of background samples has been collected. In the future, CRLF may utilize industry-specific and generally accepted software programs (e.g., Sanitas®, etc.), with NMED's concurrence, to perform the necessary statistical calculations. Background groundwater quality for

future monitoring wells will be established when a total of five independent samples have been collected and analyzed for all 20.9.9.20 NMAC indicator parameters.

- L. The owner or operator of a landfill using an upgradient well to establish background concentrations shall specify in the groundwater monitoring plan one of the statistical methods described in 40 CFR 258.53(g). The statistical method to be used in evaluating groundwater monitoring data must be demonstrated to meet the performance criteria of 40 CFR 254.53(h).
 - (1) If the background concentration at the upgradient well is below the practical quantitation limit (PQL), the PQL shall be used to establish background; a statistical method is not necessary for a comparison between the analytical results and the PQL.
 - (2) The number of samples collected to establish groundwater quality data must be consistent with the appropriate statistical procedure that meets the performance standards of 40 CFR 258.53(h).

Procedures for establishing background concentrations comply with the requirements of this section.

- M. Groundwater samples for the constituents and values referenced in Subsections A and C of 20.9.9.20 NMAC shall be collected from each monitoring well at least semi-annually during the active life of the facility.
 - (1) At a new landfill, or at a lateral expansion, the first sampling event shall be prior to the receipt of any waste.
 - (2) Once background concentrations and values have been established and approved, the owner or operator shall conduct detection monitoring for all constituents and parameters listed in or referenced in Subsections A and C of 20.9.9.20 NMAC and determine whether or not the AML has been exceeded for any constituent referenced in Subsection A of 20.9.9.20 NMAC and for the parameter of pH, or as required in the particular groundwater monitoring plan that applies to the landfill.
 - (3) In determining whether the AML has been exceeded, the owner or operator shall compare the groundwater quality for each constituent at each monitoring well to the background value for that constituent, according to the statistical procedures and performance standards specified in the groundwater monitoring plan and this section.

Analytical test results for groundwater samples collected in applicable wells since 1989 have been compared to the background concentration levels for these wells. To date, no verified exceedances of established AMLs are evident. The results are

documented in the 2006 Groundwater Monitoring Program Update and summarized in Volume V, Section 2. A similar comparison for future wells will be performed when background groundwater quality has been established for these wells.

- N. Groundwater documentation shall be submitted to the department within 90 days of completing sampling, in a form acceptable to the department, for each sample, and a copy of all monitoring results shall be kept in the operating record. The documentation shall include:
 - (1) the constituents and parameter tested;
 - (2) the test method (U.S. EPA or equivalent) for each constituent and parameter;
 - (3) the groundwater protection standard for each constituent detected (if a numeric standard has been established);
 - (4) the method detection limit (MDL) for each constituent;
 - (5) the practical quantitation limit (PQL) for each constituent and parameter;
 - (6) the well number and location for each sample;
 - (7) the laboratory ID sample number;
 - (8) chain of custody documentation;
 - (9) the date sampled;
 - (10) the date received at the laboratory;
 - (11) the date analysis commenced;
 - (12) results, with constituent or parameter, chemical abstract system number, concentration with units, approved AML, groundwater protection standard, PQL, qualifier code (e.g., J, B, U, etc.), well number, and sample date;
 - (13) sample preservation (field data);
 - (14) field blank results, and trip blank results;
 - (15) quality assurance/quality control summary report (laboratory blanks, spike recoveries, etc.);
 - (16) anomaly report (non-conformance with quality assurance/quality control plan, corrective actions, etc.);
 - (17) laboratory review (signature and date);
 - (18) an updated groundwater elevation contour map for the facility or, if groundwater elevation data is insufficient to contour, then the groundwater elevation for each monitoring well, prior to purging, reported on a well location map;

- (19) the approved background concentration levels as determined in accordance with Subsection E of this section; and
- (20) a certification by a qualified groundwater scientist that AMLs have or have not been exceeded.

The Groundwater Monitoring Plan (Volume V, Section 2) provides a description of the information that will be submitted to the Secretary for samples collected at CRLF. Groundwater quality documentation for future wells will be consistent with current reporting practices and the requirements of 20.9.9.10 NMAC.

O. Amendments to an approved groundwater monitoring plan shall be by specific approval.

An updated Groundwater Monitoring Plan is included in Volume V, Section 2. The updated plan will not be implemented until approved.

20.9.9.11 DETECTION MONITORING PLAN

- A. The owner or operator shall conduct detection monitoring at all groundwater detection monitoring wells unless such monitoring has been suspended in accordance with Subsection C of 20.9.9.8 NMAC. The detection monitoring program shall include the monitoring for constituents and parameters listed and referenced in Subsection A of 20.9.9.20 NMAC, and shall be conducted at least semiannually during the active life and post-closure care period of the facility. After background concentrations have been approved as required in Subsection E of 20.9.9.10 NMAC for all constituents in Subsection A of 20.9.9.20 NMAC, the owner or operator may request a specific approval that the groundwater detection monitoring program description be amended to:
 - (1) not require testing for particular constituents in Subsection A of 20.9.9.20 NMAC for a municipal landfill if it can be shown that the particular constituents are not reasonably expected to be in or derived from the waste contained in the landfill; and
 - (2) establish an alternate list of inorganic indicator parameters constituents for a landfill in lieu of some or all of the heavy metals listed or referenced in Subsection A of 20.9.9.20 NMAC if the alternative constituents provide a reliable indication of inorganic releases from the landfill to the groundwater; in determining alternative constituents, the department shall consider the following factors:
 - (a) the types, quantities, and concentrations of constituents in wastes managed at the landfill;

- (b) the mobility, stability, and persistence of constituents or their reaction products in the unsaturated earth zone beneath the landfill;
- (c) the detectability of the constituents, and reaction products in the groundwater; and
- (d) the concentrations or values and coefficients of variation of levels of the constituents in the groundwater;
- (3) allow annual sampling of the approved alternate list after the first year based on the following factors:
 - (a) lithology of the aquifer and unsaturated zone:
 - (b) hydraulic conductivity of the aquifer and unsaturated zone;
 - (c) groundwater flow rates;
 - (d) minimum distance between upgradient edge of the landfill and downgradient monitoring well screen (minimum distance of travel); and
 - (e) resource value of the aquifer.

Annual groundwater sampling for the 20.9.9.20 NMAC parameter list, which may include the collection and analysis of background groundwater samples for proposed Wells I, A2, G2, and E2, will commence after the solid waste footprint approaches the area that they are positioned to monitor (i.e., Cell 3.2 and Unit 4). At that time, CRLF may consider making specific demonstrations to refine and reduce the analytical parameter list (to an alternate list). Any future amendments would be based on an evaluation of the groundwater quality results and site-specific hydrogeology. Requests for reduction of frequency or parameters will be submitted to NMED for approval prior to implementation.

B. Regardless of approval by the department of an alternate constituent list under Subsection A of this section, the minimum frequency for testing for all the constituents in Subsection A of 20.9.9.20 NMAC shall be at least once every five years in addition to the required frequencies for the alternate list.

CREC will continue to comply with this requirement.

- C. If the owner or operator determines, as evidenced in the groundwater monitoring data, that the AML has been exceeded for one or more of the constituents or parameters referenced in Subsection A of 20.9.9.20 NMAC or approved alternate constituent list at any monitoring well, the owner or operator:
 - (1) shall, within 14 days of this finding, notify the department of the exceedance and place a notice in the operating record indicating which constituents or values have exceeded approved AMLs; and

- (2) shall submit, within 60 days of the finding, an assessment monitoring plan that meets the requirements of 20.9.9.13 NMAC;
- (3) in addition, the owner or operator may submit, within 60 days after the finding, a demonstration that a source other than a landfill caused the contamination or that the AML exceedance resulted from an error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality; a report documenting this demonstration shall be certified by a qualified groundwater scientist, shall be placed in the operating record, and shall be submitted to the department for specific approval; the department shall issue a specific approval or denial within 90 days approving or denying the demonstration; if the demonstration is denied, the assessment monitoring shall proceed according to the submitted plan within 90 days after the denial.

Groundwater monitoring data, including AML establishment and detection, is discussed in the Groundwater Sampling Plan (Volume V, Section 2). Notification, resampling, verification, and assessment are also discussed in the plan.

20.9.9.12 ASSESSMENT MONITORING LEVELS

- A. Approved background groundwater quality determinations shall be used as the baseline for determination of AMLs.
- B. For all hazardous constituents, AMLs shall be 50 percent of the groundwater protection standard.
- C. If the background concentrations of any hazardous constituents is above 50 percent of the groundwater protection standards, then the background concentration shall be the AML. Any statistically significant increase above the AML shall be an exceedance of the AML for that constituent.
- D. If a groundwater protection standard has not been established for a hazardous constituent, the AML shall be the background concentration or a 95 percent increase over the PQL of the constituent, whichever is greater.
- E. For constituents identified in Subsections B and C of 20.6.2.3103 NMAC, the AMLs shall be 75 percent of the groundwater protection standard, except pH, which shall be within the range of values shown in Subsection B of 20.6.2.3103 NMAC
- F. If the background concentration of any constituent identified in Subsections B and C of 20.6.2.3103 NMAC is above 75 percent of the groundwater protection standard, then the background concentration

- shall be the AML. Any statistically significant increase above the AML shall be an exceedance of the AML for that constituent.
- G. If more than one toxic pollutant identified in 20.6.2.7 NMAC is detected, the toxic pollutant criteria of the commission rules for the combination of constituents shall be used to determine a groundwater standard, using the methods described in Subsection I of 20.9.9.13 NMAC. The AML shall be 50 percent of the groundwater standard, or the background concentration, whichever is greater. If the background concentration is greater than the groundwater standard, then any statistically significant increase above the background concentration shall be an exceedance of the AML. However, this shall apply only in cases where such AMLs are more stringent than the AMLs otherwise determined under this section.

Groundwater quality test results are compared to background concentrations in order to satisfy the requirements of this section. This is discussed in the Groundwater Monitoring Plan (Volume V, Section 2).

20.9.9.13 ASSESSMENT MONITORING

- A. Owners and operators shall conduct assessment monitoring whenever the AML has been exceeded for one or more constituent of Subsection A of 20.9.9.20 NMAC or an alternate constituent list approved under Subsection A of 20.9.9.11 NMAC unless a demonstration has been approved pursuant to Paragraph (3) of Subsection C of 20.9.9.11 NMAC. Assessment monitoring shall be conducted in accordance with an assessment monitoring plan, approved in accordance with Subsection C of 20.9.9.11 NMAC.
- B. Within 90 days of the determination of an exceedance under Subsection M of 20.9.9.10 NMAC, and annually thereafter, the owner or operator shall sample and analyze the groundwater for all constituents and parameters referenced and listed in Subsections B and C of 20.9.9.20 NMAC for each downgradient well. For any constituents detected in the downgradient wells as a result of the complete analysis, a minimum of four independent samples from each well (upgradient downgradient) shall be collected and analyzed to establish background constituents for which background has established. Sampling data and proposed background concentration shall be submitted to the department within 180 days of the determination of an exceedance under Subsection M of 20.9.9.10 NMAC. The upgradient concentrations shall be presumed to be the background unless the owner or operator demonstrates that hydrogeological conditions are such that sampling at other points will provide an indication of background groundwater quality that is as

representative or more representative than that provided at the upgradient wells. The department shall approve background levels for those detected constituents for which background concentrations have not previously been determined within 60 days, or the upgradient concentrations shall be deemed to be the background concentrations.

- C. The department may specifically approve an alternative frequency or subset of wells for repeated sampling for assessment monitoring during the active life and post-closure care period of the facility. In determining an alternative frequency or subset of wells, the department shall consider:
 - (1) lithology of the aquifer and unsaturated zone;
 - (2) hydraulic conductivity of the aquifer and unsaturated zone;
 - (3) groundwater flow rate;
 - (4) minimum distance between the waste management unit boundary and downgradient monitoring well screen;
 - (5) resource value of the aquifer; and
 - (6) nature of any constituents detected.
- D. After obtaining the results from the sampling required by Subsection B of this section, the owner or operator shall:
 - (1) within 14 days, notify the department in writing and document in the operating record any constituents that have been detected:
 - (2) within 90 days and at least semiannually, resample all wells and analyze for all constituents in Subsections A and C of 20.9.9.20 NMAC and any constituents in Subsection B of 20.9.9.20 NMAC or an approved alternate list that have been detected; the department may specify an alternate monitoring frequency in accordance with Subsection A of 20.9.9.11 NMAC, but all constituents in Subsection B of 20.9.9.20 NMAC shall be sampled no less frequently than once every five years during the active life and post-closure care period.
- E. If the concentration of each constituents in Subsection A of 20.9.9.20 NMAC, and each detected constituent of Subsection B of 20.9.9.20 NMAC is determined to be at or below the approved AML after two sampling events, the owner or operator shall notify the department in writing and may return to detection monitoring.
- F. If the concentration of any constituent in 20.9.9.20 NMAC is above the AML, but below the corrective action level (CAL), the owner or operator shall continue assessment monitoring in accordance with this section.
- G. If one or more constituents in 20.9.9.20 NMAC is detected above the CALs in any sampling event, the owner or operator shall:

- (1) within 14 days of this finding, notify the department and all appropriate local government officials in writing;
- (2) install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with this section within six months; the department may approve an extension for this installation and sampling for good cause for up to an additional six months of the finding of the exceedance;
- (3) characterize the nature and extent of the release by installing additional monitoring wells as necessary within one year of the finding of the exceedance;
- (4) notify area residents and land owners in the same manner as described in Subsection B of 20.6.2.4108 NMAC; and
- (5) initiate an assessment of corrective measures as required by 20.9.9.15 NMAC within 90 days; or
- the owner or operator may demonstrate that a source other than the facility caused the contamination, or that the increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality; a report documenting this demonstration shall be certified by a qualified groundwater scientist and submitted to the department for review and approval; if a demonstration is specifically approved by the department, the owner or operator may return to detection monitoring; until a successful demonstration is made, the owner or operator shall comply with 20.9.9.12 20.9.9.20 NMAC, including initiating an assessment of corrective action.
- H. Within 90 days after any AML exceedance, the owner or operator shall identify the groundwater protection standard for each constituent in 20.9.9.20 NMAC that exceeded the AML in the groundwater that was not identified pursuant to Subsection I of 20.9.9.10 NMAC. The owner or operator shall propose for department approval groundwater protection standards for any constituent that exceeded the AML pursuant to Subsection B of this section and Paragraph (2) of Subsection D of this section that does not have an MCL or numeric standard in commission rules. The owner or operator shall make a demonstration that the proposed standard will be protective of the public health and the environment, in accordance with Subsection I of this section.
 - (1) The groundwater protection standards for constituents shall be the more stringent of the MCL promulgated at 40 CFR 141, or the numeric standard established by commission rules.

- (2) For hazardous constituents for which the background concentration is higher than the groundwater protection standard, the background concentration shall be used as the groundwater protection standard.
- I. The secretary may establish an alternative groundwater protection standard for constituents for which MCLs or commission standards have not been established. These groundwater protection standards shall be appropriate health based levels that satisfy the following:
 - (1) the level is derived in a manner consistent with U.S. EPA guidelines for assessing the health risks of environmental pollutants;
 - (2) the level is based on scientifically valid studies conducted in accordance with the Toxic Substances Control Act good laboratory practice standards or equivalent;
 - (3) for carcinogens, the level represents a concentration associated with an excess lifetime cancer risk of more than one cancer per 100,000 exposed persons; and
 - (4) for systemic toxicants, the level represents a concentration to which the human population could be exposed on a daily basis that is likely to be without appreciable risk of deleterious effects during a lifetime; systemic toxicants include toxic chemicals that cause effects other than cancer or mutation.
- J. In establishing groundwater protection standards under Subsection I of this section, the secretary may consider the following:
 - (1) multiple contaminants in the groundwater;
 - (2) exposure threats to sensitive environmental receptors; and
 - (3) other site specific exposure or potential exposure to groundwater.

CRLF will comply with the requirements for assessment monitoring in 20.9.9.13 NMAC if conditions warrant. This is discussed in the Groundwater Monitoring Plan (Volume V, Section 2).

20.9.9.14 CORRECTIVE ACTION LEVELS

- A. Background water quality data approved by the department shall be used as the baseline to determine corrective action levels (CALs).
- B. For all constituents, CALs shall be the groundwater protection standard.
- C. If the background concentrations of any constituent is above what would otherwise be the groundwater protection standards, then the background concentration shall be used as the CAL. Any statistically

- significant increase above the CAL shall be considered an exceedance of the CAL for that constituent.
- D. If more than one potential toxic pollutant, as defined in 20.6.2.7 NMAC, is detected, the potential toxic pollutant criteria of the commission rules for the combination of constituents shall be used to determine the CALs. If the background concentration is greater than the groundwater standard, then any statistically significant increase above the background concentration shall be an exceedance of the CAL. However, this shall apply only in cases where such CALs are more stringent than the CALs otherwise determined under this section.

CRLF will comply with the requirements for determining corrective action levels stipulated in 20.9.9.14 NMAC if the Secretary makes such a determination.

20.9.9.15 ASSESSMENT OF CORRECTIVE MEASURES

- A. Upon finding that any constituent listed in 20.9.9.20 NMAC has exceeded its CAL, the owner or operator shall initiate an assessment of corrective measures. Such an assessment shall be submitted to the department within 180 days of the finding.
- B. The owner or operator shall continue to monitor in accordance with the assessment monitoring program as specified in 20.9.9.13 NMAC.
- C. The assessment shall include a demonstration of:
 - (1) the extent and nature of contamination:
 - (2) the practical capabilities of remedial technologies in achieving compliance with groundwater protection standards and other objectives of the remedy;
 - (3) the availability of treatment or disposal capacity for wastes managed during implementation of the remedy;
 - (4) the desirability of utilizing technologies that are not currently available, but which may offer significant advantages over available technologies in terms of effectiveness, reliability, safety, or ability to achieve remedial objectives;
 - (5) the potential risks to public health, welfare and the environment from exposure to contamination prior to completion of the remedy;
 - (6) the resource value of the aquifer including:
 - (a) current and future uses;
 - (b) proximity and withdrawal rate of users;
 - (c) groundwater quantity and quality;

- (d) the potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;
- (e) the hydrogeologic characteristic of the facility and surrounding land;
- (f) groundwater removal and treatment costs; and
- (g) the cost and availability of alternative water supplies;
- (7) the practicable capability of the owner or operator;
- (8) the performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts and control of exposure to any residual contamination;
- (9) the time required to begin and complete the remedy;
- (10) the costs of remedy implementation;
- (11) the institutional requirements for local permits or other environmental or public health requirements that may substantially affect implementation of the remedy(s);
- (12) the need for interim measures in accordance with provisions of Paragraph (3) of Subsection A of 20.9.9.17 NMAC;
- (13) an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives and evaluation factors of the remedy as described in 20.9.9.16 NMAC; and
- (14) other relevant factors.
- D. The owner or operator shall discuss the results of the corrective measures assessment, prior to the selection of remedy, in a public meeting with interested and affected parties. Notice of the public meeting shall be provided the same as that specified in the Solid Waste Act for permit applications and Paragraph (4) of Subsection G of 20.9.9.13 NMAC. The public notice shall also contain the following information:
 - (1) name, address, and telephone number of the owner or operator and contact person;
 - (2) name and location of the facility;
 - (3) meeting location, date, and time;
 - (4) nature and extent of the plume;
 - (5) brief description of the assessment of corrective measures and the preferred remedy of the owner or operator;

- (6) location where the assessment of corrective measures can be reviewed; and
- (7) information regarding the opportunity to submit oral or written comments at the public meeting, and until 30 days after the public meeting, regarding the assessment and proposed remedy for consideration by the department.
- E. The owner or operator shall make a record of the public meeting and submit it to the department.
- F. The secretary may, based on the initial assessment, order interim measures, in accordance with Paragraph (3) of Subsection A of 20.9.9.17 NMAC.

CRLF will comply with the requirements for assessing corrective measures stipulated in 20.9.9.15 NMAC if the Secretary makes such a determination.

20.9.9.16 SELECTION OF REMEDY

- A. Based on the results of the corrective measures assessment conducted under 20.9.9.15 NMAC, the owner or operator shall, within 120 days following the submission of the assessment of corrective measures, submit a proposed remedy to the department for review and approval that meets the standards listed in this section. The secretary may issue an order approving, approving with conditions, denying the proposed remedy, may require submission of an alternative proposed remedy, or may impose a remedy whether or not proposed by the owner or operator.
- B. Prior to approving or imposing a remedy, the department shall hold a hearing on the remedy proposed by the owner or operator and any draft remedy proposed by the department. The owner or operator shall be required to provide notice of hearing on the proposed remedy or remedies in accordance with Section 74-9-22 NMSA 1978. Hearing procedures shall be in accordance with Permit Procedures Environment Department, 20.1.4 NMAC.
- C. The selected remedy shall:
 - (1) be protective of public health, welfare and the environment;
 - (2) attain the CAL;
 - (3) control the source(s) of releases so as to reduce or eliminate, to the maximum extent practicable, further releases into the environment that may pose a threat to public health, welfare or the environment;

- (4) comply with standards for management of wastes as specified in Subsection C of 20,9,9,17 NMAC.
- D. In its submission of a proposed remedy that meets the standards listed above, the owner or operator shall provide evidence demonstrating:
 - (1) the long and short term effectiveness and protectiveness of the potential remedy, along with the degree of certainty that the remedy will prove successful based on consideration of the following:
 - (a) magnitude of reduction of existing risks;
 - (b) magnitude of residual risks in terms of likelihood of further releases due to waste remaining following implementation of a remedy;
 - (c) the type and degree of long term management required, including monitoring, operation, and maintenance;
 - (d) short term risks that might be posed to the community, workers, or the environment during implementation of such a remedy, including potential threats to public health, welfare and the environment associated with excavation, transportation, and redisposal of wastes;
 - (e) time until full protection is achieved;
 - (f) potential for exposure of humans and environmental receptors to remaining wastes, considering the potential threat to public health, welfare and the environment associated with excavation, transportation, redisposal, or containment:
 - (g) long term reliability of the engineering and institutional controls; and
 - (h) potential need for replacement of the remedy;
 - (2) the effectiveness of the remedy in controlling the source to reduce further releases based on consideration of the following factors:
 - (a) the extent to which containment practices will reduce further releases; and
 - (b) the extent to which treatment technologies may be used;
 - (3) the ease or difficulty of implementing a potential remedy based on consideration of the following factors:
 - (a) degree of difficulty associated with constructing the technology;

- (b) expected operational reliability of the technology;
- (c) need to coordinate with, and obtain necessary approvals and permits from, other agencies;
- (d) availability of necessary equipment and specialists; and
- (e) available capacity and location of needed treatment, storage, and disposal services;
- (4) practicable capability of the owner or operator, including a consideration of the technical and economic capability; and
- (5) the degree to which community concerns are addressed.
- E. The owner or operator shall specify as part of the proposed selected remedy a schedule for initiating and completing remedial activities. Such a schedule shall provide for the initiation of remedial activities within a reasonable period of time, taking into consideration the factors listed in Subsection C of 20.9.9.15 NMAC.
- F. In its submission of a proposed remedy under this section, the owner or operator may seek a determination that remediation of a contaminant to the CAL is not required as follows:
 - (1) if an exceedance of a commission standard would occur, the owner or operator shall seek a variance from the commission standard in accordance with Subsection E or F of 20.6.2.4103 NMAC and incorporate the terms and conditions of any such variance into the selected remedy and corrective action program; or
 - **(2)** the owner or operator may seek a determination from the secretary that remediation of a contaminant to the CAL (for CALs not based on a commission standard) is not required by submitting a written request to the secretary for a determination that attainment of the CAL is technically infeasible; the request shall include: a demonstration of technical or physical impossibility of attaining the CAL using potential remedies; the effectiveness of potential remedies; whether the proposed determination will allow a present or future hazard to public health or the environment; and any other information required by the secretary; in addition, the request shall propose an alternate CAL for the secretary's approval, based on the effectiveness of potential remedies and a site-specific risk assessment; the secretary may approve, approve with terms and conditions, or deny the requested determination.
- G. A determination by the secretary pursuant to Subsection F of this section shall not affect the authority of the secretary to require the owner or operator to undertake source control measures or other

measures that may be necessary to eliminate or minimize releases to the groundwater, to prevent exposure of the groundwater to concentrations that are technically practicable and significantly reduce threats to public health, welfare or the environment.

CRLF will comply with the rules for selecting a remedy and submitting a schedule for remedial activities stipulated in 20.9.9.16 NMAC in the unlikely event that remediation is necessary.

20.9.9.17 IMPLEMENTATION OF A CORRECTIVE ACTION PROGRAM

- A. Based on the schedule approved by the secretary under Subsection F of 20.9.9.16 NMAC for initiation and completion of remedial activities, the owner or operator shall:
 - (1) establish and implement a corrective action groundwater monitoring program that:
 - (a) at a minimum, meets the requirements of an assessment monitoring program under 20.9.9.13 NMAC;
 - (b) will indicate the effectiveness of the corrective action remedy; and
 - (c) demonstrates compliance with the corrective action levels;
 - (2) implement the corrective action remedy approved under 20.9.9.16 NMAC; and
 - (3) take any interim measures necessary to ensure the protection of public health, welfare and the environment; interim measures should, to the greatest extent practicable, be consistent with the objectives of, and contribute to the performance of, any remedy that may be required pursuant to 20.9.9.16 NMAC; the following factors shall be considered in determining whether interim measures are necessary:
 - (a) time required to develop and implement a final remedy;
 - (b) actual or potential exposure of nearby populations or environmental receptors to constituents;
 - (c) actual or potential contamination of drinking water supplies or sensitive ecosystems;
 - (d) further degradation of the groundwater that may occur if remedial action is not initiated expeditiously;
 - (e) weather conditions that may cause constituents to migrate or be released;

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- (f) risks of fire or explosion, or potential for exposure to constituents as a result of an accident or failure of a container or handling system; and
- (g) other situations that may pose threats to public health, welfare and the environment.
- B. If the secretary determines, based on information developed after implementation of the remedy has begun or other information, that compliance with requirements of Subsection C of 20.9.9.16 NMAC are not being achieved through the remedy selected the secretary may issue an order requiring the owner or operator to propose, for consideration by the secretary, other methods or techniques that could practicably achieve compliance with Subsection C of 20.9.9.16 NMAC. An owner or operator proposing an alternative remedy under this subsection shall comply with all factors and criteria of 20.9.9.15-16 NMAC.
- C. All solid wastes that are generated pursuant to this section, or an interim measure required under Paragraph (3) of Subsection A of this section, shall be managed in a manner which:
 - (1) is protective of public health, welfare and the environment; and
 - (2) complies with applicable RCRA requirements, the Solid Waste Act and 20.9.2 20.9.10 NMAC.
- D. Remedies selected pursuant to 20.9.9.16 NMAC shall be considered complete when:
 - (1) the owner or operator complies with the CALs at all points within the plume of contamination for a period of three consecutive years; the secretary may specify an alternative length of time during which the owner or operator shall demonstrate that concentrations of constituents referenced in 20.9.9.20 NMAC have not exceeded CALs provided the time is not less than eight consecutive calendar quarters with one sampling event per quarter, and taking into consideration:
 - (a) extent and concentration of the release(s);
 - (b) behavior characteristics of the hazardous constituents in the groundwater;
 - (c) accuracy of monitoring or modeling techniques, including any seasonal, meteorological, or other environmental variabilities that affect the accuracy; and
 - (d) characteristics of the groundwater; and
 - (2) all actions required to complete the remedy have been satisfied.

- E. Upon completion of the remedy, the owner or operator shall notify the secretary in writing within 14 days with a certification that the remedy has been completed in compliance with the requirements of Subsection D of this section. The certification shall be signed by a qualified groundwater scientist and submitted to the secretary for specific approval.
- F. Upon approval of the certification that the corrective action remedy has been completed in accordance with the requirements under Subsection D of this section, the owner or operator shall be released from the requirements for financial assurance for corrective action under 20.9.10.12 NMAC.
- G. In the event that new information becomes available which indicates a constituent release may pose a threat to human health or welfare or the environment, the department may require continued compliance with 20.9.9.17 NMAC, or further investigation or selection of a remedy as necessary.

CRLF will comply with the requirements stipulated in 20.9.9.17 NMAC for implementing a corrective action program in the unlikely event that the Secretary makes such a determination.

20.9.9.18 APPROVED LABORATORIES

For the purpose of determining compliance with the requirements of 20.9.9 NMAC, within one year of the effective date of this part, analytical results may be considered only if they have been determined by a laboratory acceptable to the department as specified in this section. The department may accept analytical results if they have been determined by:

- A. the scientific laboratory division of the New Mexico department of health or other laboratories certified by the U.S. EPA; a laboratory, other than the scientific laboratory division, shall provide the department documentation of its certification by the U.S. EPA;
- B. a laboratory certified by an official agency of a state and approved by the department; a laboratory shall provide the department documentation of its certification by an official agency of a state for review and approval; or
- C. a laboratory accredited by an approved third party accreditation organization and approved by the department; a third party accreditation organization shall submit a quality assurance project plan to the department for review and approval.

CRLF will employ an approved laboratory to determine analytical results in compliance with 20.9.9.18 NMAC.

20.9.9.19 DEPARTMENT APPROVAL OF BACKGROUND AND TOXIC POLLUTANT STANDARDS

All background levels proposed by the owner or operator are subject to review and approval by the secretary. All ground water protection standards proposed for toxic pollutants listed in 20.6.2.7 NMAC are subject to review and approval by the secretary.

CREC acknowledges this requirement.

20.9.9.20 CONSTITUENTS AND PARAMETERS

Constituents and parameters to be evaluated under the requirements of 20.9.9.1 - 20.9.9.19 NMAC include:

- A. every constituent listed in the following:
 - (1) 40 CFR 258 Appendix I;
 - (2) 20.6.2.3103 NMAC, including the parameter of pH;
- B. all constituents listed in 40 CFR 258 Appendix II, 20.6.2.3103 NMAC, potential toxic pollutants listed in 20.6.2.7 NMAC; and
- C. the following constituents and parameters:
 - (1) calcium (CAS No. 7440-70-2);
 - (2) magnesium (CAS No. 7439-95-4):
 - (3) potassium (CAS No. 7440-09-7);
 - (4) sodium (CAS No. 7440-23-5);
 - (5) ammonia (CAS No. 1331-21-6);
 - (6) bicarbonate alkalinity:
 - (7) carbonate alkalinity;
 - (8) total nitrogen;
 - (9) total kjeldahl nitrogen;
 - (10) total organic carbon;
 - (11) phosphate;
 - (12) specific conductance;
 - (13) temperature;
 - (14) depth to ground water; and
 - (15) ground water elevation.

- D. When additional constituents are added to ground water monitoring requirements through updates to the rules cited, the new constituents shall be added to the routine sampling frequency for a particular landfill. Background quality for the new constituent shall be determined after a sufficient number of samples are collected during routine sampling, unless a new constituent is detected above the AML, in which case the procedure in Subsection E of 20.9.9.10 NMAC shall be used to determine background concentration.
- E. A list of constituents and parameters to be evaluated under the requirements of 20.9.9 NMAC will be made available to the public and posted on the NMED website.

CREC acknowledges this requirement.

CAMINO REAL LANDFILL SUNLAND PARK, NEW MEXICO NMED FACILITY PERMIT NOS. SWM-030738 AND SWM-030738(SP)

APPLICATION FOR PERMIT MODIFICATION AND RENEWAL

VOLUME I – PERMIT APPLICATION TEXT SECTION 10 – FINANCIAL ASSURANCE

Prepared for

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September 2022



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20.9.10.8 APPLICABILITY AND EFFECTIVE DATE

A. The requirements of 20.9.10 NMAC apply to owners and operators of all solid waste facilities and composting and recycling facilities required to provide financial assurance pursuant to Subsection C of 20.9.3.28 NMAC and Subsection E of 20.9.3.29 NMAC, except owners and operators who are the United States, the state of New Mexico, or any agency, department, instrumentality, office, or institution of those governments whose debts and liabilities are the debts and liabilities of the United States or the state of New Mexico. Owners or operators of composting and recycling facilities required to provide financial assurance pursuant to Subsection C of 20.9.3.28 NMAC and Subsection E of 20.9.3.29 NMAC are not required to provide financial assurance for post-closure care, phase I and II assessments or corrective action.

As the owner and operator of an existing solid waste facility, the Camino Real Environmental Center, Inc. (CREC) is required to provide Financial Assurance in compliance with 20.9.10 NMAC for the Camino Real Landfill (CRLF). The Closure/Post-closure (C/PC) cost estimates for the CRLF have been updated to reflect current conditions. Routine financial assurance estimates have been updated to reflect the impacts of inflation and other facility updates annually (i.e., Annual Reporting). Current Financial Assurance documentation is provided in Volume VI, Section 1. Revised C/PC cost estimates corresponding to the updates in this Application for Permit Renewal and Modification are provided as part of the C/PC Plan in Volume II, Section 5. Once the new Permit is granted, CREC will provide updated Financial Assurance corresponding to the new approved C/PC costs.

B. The owner or operator of a category 5 landfill or any solid waste facility modified after the initial effective date of this section shall submit to the department proof of financial assurance prior to the initial receipt of waste.

CRLF is not a category 5 landfill, but CREC is submitting this Application after the initial effective date of this section, and is therefore required to submit proof of Financial Assurance per 20.9.10.8.B NMAC.

C. For municipal landfills operating on or after April 9, 1997, or solid waste facilities permitted after January 30, 1992, the requirements of 20.9.10 NMAC apply. For landfills that have been granted a waiver under 20.9.2.14 NMAC, the requirements of 20.9.10 NMAC apply.

The requirements of 20.9.10 NMAC apply to CRLF. Current Financial Assurance documentation is provided in Volume VI, Section 1. Once the new Permit is granted, CREC will provide updated Financial Assurance corresponding to the approved new C/PC cost estimate included in Volumes II, Section 5 and VI, Section 1.

D. Multiple facilities under one permit shall be treated individually for the purposes of 20.9.10 NMAC. Estimates and assurance must be given for each facility, but multiple facilities may be covered by the same mechanism(s).

Not applicable.

20.9.10.9 FINANCIAL ASSURANCE FOR CLOSURE AND NUISANCE ABATEMENT

- A. The owner or operator of a solid waste facility shall develop a detailed written estimate, in current dollars, of the cost of hiring a third party to close the largest area of the facility ever requiring closure under 20.9.6 NMAC at any time during the active life. This estimated cost should include estimated costs for an independent project manager and contract administration. The estimate may contain a subsidiary schedule showing the amount necessary to perform closure of the facility in each year of the permit life of the facility. The owner or operator shall file a copy of the estimate with the department concurrently with proof of financial assurance and shall notify the department that copies have also been placed in the operating record.
 - (1) For landfills, the cost estimate shall be based upon the cost of closing the largest area of all landfill cells ever requiring a final cover at any time during the active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan. Should the owner or operator submit a subsidiary schedule, the amount guaranteed annually may be in accordance with this schedule upon approval by the secretary. If the owner or operator is found to be utilizing acreage in excess of the amount shown in the subsidiary schedule, final closure on the excess acreage shall be completed within sixty days or the subsidiary schedule and the amount of financial assurance shall be increased to reflect the excess acreage.
 - (2) For all other solid waste facilities, the cost estimate must be a detailed written estimate of the cost of closure to be performed in accordance with the applicable portions of 20.9.6.12 NMAC and also shall include the cost of hiring a third party to clean up and dispose of the largest inventory of material and end product expected at the facility and to clean up and dispose of all fugitive trash, solid waste, or other materials that could potentially create a nuisance at the facility. The cost estimate shall also include costs of an independent project manager and contract administration. For a recycling or composting facility required

to provide financial assurance for nuisance abatement pursuant to Subsection C of 20.9.3.28 NMAC or Subsection E of 20.9.3.29 NMAC, the owner or operator shall develop a detailed written estimate, in current dollars, of the cost of hiring a third party to clean up and dispose of the largest inventory of compostable or recyclable material and end product expected at the facility and to clean up and dispose of all fugitive trash, solid waste, or other materials that could potentially create a nuisance at the facility. The cost estimate shall also include the costs of an independent project manager and contract administration.

- (3) During the active life of the facility, the owner or operator shall annually adjust the closure cost estimate for inflation, installation of final cover material on any areas at final grade, and any other factors affecting closure costs. A copy of the adjusted closure cost estimate shall be placed in the operating record.
- (4) The owner or operator shall increase the amount of financial assurance if changes to the closure plan or facility conditions increase the maximum cost of closure at any time during the remaining active life by over three percent of the current financial assurance amount.
- (5) The owner or operator may reduce the amount of financial assurance for closure if the cost estimate exceeds the maximum cost of closure at any time during the remaining life of the facility, upon specific approval by the secretary. To seek approval, the owner or operator shall provide the adjusted cost estimate and supporting documentation to the department. If approved, the owner or operator may revise any financial assurance documents to reflect the adjusted closure cost estimate, and shall file a duplicate original of each financial assurance document with the department within 15 days following approval, and shall place a copy of the estimate and approval in the operating record.

Financial Assurance (Volume VI, Section 1) provides cost estimates for closure/post-closure and nuisance abatement activities as specified in 20.9.10.9.A(1) NMAC. These cost estimates are based on projected landfill operations, as well as ancillary facilities, during any point in the Permit duration, which includes routine or immediate closure. The C/PC Plan (Volume II, Section 5) outlines the activities associated with site closure. CREC will comply with the provisions of 20.9.10.9.A NMAC for adjusting the estimated closure costs for inflation or changes in operation that modify the closure cost estimate (i.e., Annual Reporting). CREC may perform incremental closure of CRLF cells as they reach final grade in order to keep the open area to a minimum. This will provide CREC with the

flexibility to adjust their Financial Assurance values accordingly with NMED concurrence.

B. The owner or operator of each solid waste facility shall establish a financial assurance mechanism for closure of the facility in compliance with 20.9.10.13 - 20.9.10.23 NMAC. The owner or operator shall provide continuous coverage for closure until released from financial assurance requirements by a written verification issued by the secretary pursuant to Subsection O of 20.9.6.8 NMAC.

Financial Assurance for CRLF is currently funded under a surety bond in compliance with 20.9.10.13 NMAC. A copy of the currently approved surety bond is provided in Volume VI, Section 1. A new surety bond will be acquired and provided to NMED upon approval of the cost estimate (updated to 2021 dollars as part of this Permit Application) included in Volume II, Section 5. CRLF will also provide continuous coverage for closure until released from financial assurance requirements by demonstrating compliance with 20.9.6.1 – 20.9.6.12 NMAC.

20.9.10.10 FINANCIAL ASSURANCE FOR POST-CLOSURE CARE

- A. The owner or operator of a solid waste facility shall develop a detailed written estimate, in current dollars, of the cost of hiring a third party to conduct post-closure care for the facility in compliance with the postclosure care plan developed under 20.9.6 NMAC. The post-closure care cost estimate shall account for the total costs of conducting post-closure care, including annual and periodic costs as described in the postclosure care plan over the entire post-closure care period. This estimated cost should also include estimated costs for an independent project manager and contract administration. The owner or operator may submit a subsidiary schedule showing, for the permit life of the facility, the annual incremental acreage and total acreage needing postclosure care and the corresponding estimate of post-closure costs. The owner or operator shall file a copy of the estimate with the department concurrently with proof of financial assurance and shall notify the department that copies have also been placed in the operating record.
 - (1) The cost estimate for post-closure care shall be based on the most expensive

costs for care during the post-closure period. Should the owner or operator submit a subsidiary schedule as described in Subsection A of this section, the amount guaranteed annually for post-closure care during the permit life of the facility may be in accordance with this schedule upon approval by the secretary. If the owner or operator, upon inspection, is found to have exceeded the acreage shown on the subsidiary schedule, the

- subsidiary schedule and the amount of financial assurance shall be increased within sixty days.
- (2) During the active life of the facility and during the post-closure care period, the owner or operator shall annually adjust the post-closure care estimate for inflation, and any other factors affecting post-closure care costs. The owner or operator shall place a copy of the adjusted estimate in the operating record.
- (3) The owner or operator shall increase the amount of financial assurance if changes in the post-closure care plan or facility conditions increase the maximum cost of post-closure care by over three percent of the current financial assurance amount.
- (4) The owner or operator may reduce the amount of financial assurance if the adjusted cost estimate exceeds the maximum cost of care remaining over the post-closure period, upon specific approval by the secretary. To seek approval, the owner or operator shall provide the reduced post-closure care cost estimate and any justification for the reduced estimate in a request to the department.

Financial Assurance (Volume VI, Section 1) provides updated cost estimates for post-closure activities for CRLF as specified in 20.9.10.10.A NMAC. CREC acknowledges this requirement and will continue to comply with the provisions of 20.9.10.10.A NMAC for adjusting the estimated post-closure care costs.

B. The owner or operator of each solid waste facility shall establish financial assurance for the costs of post-closure care in compliance with 20.9.10.13 - 20.9.10.23 NMAC. An originally signed duplicate of each financial assurance document shall be filed with the department. The owner or operator shall provide continuous coverage for post-closure care until released from financial assurance requirements by a written verification issued by the secretary pursuant to Subsection 0 of 20.9.6.8 NMAC.

Financial assurance for CRLF is funded under a surety bond as described in 20.9.10.13 NMAC (Volume VI, Section 1).

20.9.10.11 FINANCIAL ASSURANCE FOR PHASE I & PHASE II ASSESSMENTS

A. Unless suspended from the requirements of 20.9.9.9 - 20.9.9.13 NMAC in accordance with Subsection C of 20.9.9.8 NMAC, the owner or operator shall develop a detailed written estimate, in current dollars, of the cost of hiring a third party to conduct activities of the phase I (20.9.9.13 NMAC) and phase II (20.9.9.15 - 20.9.9.16 NMAC) assessments. The phase I and phase II assessments cost estimate shall

account for the entire cost of the phase I and phase II assessments for the entire assessment period. This estimated cost should also include estimated costs for an independent project manager and contract administration. The owner or operator shall file a copy of the estimate with the department concurrently with proof of financial assurance and shall notify the department that copies have also been placed in the operating record. The estimate may contain a subsidiary schedule showing the amount necessary to perform a phase I assessment if a release is detected. Should the owner or operator submit a subsidiary schedule, the amount guaranteed annually may be in accordance with this schedule upon approval by the secretary.

- (1) During the permit life of the facility and during the post-closure care period, the owner or operator shall annually adjust the phase I and phase II assessments estimate for inflation and any other factors affecting phase I and phase II assessment costs.
- (2) The owner or operator shall increase the amount of financial assurance for phase I and phase II assessment costs if changes in the phase I and phase II assessments or facility conditions increase the maximum costs of the phase I and phase II assessments by over three percent of the current financial assurance amounts for phase I and phase II costs.
- (3) The owner or operator may reduce the amount of the phase I and phase II financial assurance if the cost estimate exceeds the maximum remaining cost for the phase I and phase II assessments, upon specific approval by the secretary. To seek approval, the owner or operator shall provide a revised cost estimate and supporting documentation to the department. If approved, the owner or operator shall place a copy of the revised cost estimate in the operating record, shall notify the secretary that the estimate has been placed in the operating record and shall file a copy with the department.

Financial Assurance (Volume VI, Section 1) provides cost estimates for Phase I and Phase II Assessment activities as specified in 20.9.10.11 NMAC. CRLF will comply with the provisions of 20.9.10.11 NMAC for adjusting the estimated Phase I and Phase II Assessment costs. CRLF will seek prior approval from NMED for any adjustments to be made to the Phase I and Phase II Assessment costs. If any adjustments are made, they will be recorded in the Facility Operating Record and the Secretary will be notified by the owner and/or operator.

B. Unless suspended from the requirements of 20.9.9.9 - 20.9.9.13 NMAC in accordance with Subsection C of 20.9.9.8 NMAC, the owner or operator of each solid waste facility shall secure financial assurance for the costs of phase I and phase II assessments as required under 20.9.9.13 - 20.9.9.16 NMAC. The owner or operator shall provide

continuous coverage for the phase I and phase II assessments until released from financial assurance requirements by a written verification issued by the secretary pursuant to Subsection O of 20.9.6.8 NMAC.

Financial assurance for CRLF is funded under a surety bond. CRLF will also provide continuous coverage for closure until released from financial assurance requirements.

20.9.10.12 FINANCIAL ASSURANCE FOR CORRECTIVE ACTION

- A. An owner or operator of a facility required to undertake a corrective action program under 20.9.9.13 20.9.9.17 NMAC, or required to guarantee any portion of a corrective action program as a condition of any permit or order by the secretary, shall develop a detailed written estimate, in current dollars, of the cost of hiring a third party to perform the corrective action. The corrective action cost estimate shall account for the total costs of activities as described in the corrective action plan for the entire corrective action period. This estimated cost should also include estimated costs for an independent project manager and contract administration. The owner or operator shall file a copy of the estimate with the department concurrently with proof of financial assurance and shall notify the department that copies have also been placed in the operating record.
 - (1) The owner or operator shall annually adjust the estimate for inflation and any other factors affecting the corrective action costs until the corrective action program is completed.
 - (2) The owner or operator shall increase the amount of financial assurance if changes in the corrective action program or facility conditions increase the maximum costs of corrective action by over three percent of the current financial assurance amounts for corrective action costs.
 - (3) The owner or operator may reduce the amount of the financial assurance if the cost estimate exceeds the maximum remaining cost of corrective action, upon specific approval by the secretary. To seek approval, the owner or operator shall provide the revised cost estimate and supporting documentation to the department. If approved, the owner or operator shall notify the secretary when notice of the amount of financial assurance has been placed in the operating record.

CREC will comply with the requirements of 20.9.10.12.A NMAC should corrective action be recommended after technical evaluation of the CRLF.

B. The owner or operator of each solid waste facility required to implement a corrective action program shall secure financial assurance for the corrective action program in compliance with 20.9.10.13 - 20.9.10.23 NMAC. The owner or operator shall provide continuous coverage for corrective action until released from corrective action financial assurance requirements by a written verification issued by the secretary pursuant to Subsection O of 20.9.6.8 NMAC.

Should a determination be made by NMED that a corrective action plan is needed, CREC will comply with the requirements of 20.9.10.12 NMAC.

20.9.10.13 ALLOWABLE MECHANISMS

- A. The owner or operator shall establish a financial assurance mechanism to ensure that the funds necessary to meet the costs of closure, post-closure care, phase I and phase II assessments, and corrective action for known releases will be available whenever they are needed. The allowed mechanisms are:
 - (1) trust fund;
 - (2) surety bond;
 - (3) irrevocable letter of credit;
 - (4) insurance;
 - (5) risk management pool;
 - (6) local government financial test;
 - (7) local government guarantee;
 - (8) local government reserve fund:
 - (9) corporate financial test; or
 - (10) multiple mechanisms.
- B. Owners or operators shall implement one or more of the financial assurance mechanisms specified in 20.9.10.14 20.9.10.23 NMAC. Each selected mechanism shall be made payable to or name the New Mexico governmental entity or entities that own or operate the facility as the beneficiary of the instrument, but if no New Mexico governmental entity or entities own or operate the facility, then the instrument shall be made payable to or name the New Mexico environment department as the beneficiary.

CRLF provides financial assurance under a surety bond in compliance with 20.9.10.15 NMAC.

20.9.10.15 SURETY BOND GUARANTEEING PAYMENT OR PERFORMANCE

An owner or operator may demonstrate financial assurance for closure, postclosure care, phase I and phase II assessments, or corrective action by obtaining a surety bond guaranteeing payment into a trust fund or standby trust fund established by the owner or operator. The surety bond and standby trust fund shall be worded as in the forms supplied by the department.

- A. In the case of closure, post-closure care, and phase I and phase II assessments, the surety bond shall be effective prior to the initial receipt of waste. In the case of corrective action, the surety bond shall be effective no later than 120 days after the corrective action remedy has been approved by the secretary.
- B. The owner or operator who uses a surety bond to satisfy its financial assurance requirements must also establish a trust fund or standby trust fund. Under the terms of the bond, all payments made thereunder must be deposited by the surety directly into the trust fund or standby trust fund in accordance with instructions from the secretary. A standby trust fund must meet all the requirements of the trust fund specified in 20.9.10.14 NMAC as applicable, except that, until the standby trust fund is funded pursuant to the requirements of this 20.9.10.14 NMAC and the surety agreement, annual payments into the standby trust fund are not required, updating of Schedule A to the trust agreement is not required, annual valuation as required by the trust agreement is not required, and notices of non-payment are not required.
- C. Companies providing surety bonds shall be admitted carriers, licensed carriers, or registered carriers of surplus lines of insurance and authorized in the state of New Mexico to do business and be among those listed as acceptable sureties on federal bonds in circular 570 of the U.S. department of the treasury.
- D. Except as provided in 20.9.10.23 NMAC, the penal sum of the bond shall be in an amount at least equal to the estimated costs to perform the activities assured by the bond.
- E. Under the terms of the bond, the surety shall become liable on the bond obligation when the secretary determines that the owner or operator has failed to perform as guaranteed by the bond.
- F. Payments made under the terms of the bond shall be deposited by the surety directly into the trust fund or standby trust fund in accordance with instructions by the secretary. No payments shall be made from the trust fund or standby trust fund unless approved in writing by the secretary.

G. The bond shall remain in effect until the closure and post-closure care or phase I and phase II assessments or any corrective action for which the bond was acting as financial assurance is certified as complete, or until it is replaced by an alternate financial assurance mechanism.

CRLF provides financial assurance under a surety bond in compliance with this section as demonstrated in Volume VI, Section 1.