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AIR QUALITY BUREAU
NEW SOURCE REVIEW PERMIT
Issued under 20.2.72 NMAC

Certified Mail No: 7017 1450 0001 2818 8267
Return Receipt Requested

NSR Permit No:	7592
Facility Name:	Camino Real Landfill
Permittee Name:	Camino Real Environmental Center, Inc.
Mailing Address:	PO Box 580 Sunland Park, NM 88063
TEMPO/IDEA ID No:	167-PRN20170001
AIRS No:	35-013-0053
Permitting Action:	New Minor Source Review Construction Permit
Source Classification:	Title V Major
Facility Location:	1000 Camino Real Blvd, Sunland Park, NM
County:	Doña Ana
Air Quality Bureau Contact	Cember Hardison
Main AQB Phone No.	(505) 476-4300

Liz Bisbey-Kuehn
Bureau Chief
Air Quality Bureau

March 11, 2019
Date

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PART A FACILITY SPECIFIC REQUIREMENTS

A100 Introduction

A. This is a new minor source construction permit for an existing landfill.

A101 Permit Duration (expiration)

A. The term of this permit is permanent unless withdrawn or cancelled by the Department.

A102 Facility: Description

A. This permit is for a Municipal Solid Waste (MSW) Landfill that receives household trash; commercial trash, for example from schools and restaurants; and Special Wastes that include industrial waste, sludge, and petroleum contaminated soils. The landfill is not authorized to accept any hazardous or medical waste. The landfill is equipped with a Gas Collection Control System that routes landfill gas (LFG) to a flare or to a co-located Landfill Gas to Energy facility. There is also a convenience station for residents and a recycling center.

B. This facility is located at 1000 Camino Real Blvd, Sunland Park, Doña Ana County, New Mexico.

C. Modification and Changes: The Camino Real Landfill added to and improved their Gas Collection and Control System (GCCS) that was required as of November 16, 2018 by New Source Performance Standard (NSPS) WWW. The landfill gas (LFG) is generated by decomposition of the solid waste. This improvement to the GCCS will increase the amount of LFG routed to the Landfill's Utility Flare which will increase the amount of gas combusted and the emission rates from the Flare. LFG will still be sent to the co-located Four Peaks Energy facility, a beneficial-use to-energy plant, that generates commercial electric power. During times when Four Peaks cannot accept any or all of the LFG for power generation, it must be combusted and destroyed by the Landfill's Utility Flare.

The application submitted previously in December 2017, was withdrawn by the Camino Real Landfill Environmental Center with approval by the Air Quality Bureau (AQB) and was replaced with this December 2018 application.

The description of these modification and changes is for information only and not enforceable.

D. Tables 102.A and Table 102.B show the total potential emission rates (PER) from this facility for information only. This is not an enforceable condition and excludes emissions from Minor NSR exempt activities per 20.2.72.202 NMAC.

Table 102.A Total Potential Emission Rate (PER) from the Landfill

Pollutant	Emissions (tpy except NMOC)
Nitrogen Oxides (NOx)	27.1
Carbon Monoxide (CO)	123.7
Volatile Organic Compounds (VOC)	46.2
Sulfur Dioxide (SO_2)	6.2
Particulate Matter[1] (PM)	85.4
Total Suspended Particulates (TSP)	85.4
Particulate Matter 10 microns or less (PM_{10})	24.1
Particulate Matter 2.5 microns or less ($PM_{2.5}$)	2.9
Hydrogen Sulfide (H_2S)	0.6
Non-Methane Organic Hydrocarbons (NMOC) (Uncontrolled)	$\geq$ 50 Mg
Greenhouse Gas (GHG) as CO_2e	92,429.0

1. Particulate matter (PM) is a regulated air pollutant per 20.2.74 NMAC Prevention of Significant Deterioration and 20.2.70 NMAC Title V since it is regulated pursuant to Section 111 of the CAA. No ambient air quality standards apply to PM.
2. No specific requirements apply to TSP, including ambient air quality standards, since the NMAAQS was repealed. TSP is included here since it is still listed as a regulated air pollutant in 20.2.70 NMAC.

Table 102.B Total Potential Emissions Rate (PER) for Hazardous Air Pollutants (HAPs) that exceed 1.0 ton per year

Pollutant	Emissions (tons per year)
Toluene	2.1
Xylenes	1.6
Total HAPs**	24.0

* HAP emissions are already included in the VOC emission total.

** The total HAP emissions may not agree with the sum of individual HAPs because only individual HAPs greater than 1.0 tons per year are listed here.

A103 Facility: Applicable Regulations

A. The permittee shall comply with all applicable sections of the requirements listed in Table 103.A.

Table 103.A Applicable Requirements

Applicable Requirements	Federally Enforceable	Unit No.
20.2.1 NMAC General Provisions	X	Entire Facility
20.2.3 NMAC Ambient Air Quality Standards	X	Entire Facility

Table 103.A Applicable Requirements

Applicable Requirements	Federally Enforceable	Unit No.
20.2.7 NMAC Excess Emissions	X	Entire Facility
20.2.61 NMAC Smoke and Visible Emissions	X	5
20.2.70 NMAC Operating Permits	X	Entire Facility
20.2.71 NMAC Operating Permit Emission Fees	X	Entire Facility
20.2.72 NMAC Construction Permit	X	Entire Facility
20.2.73 NMAC Notice of Intent	X	Entire Facility
20.2.75 NMAC Construction Permit Fees	X	Entire Facility
20.2.77 NMAC New Source Performance Standards	X	Units subject to 40 CFR 60
20.2.82 NMAC Maximum Achievable Control Technology Standards for Source Categories of HAPS	X	Units subject to 40 CFR 63
40 CFR 50 National Ambient Air Quality Standards	X	Entire Facility
40 CFR 60, Subpart A, General Provisions	X	3 and 5
40 CFR 60.18 General Control Device Requirements	X	5
40 CFR 60, Subpart WWW[1]	X	3 and 5
40 CFR 60, Subpart Cf [1] and the State Plan	X	3 and 5
40 CFR 63, Subpart A, General Provisions	X	5
40 CFR 63.6 Compliance with Standards and maintenance requirements	X	3 and 5
40 CFR 63, Subpart AAAA	X	5
40 CFR 68, Chemical Accident Prevention	X	Entire Facility
40 CFR 82, Protection of Stratospheric Ozone	X	Recycling Center

1. When and if EPA approves the State Plan submitted pursuant to 40 CFR 60, Subpart Cf the landfill will be subject to this regulation and will no longer be subject to 40 CFR 60, Subpart WWW.

A104 Facility: Regulated Sources

A. Table 104.A lists the emission units authorized for this facility. Emission units identified as minor NSR exempt equipment (as defined in 20.2.72.202 NMAC) and/or equipment not regulated pursuant to the Act are not included.

Table 104.A Facility Regulated Emissions Units

Unit No.	Source Description	Make and Model	Serial No.	Construction/ Modification Date
1	Paved and Unpaved Roads PM10 and PM2.5 Emissions From refuse vehicles, customer drop off, and Border Patrol Vehicles	not applicable	not applicable	1987
2	Landfill earthmoving fugitive dust emissions. PM10 and PM2.5 emissions from scrapers, road grader, bull dozer, compactor, and wind erosion	not applicable	not applicable	1987
3	Landfill Gas & Gas Collection Control System	not	not	Landfill 1987 &

Table 104.A Facility Regulated Emissions Units

Unit No.	Source Description	Make and Model	Serial No.	Construction/ Modification Date
	(GCCS)	applicable	applicable	modified before July 17, 2014 (GCCS 2001-2009 & modified 2018)
4	Petroleum Contaminated Soil (PCS) Land Farm	not applicable	not applicable	1987
5	Landfill Gas Utility Flare (3000 standard cubic feet per minute (scfm) capacity)	Landfill Gas Specialties, PCF1230I10	1646	2018

A105 Facility: Control Requirements

A. Table 105 lists the regulated air pollutant controls required for this facility. Each emission point is identified by the same number that was assigned to it in the permit application.

Table 105.A Control Requirements

Control Description	Pollutant being controlled	Control for Unit Number(s)[1]
Water or other techniques according to the Dust Control Plan in Section A705	Particulate Matter Emissions from Fugitive Dust (PM10 and PM2.5)	1 and 2
Gas Collection Control System (GCCS)	Landfill gas (NMOCs, which includes VOCs and HAPs)	3
Unit 5 Landfill Gas Utility Flare (98% destruction efficiency)	Landfill gas (NMOCs, which includes VOCs and HAPs)	3
LFG treatment system (60.752(b)(iii)(C) or 60.33f(c)(3) and (4) located at Four Peaks Energy LLC (1,100 cfm of LFG) [2]	Landfill gas (NMOCs which includes VOCs and HAPs)	3

1. Control for unit number refers to a unit number from the Regulated Equipment List

2. The Four Peaks Energy LLC, that includes a LFG treatment system per NSPS WWW/Cf control requirements and routed to two Caterpillar engines and generators (Units E1 and E2), is a separate Landfill Gas to Energy facility that is co-located at the landfill and owned and operated by a different permittee under permit number 3275-M2, or subsequent revisions.

A106 Facility: Emission Limits

A. The following Section lists the emission units and their allowable emission limits. (40 CFR 50; 40 CFR 60, Subparts A, WWW and Cf; 40 CFR 63, Subparts A and AAAA, and 20.2.72.210.A and B.1 NMAC).

Table 106.A Pound per Hour (PPH) and Ton Per Year (TPY) Emission Limits

Unit No.	NO_x[1] pph	NO_x[1] tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO_2 pph	SO_2 tpy	PM_{10} pph	PM_{10} tpy	$PM_{2.5}$ pph	$PM_{2.5}$ tpy
1	-	-	-	-	-	-	-	-	11.70	16.85	1.23	1.79
2	-	-	-	-	-	-	-	-	7.67	6.81	0.74	0.66
3	-	-	-	-	*	30.33	-	-	-	-	-	-
4	-	-	-	-	*	14.50	-	-	-	-	-	-
5	6.19	27.13	28.23	123.67	*	1.4	1.40	6.15	0.09	0.41	0.9	0.41

1. Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO_2

For Title V facilities, the Title V annual fee assessments are based on the sum of allowable tons per year emission limits in Sections A106 and A107.

"-" indicates the application represented emissions of this pollutant are not expected.

"*" indicates hourly emission limits are not appropriate for this operating situation.

To report excess emissions for sources with no pound per hour and/or ton per year emission limits, see condition B110F. B110.F does not apply to emission limits designated with an asterisks (*).

Unit 3 VOC emission limits from landfill gas (LFG) assume that a portion of LFG is not collected by the GCCS. Unit 5 VOC Utility Flare emission limits assume that 100% of the LFG is collected and VOCs are reduced by 98% through flare combustion. Unit 3 and Unit 5 emissions will not occur at the same time.

Unit 5 emission limits assume that no LFG is routed to the LFG to energy facility for treatment and combustion.

B. As of November 16, 2018, the landfill must be equipped with a Gas Collection and Control System (GCCS) per 40 CFR 60.752(b)(2)(iii)(A) in Subpart WWW, and eventually required by Subpart Cf (60.33f(b)). The Utility Flare (Unit 5) located within the landfill is the control mechanism for the Landfill Gas Collection System (Unit 3) except when the landfill gasses are routed to the co-located Landfill Gas to Energy facility, Four Peaks Energy, LLC that will generate commercial electric power using two internal combustion engines.

C. Per 40 CFR 60, Subpart WWW (40 CFR 60.753(d)) the permittee shall operate the GCCS so that methane concentration is less than 500 ppm above background concentrations at the landfill surface. If and when NSPS Cf and the State Plan comes into effect, the permittee shall meet the GCCS requirements at 40 CFR 60, Subpart Cf (60.33f(b)) and the State Plan.

D. The Utility Flare, an open nonassisted flare, shall meet the requirements in 40 CFR 60.18; and shall meet the requirements in 60.752(b)(2)(iii)(A) (NSPS WWW) or in 60.33f(c) (Emissions Guidelines Cf) if and when the State Plan comes into effect. The

Flare is also subject to and shall meet the 20% Opacity limit of 20.2.61 NMAC by meeting smokeless flare requirements in 40 CFR 60.18.

E. Per 40 CFR 63, Subpart AAAA, the permittee shall meet all applicable requirements and shall meet the requirements in 40 CFR 60, Subpart WWW (63.1955(a)(1)).

F. To remain a Title V minor HAP source, facility-wide emissions of hazardous air pollutants (HAPs) shall not exceed 24 tpy of combined HAPs and 9 tpy of any single HAP.

A107 Facility: Allowable Startup, Shutdown, & Maintenance (SSM)

A. Separate allowable SSM emission limits are not required for this facility since the emission rates during start up, shut down, or malfunctions will not exceed emission limits in this permit. The permittee shall maintain records in accordance with Condition B109.C.

A108 Facility: Allowable Operations

A. Allowable Operating Hours for Landfill Operations (Units 1 and 2)

Requirement: To demonstrate compliance with ambient air quality standards and emission limits in Table 106.A, all landfill activities associated with Units 1 and 2 are limited to operate between 5am and 5pm and no more than 3,443 hours per 12-months. Site maintenance such as the application of the daily cover and some site traffic before the landfill is open to the public may extend beyond these operating hours.
Monitoring: The permittee shall monitor the start and end times of Units 1 and 2 operations and the annual operating hours.
Recordkeeping: (1) Daily, the permittee shall record the date and the start and end times of operations in Units 1 and 2. (2) Each month, the permittee shall record the monthly operating hours and the monthly rolling 12-month total operating hours.
Reporting: The permittee shall report in accordance with Section B110.

B. Facility Wide Emission Limits for Hazardous Air Pollutants (Units 3, 4, and 5)

Requirement: The permittee shall limit the total amount of Hazardous Air Pollutants (HAP) from the entire facility to no more than 24 tpy combined HAPs and 9 tpy for any single HAP (Condition A106.E).
Monitoring: The permittee shall meet the monitoring requirements of Conditions A701.A, A701.C, A701.E, and A703.A.

Recordkeeping:

(1) If PCS is accepted, the permittee shall calculate and record the monthly rolling 12-month tpy of combined HAPs and each individual HAP using the records required by A701.A, A701.C, A701.E, and A703.A.
(2) These records shall be kept for at least 12-months from the last date that PCS is accepted.
(3) These A108.B records are not required if PCS is not accepted.

Reporting: The permittee shall report in accordance with Section B110.

A109 Facility: Reporting Schedules

A. The permittee shall report according to the Specific Conditions and General Conditions of this permit.

EQUIPMENT SPECIFIC REQUIREMENTS

A200 Oil and Gas Industry – Does Not Apply

A201 Miscellaneous – Does Not Apply

A300 Construction Industry – Aggregate – Does Not Apply

A400 Construction Industry – Asphalt – Does Not Apply

A500 Construction Industry – Concrete – Does Not Apply

A600 Power Generation Industry – Does Not Apply

SOLID WASTE DISPOSAL (LANDFILLS) INDUSTRY

A700 Solid Waste Disposal (Landfills) Industry

A. This section applies to Solid Waste Landfills.

A701 Landfill Gas (LFG) and LFG Gas Collection and Controls

A. 40 CFR 60, Subparts WWW and Cf (Units 3, 5, and LFG Treatment System)

Requirement:

(1) The permittee shall operate the Gas Collection System and route landfill gases to the Utility Flare or to the Four Peaks Energy Facility Landfill Gas (LFG) treatment system.

NSPS WWW

(2) The permittee shall meet all applicable requirements of 40 CFR 60, Subparts A and WWW, including the 60.752 Standards of Air Emissions from Municipal Solid Waste Landfills.

(3) Specifically, the permittee shall meet
60.752(b)(2)(iii)(A) or (C) emissions standards;
60.753(a) through (g) operational standards for collection and control systems;
60.755 compliance provisions;
60.759 specifications for active collection systems; and
the Section 4 approved Alternatives to the GCCS requirements of Subparts 60.753 through 60.758 attached to this permit.

NSPS Cf

(4) The Camino Real Landfill is a designated facility under 40 CFR 60 Subpart Cf Emissions Guidelines and Compliance Times for Municipal Solid Waste Landfills per 60.31f(a) but must continue to meet the requirements under 40 CFR 60, Subpart WWW until the EPA has finished its reconsideration of NSPS Cf and approved the Cf State Plan.

(5) After the EPA 2017 stay reconsideration and approval of the NSPS Cf State Plan, the permittee shall comply with all applicable requirements of the State Plan and NSPS Cf, including
60.33f(b) emission guidelines and operating requirements for collection systems;
60.33f(c)(1) and (3) control systems;
60.34f(a) through (g) operational standards for collection and control systems;
60.36f compliance provisions including requirements during startup, shutdown, and malfunctions;
60.40f specifications for active collection systems; and
any approved Alternatives of the GCCS Design Plan requirements.

Monitoring:

(1) The permittee shall meet all applicable testing and monitoring requirements for LFG GCCS and controls in 60.754(b) and (e), and 60.756(a) and (c).

(2) When and if NSPS Cf and the State Plan are in effect, the permittee shall meet all applicable testing and monitoring requirements for LFG GCCS and controls in
60.35f(a), (b), and (d);
60.37f(a), (c), and (h); and

60.39f(b)(5)(ii) LFG treatment site specific monitoring plan.

Recordkeeping:

(1) The permittee shall meet all applicable recordkeeping in 60.758 for the GCCS and controls and in Section 4 NSPS Alternatives.
(2) When and if NSPS Cf and the State Plan are in effect, the permittee shall meet all applicable recordkeeping in the State Plan and in 60.39f for GCCS and controls.

Reporting:

(1) The permittee shall meet the reporting requirements in Subpart WWW, including those in 60.757 and in Section 4 NSPS Alternatives (Section A704).
(2) Any changes to the approved NSPS Alternative to Subparts 60.753 through 60.758 shall be submitted to the Permit Program Manager as an administrative permit revision per 20.2.72.219.A NMAC for approval before making changes.
(3) When and if the NSPS Cf and the State Plan are in effect, the permittee shall meet the reporting requirements in 63.38f and in the State Plan.

B. 40 CFR 63, Subparts A and AAAA (Units 3 and 5)

Requirement:

(1) Per 63.1935(a)(3) the owner/operator of the landfill's entire disposal facility (Unit 3), the GCCS, and Utility Flare (Unit 5) are subject to 40 CFR 63.1955(b) and 63.1960 through 63.1980 in Subpart AAAA.
(2) Per 63.1960, the owner/operator shall meet the requirements in Subpart AAAA by meeting the requirements of NSPS WWW.
(3) The permittee shall also meet the operation and maintenance requirements and develop and implement a plan to minimize emissions during startup, shutdown, or malfunction per 40 CFR 63.6(e), in Subpart A.
(4) Once the landfill becomes subject to 40 CFR 60, Subpart Cf, neither 40 CFR 63, Subpart AAAA or 63.6(e) applies, under Subpart Cf, unless 40 CFR 63 is revised to incorporate NSPS Cf requirements.

Monitoring: The permittee shall meet the monitoring required by 40 CFR 60, Subpart WWW, 63.1955(a), 63.1960, and 63.6(e).

Recordkeeping: The permittee shall meet the records required in 40 CFR 60, Subpart WWW, 63.1955(a)(1), and (b), 63.1960. and 63.6(e).

Reporting: The permittee shall report according to 40 CFR 60, Subpart WWW, 63.1955(a)(1), 63.1960, 63.1965, and 63.6(e).

C. Utility Flare Requirements in 40 CFR 60, Subparts A (60.18), WWW, Cf, and the State Plan (Unit 5)

Requirement:

The permittee shall meet all applicable GCCS and Utility Flare (Unit 5) control requirements (per 40 CFR 60, Subpart WWW); and shall meet the collection and control device requirements in 40 CFR 60.18; and in NSPS Cf and the State Plan when and if approved.

60.18 General Control device and work practice requirements: At all times, the Utility Flare (Unit 5) shall meet all applicable requirements at 40 CFR 60.18(c) through (e), specifically

(c)(1) flares shall be designed and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours; and

(c)(2) flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).

Per 40 CFR 60.18 (c)(3), the owner/operator shall meet the heat content specifications in paragraph (c)(3)(ii) and the maximum tip velocity specifications in paragraph (c)(4); or shall meet the requirements in paragraph (c)(3)(i).

Per 40 CFR 601.8(c)(6), flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

NSPS WWW 60.752(b)(2)(ii) and (iii)(A): While subject to 40 CFR 60, Subpart WWW, the permittee shall route all the collected gas to a control system that complies with the requirements in paragraph (b)(2)(iii)(A) which requires routing collected gas to an open flare designed and operated in accordance with §60.18 except as noted in §60.754(e).

NSPS Cf 60.33f (b) and (c)(1): While Subject to 40 CFR 60, Subpart Cf and the State Plan, the permittee shall meet all requirements in the State Plan and shall route all the collected gas to a non-enclosed flare designed and operated in accordance with the parameters established in §60.18 except as noted in §60.37f(d).

Monitoring and Testing:

40 CFR 60.18 General control Device and work practice requirements

(d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor the flare to ensure that it is operated and maintained in conformance with its design.

(f)(1) Method 22 of 40 CFR 60, Appendix A shall be used to determine compliance with the visible emission provisions at 60.18(c)(1). The observation period is 2 hours.

(f)(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(f)(3) The net heating value of the gas being combusted in a flare shall be calculated according to the methods in 40 CFR 60.18.

NSPS WWW 40 CFR 60.754 Test methods and procedures

(e) For the performance test required in §60.752(b)(2)(iii)(A), the net heating value of the combusted landfill gas as determined in §60.18(f)(3) is calculated from the concentration of methane in the landfill gas. The measurement of other organic components, hydrogen, and carbon monoxide does not apply.

Method 3C may be used to determine the landfill gas composition and methane content for calculating the gas' heat content under §60.18(f)(3).

EPA Reference Methods 1 through 4, in 40 CFR 60, Subpart A shall be used to measure the flow rate within the landfill gas collection and control system piping.

NSPS WWW 40 CFR 60.756(c)

While Subject to NSPS WWW, for the Flare the permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

(c)(1) a heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame;

(c)(2) a device that records flow to or bypass of the flare; and

(c)(2)(i) a gas flow rate measuring device that records the flow to the control device at least every 15 minutes.

NSPS Cf 60.37f(c)

While Subject to NSPS Cf, for the Flare the permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

(c)(1) a heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame;

(c)(2) a device that records flow to the flare and bypass of the flare; and

(c)(2)(i) a gas flow rate measuring device that records the flow to the control device at least every 15 minutes.

(c)(2)(ii) The owner/operator shall secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

The permittee shall also meet any monitoring requirements in the NSPS Cf State Plan if and when approved.

Recordkeeping:

60.18 General control device and work practice requirements:

The permittee shall keep records of the data monitored during any performance test and the monitoring required pursuant to 40 CFR 60.18.

NSPS WWW 60.758(b)(4):
While subject to NSPS WWW, where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.752(b)(2)(iii)(A) through use of an open flare, the permittee shall keep records of:

the flare type (i.e., steam-assisted, air-assisted, or nonassisted),
all visible emission readings,
heat content determination,
flow rate or bypass flow rate measurements, and
exit velocity determinations made during the performance test as specified in §60.18.
Continuous records shall be kept of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

NSPS Cf 60.39f(b)(4) and (c)(4):
While Subject to NSPS Cf, except as provided in §60.38f(d)(2), each owner or operator of a controlled landfill must keep up-to-date, readily accessible records for the life of the control system equipment as follows:

the flare type (i.e., steam-assisted, air-assisted, or non-assisted),
all visible emission readings,
the heat content determination,
the flow rate or bypass flow rate measurements, and
the exit velocity determinations made during the performance test as specified in §60.18.
Continuous records shall be kept of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame or the flare flame is absent.

While subject to NSPS Cf (c)(4) Each owner or operator seeking to comply with the provisions of this subpart by use of a non-enclosed flare must keep up-to-date, readily accessible continuous records as follows:

the flame or flare pilot flame monitoring specified under §60.37f(c), and
up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

The permittee shall also meet the applicable records requirements in the NSPS Cf State Plan if and when approved.

Reporting:
40 CFR 60.18 the permittee shall submit the test results pursuant to 40 CFR 60.18 and 40 CFR 60.757.
The permittee shall also meet the following reporting requirements:

NSPS WWW 60.757(d), (e), and (f);
NSPS Cf 60.38f and 60.39f(c);
applicable NSPS Cf State Plan reporting requirements; and
the reporting requirements in Section B111 of this permit.

D. Compliance with Emission Limits (Unit 5)

Requirement:
The permittee shall demonstrate compliance with the Utility Flare (Unit 5) emission limits in Section A106 by meeting the requirements at 40 CFR 60.18; 40 CFR 60, Subpart WWW; and 40 CFR 60, Subpart Cf and the State Plan.

Monitoring:
The permittee shall meet the testing and monitoring requirements for the Utility Flare found in 40 CFR 60.18; 40 CFR 60, Subpart WWW; and 40 CFR 60, Subpart Cf and the State Plan.

Recordkeeping:
The permittee shall keep records required by 40 CFR 60.18; 40 CFR 60, Subpart WWW; and 40 CFR 60, Subpart Cf and the State Plan.

Reporting: The permittee shall report in accordance with Section B110.

E. Compliance with Emission Limits (Unit 3)

Requirement:
The permittee shall demonstrate compliance with the LFG (Unit 3) emission limits in Section A106 by meeting the requirements in the applicable NSPS (40 CFR 60, Subparts WWW or Cf and the State Plan), and 40 CFR 63, Subpart AAAA (as applicable once 40 CFR 60, Subpart Cf is finalized).

Monitoring:

(1) The permittee shall monitor the operation of the GCCS, controls, and bypass valves pursuant to the applicable NSPS.
(2) The permittee shall also monitor the quantity of HAPs and VOCs (NMOC) anytime LFG is not routed to the GCCS controls as required by the applicable NSPS or is vented directly from a bypass valve.

Recordkeeping:

(1) Anytime one of the following events occurs the permittee shall keep the records required by this condition in addition to the records required by the applicable NSPS:
    (a) an indication that LFG is not being routed to a GCCS control as required by the applicable NSPS, and/or
    (b) anytime LFG is vented from a bypass valve.
(2) The following records shall be kept when an event, as listed in this condition, occurs:
    (a) the date, time, and a description of the event; and
    (b) if LFG was vented directly to the atmosphere through a bypass valve or not routed to a control as required by the applicable NSPS.
(3) If it is determined that an event, as listed in this condition, occurs results in LFG being emitted directly to the atmosphere, the permittee shall calculate and record a monthly rolling 12-month tpy total of VOCs and HAPs.

Reporting: The permittee shall meet the Title V Permit reporting requirements; reports required by 40 CFR 60, Subparts WWW, Cf and the State Plan; 40 CFR 63, AAAA (as applicable); and Section B110.

A702 Fugitive Dust – Landfill and Roads

A. Paved and Unpaved Roads Fugitive Dust Emissions - (Unit 1)

Requirement: To demonstrate compliance with emission limits in Table 106.A, the permittee shall follow the fugitive dust control measures for the paved and unpaved roads at the landfill found in Sections III.A and B; IV.A, B, C, and I; and V.B.2 and 3 of the Dust Control Plan in Section A705.
Monitoring: The permittee shall visually monitor for visible fugitive dust from roads and cell operations during activities and during high wind events.
Recordkeeping: Daily records shall be kept of the frequency and quantity of the application of fugitive dust controls on the landfill roads.
Reporting: The permittee shall report in accordance with Section B110.

B. Landfill Cell Operations - Fugitive Dust Emissions (Unit 2)

Requirement: To demonstrate compliance with emission limits in Table 106.A, the permittee shall follow Sections III; IV.C, D, E, F, G, and H; and V in the Dust Control Plan in Section A705.
Monitoring: The permittee shall monitor for fugitive dust emissions during operations and during high wind events.
Recordkeeping: (1) Daily records shall be kept of the frequency and quantity of the application of fugitive dust controls on the landfill roads and cell operations. (2) During cell construction, records shall be kept of the size of a new cell during construction, the cell number, the construction start date, and date when the cell is covered with the composite liner. (3) Records shall be kept of the time and dates of wind speeds during high wind events and date, time, and activities that are restricted during each high wind event.
Reporting: The permittee shall report according to Section B111.

A703 Petroleum Contaminated Soils Landfill

A. Petroleum Contaminated Soils (PCS) Land Farm Restrictions (Unit 4)

Requirement: (1) The permittee shall ensure that HAP emissions from the PCS Land Farm, combined with other HAP sources at the landfill, do not exceed 24 tpy of total HAPs and 9 tpy for a single HAP. (2) The PCS received by or generated at the landfill shall be accompanied with a laboratory analysis indicating the total petroleum hydrocarbon (TPH – Diesel, Motor Oil, and Gasoline Range Organics); and Benzene, Toluene, Ethyl Benzene, and Xylene (BTEX).
Monitoring:

(1) The permittee shall monitor the total tons of PCS delivered to the landfill and the associated concentration of TPH and BTEX based on the analytical analysis for each PCS Profile.
(2) Profile is defined as an identification sheet for one specific project from a generator delivering PCS to the landfill or from PCS generated at the landfill.
(3) Each PCS profile may involve multiple truck loads or shipments.

Recordkeeping:

When and if PCS is received at the landfill, the permittee shall keep the following records.

(1) Records of the total amount in cubic feet or tons of PCS received and stored at the landfill and each Profile's TPH and BTEX concentrations in ppm or Mg/kg shall be kept.
(2) The permittee shall maintain the scale records documenting the amount of PCS received and stored at the landfill and the laboratory analytical results documenting the HAP concentrations of each PCS Profile. The permittee shall also maintain records of the following HAP emissions calculations.
(3) The permittee shall calculate and record a monthly rolling 12-month total of each HAP from PCS using the following equation:

MHAPs = CHAPs x MPCS x VLF x 1x106, where
MHAPs = mass of HAPs emitted per year from PCS land farm (tons per year)
CHAPs = estimated concentration of HAPs in PCS accepted for land farm treatment (ppm or Mg/kg)
MPCS = mass of PCS accepted for treatment (tons)
VLF = 100% of HAPs volatized by land farm treatment = 1

(4) Calculations for individual BTEX emissions shall be based on the highest concentration of the individual BTEX HAP as determined from the analytical test results associated with each PCS profile.
(5) The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

4 REQUEST FOR NSPS FLEXIBILITIES

4.1 Introduction

Per 40 CFR §60.752(b)(2)(i)(B), the design plan shall include proposed alternatives to the prescriptive monitoring, record keeping and reporting requirements in the NSPS. This section addresses exemptions/alternatives proposed in this submittal.

Operational Standards

1) Section 60.753(a) Operational Standards for Collection and Control Systems: *"Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:*

- *5 years or more if active; or*
- *2 years or more if closed or at final grade."*

In some cases CREC may need or wish to install wells at an accelerated pace compared to NSPS installation requirements. Since these wells will have been installed in advance of NSPS requirements, CREC proposes that surface scans will not be performed over such areas and that the monitoring results from such wells will not be subject to NSPS requirements or reported with other NSPS data for wells that were installed in areas where waste has been in place for less than 5 years (active areas) or 2 years (closed areas or areas at final grade) until these time periods have expired.

It should be noted, however, that although the monitoring data for such wells will not be subject to NSPS requirements or reported with other NSPS data, each such well will still be monitored for pressure, temperature, and oxygen content on a minimum monthly basis. These monitoring readings will be recorded and available for NMED inspection on-site for a minimum of 5 years to match the records retention requirements for typical NSPS wellfield monitoring data.

2) Section 60.753(b)(3) Operational Standards for Collection and Control Systems (Formalization of the process to decommission or abandon a well): *"A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows."*

NSPS rules contain no special procedures for decommissioning a well. This request for alternative procedures would formalize the process to be used for decommissioning a well subject to NSPS requirements.

It should be noted that decommissioning is not meant to be used in the same way as the term "abandonment" here. A decommissioned well is simply shut down for a period of time (by fully closing the well valve or by disconnecting the well from the collection lateral) but is maintained for potential future use. This might be necessary if, for example, a well's temperature becomes elevated and it is turned off as a remedial method for a period of time, or if a well is shut down based on poor gas quality until the gas is able to recharge sufficiently.

With this revision, when a well needs to be decommissioned for any reason, this reason will be noted

in the monthly monitoring report. The well will, however, still be monitored on a monthly basis per NSPS requirements. Although the pressure may be positive for a decommissioned well, the temperature and oxygen levels must still continue to meet and be monitored according to NSPS rules and requirements. In many cases, the well may be temporarily opened during a monitoring event or left open only very slightly to relieve pressure buildup. Additionally, quarterly surface scans will still be conducted as if the well was still active to make sure fugitive landfill gas emissions are still controlled.

If a well remains decommissioned for six consecutive months, then a notification to NMED will be included in the first semi-annual NSPS report after this six-month consecutive period of decommissioning. This notification will describe whether the well is proposed for abandonment or will provide a plan as to how this well will eventually be brought back online. This notification will allow NMED the option to respond to CREC with a request for further follow-up or information requests, etc.

Unless CREC requests otherwise, normal procedure will be to re-drill any abandoned well within 6 months. As with a decommissioned well, the area around an abandoned well will still be subject to surface scan requirements.

3) Section 60.753(c)(2) Operational Standards for Collection and Control Systems: *"...oxygen shall be determined by an oxygen meter using Method 3A or 3C..."*

This item is simply included to clarify that Method 3C will be used, which enables the use of a gas chromatograph (GC) or a portable GEM-type analytical meter to measure oxygen concentrations. The proposed method is the typical procedure for landfills throughout the country.

4) Section 60753(d) Operational Standards for Collection and Control Systems: *"...A surface monitoring design plan shall be developed...Areas with steep slopes or other dangerous areas may be excluded from surface testing."*

It is proposed to exclude dangerous areas such as active roads, the active working face area, truck traffic areas, and slopes steeper than 4H:1V and/or dangerous slopes due to surface features/conditions from surface testing as set forth here and in the surface monitoring section of this plan. Any such areas will be noted on a map including the reason that the area was considered dangerous during the monitoring event. Such information will be submitted with the quarterly surface monitoring report which will be included in the semi-annual NSPS reports that will be transmitted to NMED.

Compliance Provisions

5) Section 60.755(a)(3) Compliance Provisions: *"…shall measure gauge pressure in the gas collection header at each individual well, monthly."*

This would seem to indicate that the pressure is to be measured on the header side of the wellhead valve instead of the well side of the wellhead valve (landfill side). Other sections of the NSPS rule simply state "at the wellhead." In order to prevent confusion between regulators and operators, the

facility proposes to measure each well's gauge pressure on the landfill side. This represents a more conservative approach.

6) Section 60.755(a)(3) and (5) Compliance Provisions (Formalization of the process to request an alternate timeline for a well monitoring exceedance): *"…action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under §60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement…" and "…action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement…"*

NSPS rules require that, if a well shows an exceedance in pressure, temperature, or oxygen requirements, that action must be taken within 5 days and that re-monitoring must show that within 15 days that the well is within compliance. If compliance is not achieved within 15 days, a new well (or construction repair) must be in place within 120 days; however, some exceedances cannot be remedied within the allowable 15-day timeframe or new construction completed within the 120-day timeframe. An example of this would be if a lateral needs repair and pipe must be ordered, or if a well becomes watered-in and must be pumped down over a number of days. Weather or drilling equipment availability may also be a limiting factor; especially during the winter months. Table 4 below provides general procedures that will be followed when an initial exceedance of the NSPS-required parameters for oxygen, pressure, or temperature is measured. These procedures are listed for each parameter in the order that they might typically be implemented.

Table 4
General Actions to be Taken for Landfill Gas Well Exceedances

NSPS Parameter	General Response to Exceedance
Oxygen	• Reduce vacuum to well to prevent over-pulling which may introduce air. • Inspect well, piping, and surrounding landfill surface for damage (e.g.. broken hose or surface cracks) that could introduce air into the well and repair. • Evaluate internal well condition using measuring tape or water level meter to determine if casing is pinched or kinked or if wellscreen is watered-in due to elevated liquid level. If pinched or kinked and repair is impracticable, then abandonment of well may be necessary. Elevated liquid levels can be addressed by pumping fluids out of the well. • If high oxygen persists after implementing above actions, then decommission well to see if production recovers or high oxygen trend can be reversed.
Pressure	• Increase vacuum to well in an attempt to achieve negative pressure and allow for more landfill gas collection. • Measure lateral vacuum to ensure that adequate vacuum is available to well and confirm that lateral pipe is not watered-in or damaged. If blockage of lateral pipe is determined, then schedule and implement repair or replacement of lateral. • If no blockage is found check to make sure piping and blowers are not undersized. This can be done by tracking the vacuum throughout the wellfield and looking for trends as portions of the wellfield become more remote.

Table 4
General Actions to be Taken for Landfill Gas Well Exceedances

NSPS Parameter	General Response to Exceedance
Temperature	• Reduce vacuum to well to prevent over-pulling which may introduce air and increase temperature. • Inspect well and surrounding landfill surface for damage (e.g., broken hose or surface cracks) that could introduce air into the well and repair. • If high temperature persists decommission well to see if temperature drops. • Evaluate potential for a fire. If data in addition to temperature indicates the likelihood of fire, notify NMED promptly and decommission well while additional steps are assessed. • Some wells operate at higher temperatures with no evidence of a fire. If this appears to be the case after a thorough investigation, consider preparing a high operating value (HOV) request for that well to submit to NMED. This request should include historical monitoring data along with the results from all investigations of possible fire-related causes.

When an extension to the aforementioned 120-day timeframe is necessary, a notification to the file for an alternate timeline will be prepared. Each notification will contain a detailed explanation of the proposed alternate timeline with a plan of action and dates for anticipated final action. Each notification will be prepared for the landfill files at least 30 days prior to the end of the 120-day timeframe. Each notification will be provided to NMED in the first semi-annual NSPS report after the time for which the notification was prepared. If this procedure is followed, no deviation or exceedance will have occurred if the 15-day or 120-day timeframe (whichever is requested) is not met. This procedure will eliminate the need for interim paperwork and frequent NMED approval for individual wells. Instead, NMED may review the notification and details provided (as well as any follow-up data provided) with the semi-annual reports and respond to CREC with further follow-up requirements, information requests, etc.

It should be noted that throughout any requested alternate timeline period, monthly well monitoring and recording of these values will continue. However, once an alternate timeline is filed because of a specific parameter, the 5-day action period and 15-day re-monitoring for that parameter would not be required for subsequent months until the end of the alternate timeframe request.

7) Section 60.755(a)(4) Compliance Provisions: *"Owners or operators are not required to expand the system as required in paragraph (a)(3) of this section during the first 180 days after gas collection system startup."*

The GCCS shown in this design plan will be built in phases. The installation of additional wells can cause challenges with the balancing of the entire system and therefore, additional time may be needed to achieve proper operating conditions. It is proposed to expand this condition to include the installation of new wells or the replacement of existing wells. During this 180-day time period, these new wells would be exempt from system expansion required as a result of exceedances of the pressure, temperature, or oxygen concentrations recorded during monthly monitoring.

8) Section 60.755(a)(5) Compliance Provisions: *"For the purposes of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in §60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days."*

Since this provision in the regulations allows the site to monitor for oxygen or nitrogen, and since most monitoring equipment to be used measures oxygen directly (as opposed to nitrogen which is usually assumed from a balance gas total) the landfill will measure oxygen, not nitrogen, for compliance with this provision unless otherwise indicated.

9) Section 60.755(c)(4)(v) Compliance Provisions (Formalization of the process to request an alternate remedy for a surface scan exceedance): *"For any location where monitored methane concentrations equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval."*

NSPS rules require that, if a surface scan exceedance occurs three times within a quarter, that a new well or collection device (or other constructed gas system improvement) must be in place within 120 days; however, in some cases the construction cannot be completed in this timeframe or other methods may be used in an attempt to mitigate the exceedance (i.e. upgrading the blower).

When an extension to the 120-day NSPS timeframe is necessary or another alternative remedy proposed, a notification to the file for alternate remedy and installation timeline will be prepared. Each notification will be prepared for the landfill files by no later than 30 days prior to the end of the 120-day period. Each notification will be provided to NMED in the first semi-annual NSPS report after the time for which the notification was prepared. Each notification will contain a detailed explanation of the proposed alternate remedy and/or timeline, with a plan of action and dates for anticipated final action. If this procedure is followed, no deviation or exceedance will have occurred if the 120-day timeframe is not met.

It should be noted that throughout any requested remedy period, quarterly surface scans will continue and the location for which the exceedance occurred will be included in the scan. However, once an alternate remedy is filed, that particular location will not require 10 or 30-day re-monitoring for any exceedances during quarterly surface scans during the alternate remedy period.

Reporting Requirements

10) Section 60.757(f)(3) Reporting Requirements: *"Description and duration of all periods when the control device was not operating for a period exceeding one hour and length of time the control device was not operating."*

This item is actually a clarification based upon experience from submitting numerous NSPS annual and semi-annual reports. The provision listed here is separate from 60.757(f)(4) which requires reporting of all periods when the collection system was not operating in excess of 5 days. It should

be noted that these two rules differ in that one references the control device and the other references the collection system. These NSPS provisions were purposely written this way because 60.757(f)(3) is meant to refer *only* to cases where the control device is down but the overall collection system is still operating. Therefore, this request is included here to clarify that, for NSPS reporting purposes, it will be assumed that this reporting requirement is for the case where the collection system is operating but the control device is not operating such that uncombusted landfill gas is being vented for a period in excess of 1 hour.

Miscellaneous

11) Individual Well Monitoring in Dangerous Areas

NSPS regulations do not address individual well monitoring which takes place in potentially dangerous areas. Daily conditions exist, especially for active landfills, which pose safety concerns for field technicians such as waste filling/compacting operations, cap construction operations, raised wells, and seasonal weather-related dangers, etc. Because the health and safety of personnel must be considered tantamount, the facility must be given wide latitude in making dangerous area determinations.

Therefore, the facility proposes to temporarily exclude any dangerous areas from individual well monitoring. Such unsafe areas will be documented by site personnel in the wellfield monitoring records as reasons for not monitoring individual wells. It is proposed that the facility be allowed up to 30 days from cessation of filling activity or other dangerous activity in a designated area to bring new or disconnected/decommissioned infrastructure back online. If additional time is needed the well will be decommissioned or abandoned per the procedures set forth in this plan until normal operation can proceed.

12) Optional Collectors for Odor Control

Frequently, landfill gas collection points are added within landfill features such as leachate cleanout risers, vaults, or horizontal trenches for safety or odor control since landfill gas can collect in these features. Examples of this at the Camino Real Landfill are current GCCS collectors on leachate cleanout risers and a leachate manhole. Although such collectors are not exempt from NSPS requirements if they collect gas from cells subject to collection requirements, this flexibility will allow alternate oxygen concentration limits of up to 21 percent and alternate pressure limits of up to 1 inches of water column positive pressure as explained below.

These limits will allow such alternate points to continue to be included in the collection system so that gasses can be extracted from them, while not inhibiting their use, since their design and the gas quality in such points cannot often meet NSPS-required limits (which were designed for landfill gas wells installed in the waste mass). These higher proposed levels of oxygen do not pose a subsurface oxidation risk at the landfill since the collection points are not directly in waste, and since gas quality may not be high. Also, regarding pressure requirements at these points, the proposed limit would prevent overpulling at these points, which could cause air to be pulled into these features, or cause gas quality to suffer.

ATTACHMENT 7.11

DUST CONTROL PLAN

(UPDATED FEBRUARY 2019)

Camino Real Landfill

I. BACKGROUND

Since 1988, the Camino Real Landfill (CRLF) has implemented a number of dust control measures to mitigate potential fugitive dust emissions during typical landfill operations. In addition, CRLF continues to evaluate the effectiveness of alternative dust control measures (surfactants, wind fences, soil amendments, etc.) as new industry technologies and approaches are developed and tested. Many of the dust control measures described below were implemented consistent with the landfill's Plan of Operations, which were an integral component of the approved Solid Waste Application for Permit Renewal (July 2008).

II. SUMMARY OF DUST CONTROL MEASURES

The dust control methods outlined in this Plan are indicative of the control measures currently employed at the site, as well as those planned for the duration of the next 5-year Title V Permit term. Using a variety proven techniques, CRLF has mitigated the emission of fugitive dust by implementing a combination of control measures:

1) Watering – Potential fugitive dust emissions are controlled via water application to the following areas of the landfill:
    - Disposal Route
    - Access Roads
    - Landfill Office Parking Lot
    - Maintenance Compound
    - Active Disposal Area Fill Face Under High Wind Conditions
    - Daily Cover Soil Borrow Areas

    Roads receiving the most traffic (e.g., the disposal route, parking lots) receive more frequent water applications. Landfill access roads and daily cover soil borrow areas are also watered.
2) Chemical Surfactants – On a periodic basis, dust palliatives or surfactants are used as a supplement to the water in order to promote the formation of a surficial crust resistant to erosion.
3) Racetrack Waste – Race track waste material supplied by the Sunland Park Race Track has proven to be more resistant to wind erosion than the native silty sands/sandy silts. The race track waste is a combination of straw and decomposing horse manure, and contains larger

particle sizes, moisture, and organic content than the native on-site material. Consequently, this material can be used to supplement the intermediate cover overlying waste deposits.

4) Rock Armoring – Rock was previously deployed over approximately 6 acres of undisturbed portions of the Closed Area. The rock, whose average size is 5 – 6 inches, resists both wind and water erosion. While the rock remains in place, much of it has been covered by wind-blown soil as a result of the activities associated with the installation of the site's gas collection and control system (GCCS) in 1999 and 2000. Racetrack waste was applied to the area once covered by rock armoring.

5) Vegetative Test Plots – Commencing in 1997, the site initiated a study to evaluate the effectiveness of stabilizing closed areas by planting a variety of plant species indigenous to the area. Since issuance of the first Title V Permit in April 2001, some of the plant growth was temporarily impacted by the excavation and drilling activities associated with the installation of the GCCS. Reseeding of select portions of the Closed Area commenced in August 2002. Although the vegetation did not become self-sustaining, this continues to be an option that may be used as necessary.

6) Limits on Vehicle Speed – Signs posted along the disposal route and access roads limit vehicle speeds to 15 miles per hour.

7) Site Access Restrictions – Access to the site continues to be controlled by a single point of ingress/egress. Vehicles entering the site can only gain authorized access by first checking in at the Gate House, and entering past the security gate. The remainder of the site is protected by fencing, topography, and "No Trespassing" signs.

8) Natural Topography and Engineered Development – The landfill's topographic setting within a low point surrounded by mesa walls on three sides continues to create favorable conditions for limiting wind erosion. Current landfilling activities are conducted to the south of the Closed Area, which acts as a wind barrier to potential dust generation by these activities. Temporary wind fencing has been deployed at selected downwind locations to trap particulates before they leave the site.

9) Paving – In 2004, Camino Real paved the 1-mile-long public access road from McNutt Road to the landfill entrance. Additional paving was applied to the Landfill Office parking lot, Gate House area, and the intersection of the facility's unpaved access roads and disposal route. Approximately 400 feet of paved road was constructed from the Gate House (i.e., site entrance) to the Landfill Office, and approximately 2,800 ft^2 of the Landfill Office parking lot was also paved. In addition, approximately 140 feet of the disposal route south of the site entrance and approximately 350 feet of access road east of the Gate House were paved.

The following discussion provides additional detail on dust control measures being implemented at the site. The discussion is generally formatted after the Maricopa County, Arizona Rule 310 Plan, which creates some repetition.

III. ACCESS RESTRICTIONS

A. Restricted Access

No Trespassing signs in Spanish and English have been in-place since 1988 leading up to the landfill entrance. CRLF is secured on the perimeters with both chain link fencing and 5-strand barbed wire where natural barriers do not preclude accessibility. The US Border Patrol maintains active surveillance of the perimeter 24 hours per day, 365 days per year. Site ingress/egress is controlled by both vertical and horizontal automatic swing-arm gates operated by an attendant at the Gate House during operating hours. After hours, site ingress/egress may be controlled by a gate attendant and/or a security keypad. **Figure 5.1**, **Section 5** shows the location of existing fencing, gates, and other access control measure. In the spring of 2008, a fence was completed by the Federal Government along the U.S./Mexico border. The fence is constructed of 21-foot steel sections which extend 15 feet above grade and 6 feet below grade. A mesh fence on steel posts is used in flat areas and sheet pile sections are used to traverse steep grades.

B. Physical Barriers That Limit Unauthorized Access

The landfill currently uses the following physical barriers to limit unauthorized access:

- Five-strand wire fencing prevents access from the Gate House to the former U.S. Border Patrol staging area (i.e., Stable) along the north property line.
- From the former Border Patrol staging area to the northern property boundary, elevated railroad tracks and natural barriers (e.g., steep hillsides, sand dunes) prevent vehicular access to the site and limit pedestrian traffic.
- Access to the remaining perimeter of the northern boundary is controlled by the elevated railroad tracks and a constructed elevated earthern berm approximately 2,800 feet in length.
- Five-strand barbed wire fencing prevents access to the western boundary of the landfill.
- Along the southern property boundary (the Mexico border), a fence is constructed of 21-foot steel sections which extend 15 feet above grade and 6 feet below grade.
- Access is prevented along the eastern property boundary by 5-strand wire fencing and steep canyon walls.
- Access through the single authorized entrance to the landfill is controlled by automated gates operated by landfill staff during operational hours.

IV. CONTROL OF EMISSIONS

A. Unpaved Parking Lots

Potential fugitive dust emissions from unpaved portions of parking lots are controlled by a combination of applying gravel as a base course, and the routine application of water by water wagons. When necessary, dust palliatives or chemical surfactants (e.g., Road Boss® and magnesium or calcium chloride) are used as a supplement to the water in order to promote the formation of a surficial crust resistant to erosion.

B. Unpaved Disposal Route/Access Roads

1.0 Vehicle Speed Limitations

Signs are posted along the disposal route and access roads that limit all vehicle speeds to 15 miles per hour.

2.0 Water Application

Potential fugitive dust emissions from landfill roads and disposal operations are controlled by application of water by the following equipment:

- A water wagon (8,000-gallon capacity) serves as the site's primary water truck and is used on a daily basis when the landfill is operational. The primary water truck applies water to landfill roads (e.g., disposal route and access roads), parking lot areas (e.g., Landfill Office and Maintenance Compound), and disposal operations areas (e.g., waste disposal and daily cover soil borrow areas). These areas are shown on **Figure 5.1**, **Section 5**.
- A water wagon (8,000-gallon capacity) serves as a backup in the event the primary water truck is not operational. The backup water truck may also serve to apply water to waste deposits at the active fill face of disposal areas during high wind events when the primary water truck is occupied with increased water application at other site locations. High wind events during landfill operations increase the frequency and application rate of water, or cessation of operations until the wind subsides.
- In the event the site's water supply well becomes inoperable, water previously stored in the two on-site water tanks would be used until empty (combined volume of 312,000 gallons). As an additional emergency measure, the site could purchase additional water from the City of Sunland Park water tank, which is located approximately 500 feet northeast of the Maintenance Compound.

3.0 Chemical Surfactants

On a periodic basis, dust palliatives or surfactants are currently used as a supplement to the water in order to promote the formation of a surficial crust resistant to erosion.

C. Disturbed Surface Areas

1.0 Daily Cover Soil Borrow Areas

Control of potential fugitive dust emissions from operations associated with the excavation of daily cover soil is accomplished with an 8,000-gallon water wagon. Water is routinely applied to control fugitive dust emissions and to facilitate more efficient removal of excavated soil. Previous experience has shown that when the native silty sands/sandy silts are amended with moisture, excavation is more efficient, and less passes of the scraper are necessary.

2.0 Phasing of Work

Routine landfill operations include the daily excavation, hauling, and stockpiling of soil from areas where the next landfill cell will be located. Soil not needed for daily cover is stockpiled at a location proximate to the cell being constructed and the cell being filled. After the day's waste receipts are accepted, stockpiling of soil ceases and only the amount of soil needed for that day's daily cover is applied. This procedure serves to eliminate double-handling of daily cover soil.

D. Control of Emissions During Dust Generating Operations

1.0 Application of Suitable Dust Suppressant

Currently, water is the primary dust suppressant used at the landfill. Water for dust suppression is obtained from an on-site water tank (400,000-gallon capacity) that is supplied by a 150-gallon-per-minute, on-site production well. Water is also available (upon arrangement with the City of Sunland Park, NM) from a 1.2 million gallon City water tank that is located adjacent to the landfill at the northeast corner of the site. Currently, a chemical surfactant is applied periodically to unpaved portions of facility parking lots and the disposal route. Consistent with manufacturer's specifications and recommendations for application rates and maintenance frequencies, the landfill intends to implement the routine application of these or comparable dust palliatives to areas of activity that generate the most dust. The Camino Real Landfill will evaluate the applicability of the various surfactants that are commercially available to actual site conditions, and select the most feasible application for the suppression of dust at the site.

2.0 Water Application

During dust generating operations, water is applied to minimize potential fugitive dust emissions. Water is regularly applied to the disposal route and access roads; daily cover soil borrow areas; and, under high wind conditions, to the active fill face of waste disposal areas.

3.0 Wind Barriers

Currently, 3-foot high wind fences have been deployed at strategic downwind locations to trap particulates before they exit the site. The wind fences are periodically re-positioned as a function of the locations of the daily active fill face and current cell under construction. In addition, a man-made vegetative barrier comprised of 2,800 feet of 6-foot high Oleander bushes are positioned atop the screening berm located parallel to the northern property boundary. The fences and Oleanders are positioned downwind of the prevailing wind direction (northeast).

4.0 Topographic Screening

The sequence of cell construction and waste disposal has been deliberately designed to take advantage of favorable natural topographic conditions. Natural topographic conditions allowed for filling in a low area that was surrounded by mesa walls on three sides (east, west and south). Waste accepted through July 1993 was placed in a 50± acre area near the north property line, and these deposits now represent the Closed Area. The Unit 2 landfill cells (Cell 1 – Cell 10B) are located south of and behind the Closed Area. Future cells will be located south of and behind current fill areas, and also to the east of current fill areas (Unit 4). The positioning of current and future cells increases the distance particulates must travel prior to exiting the site. The Closed Area and Cells 1 through 10B represent a barrier between landfill operations and the north perimeter. The surrounding natural sidewalls and the man-made barrier allow most activities to take place below-grade. Existing and proposed landfill operations are set back from the north property line by over 1,000 feet.

E. Temporary Stabilization During Non-Operating Hours

1.0 Vegetative Ground Cover

Vegetative test plots constructed in the Closed Area in 1997 were heavily impacted by the construction and installation of the GCCS. Reseeding of select portions of the Closed Area was performed again in August 2002. Due to the arid climate in the El Paso, Texas area, recovery of the vegetation was slow and will continue to be monitored. As new fill areas reach final grade, additional vegetative species may be tested.

2.0 Vehicular Access

Current and proposed traffic from all solid waste delivery vehicles and daily operations vehicles typically do not occur on Sundays and holidays. Border Patrol vehicular traffic is not controlled under this Plan. Restriction of vehicular access to the site is outlined in Section III above.

F. Permanent Stabilization

1.0 Phased Landfill Stabilization

Due to the sequencing of landfill construction and operations, most disposal cells are filled until a prescribed intermediate grade is achieved. At this point, the intermediate-grade slopes are covered with 12 inches of soil, and may be supplemented by race track waste supplied by the City of Sunland Park Race Track. Previous experience at the landfill has shown that the race track waste, comprised primarily of straw and decaying horse manure, possesses a larger particle size and higher moisture content than the native materials, making the race track waste more

erosion resistant. Landfill equipment is used to spread the race track waste across the intermediate slopes, which currently occupies approximately 175 acres± (i.e., Cells 1 through 10B).

2.0 Ultimate Landfill Stabilization

As part of ultimate site closure, a final cover system will be constructed that includes the planting of vegetation known to be successful in southern Doña Ana County. The NMED-approved Closure/Post-Closure Plan outlines the steps leading to site restoration, including the establishment of vegetation.

G. Restoration of Open Areas and Vacant Lots

1.0 Area Restoration

The configuration of the landfill has been designed to allow development of the permitted landfill footprint while minimizing disturbance of adjacent areas. Therefore, at the time of ultimate site closure, the areas that are "open" or vacant will be minimal compared to the landfilled area subject to vegetation, as prescribed in the NMED-approved Closure/Post-Closure Plan. In addition, vacant areas will occupy perimeter locations much lower in elevation than the landfill final grades. As part of routine operations, open areas (e.g., parking lots) are watered or treated with chemical surfactants to control fugitive dust emissions.

2.0 Application of Suitable Dust Suppressant

Currently, potential fugitive dust emissions from unpaved parking lots are minimized by a combination of applying water, using gravel as a base course, and on a periodic basis, supplementing the water with chemical surfactant.

H. Bulk Material Handling Operations and Open Storage Piles (During Loading and Unloading Operations)

1.0 Water Application

Two primary materials are handled at the landfill: waste and soil. If high winds occur at the active disposal fill face, water is applied to the waste and daily cover soils, as necessary, to minimize potential fugitive dust emissions. Water is also applied (as necessary) to the areas where daily cover soil is obtained. High wind events during application of daily cover soil over waste deposits and disposal operations at the active fill face prompt increased water application rates and frequency. In the event of excessively high winds, non-essential dust generating landfill operations (e.g., cell preparation and routine road maintenance) are discontinued.

2.0 Application of Alternative Excavation Techniques

New earthmoving techniques are being evaluated and tested in an effort to minimize dust generation and maximize equipment and technology efficiencies. For example, on an as-needed basis, a bulldozer is used to loosen onsite soils in daily cover soil borrow areas that occasionally are either too difficult to remove with a scraper or need to be loosened from steep embankments that cannot be accessed by the scraper. In addition, in limited areas within daily cover soil borrow areas that are inaccessible by scrapers, front end loaders are used for excavation, and the loaders place the soil into articulated dump trucks for transportation to the active fill face for use as daily cover. Unlike soil removal by scrapers, use of the bulldozer and end loaders serves to localize and confine the disturbed soil to a smaller volume, enhancing control efficiencies and lowering potential fugitive emissions.

3.0 Wind Barriers

Currently, 3-foot high wind fences have been deployed at strategic locations at the landfill. The fences are moved periodically and re-positioned to maximize their capture efficiency with respect to changing fill face and cell construction locations. In addition, a vegetative barrier comprised of 2,800 feet of 6-foot high Oleander bushes are positioned atop the screening berm located parallel to the northern property boundary. The fences and Oleanders are positioned downwind of the prevailing wind direction (northeast).

The topographic setting of the landfill also provides natural advantages with respect to reducing potential dust emissions. For example, the site is located in a natural depression with steep sidewalls located on three of its four sides (to the west, east and south). The initial waste deposits were placed near the north property line, and this disposal area was filled to final grade and closed in 1993 (the Closed Area). The current landfill cells (Cell 1 – Cell 10B) are located south of and behind the Closed Area. Future cells will be located east of, and south of and behind current fill areas. The positioning of current and future cells increases the distance particulates must travel prior to exiting the site. The Closed Area and Cells 1 through 10B represent a barrier between landfill operations and the north perimeter. The surrounding natural sidewalls and the man-made barrier allow most activities to take place below-grade. Existing and proposed landfill operations are set back from the north property line by over 1,000 feet.

I. Waste Hauling and Transportation

1.0 Loading of Haul Trucks

Most waste delivery vehicles entering the site are enclosed, and it is the landfill's standard operating practice to require non-enclosed waste delivery vehicles to be covered prior to entry. For open-top vehicles, tarps are required to cover the waste contents.

2.0 Minimization of Vehicle Trackout

The site location receives approximately 9 inches of rain annually, and the on-site roads are constructed of a combination of caliche, on-site silty sands/sandy silts, and suitable construction and demolition debris. Because of the site's dry setting and lack of cohesive road materials, concerns associated with vehicle trackout are minimal.

3.0 Limiting Vehicle Speed

Signs installed along landfill roads (disposal route and access roads limit) vehicle speeds to 15 miles per hour.

4.0 Public Convenience Station

Since October 2001, Camino Real Landfill has operated a Public Convenience Station for residents of Sunland Park, New Mexico. The Convenience Station consists of two, side-by-side, 30-yd^3 roll-off boxes accessed by an elevated, paved ramp. The purpose of the Convenience Station is to provide a convenient location for residential self-haul customers to dispose of waste, and to reduce the amount of fugitive dust emissions generated by these vehicles on the disposal route.

V. WIND EVENT CONTROL MEASURES

A. Dust Generating Operations

1.0 High Wind Events

During high wind events, the rate of water application is increased, and certain non-essential landfill operations are either restricted or stopped for the day. For example, cell preparation or routine road maintenance would likely be restricted or stopped during high winds. On rare occasions, the landfill has closed due to high winds. As necessary, the application rate and frequency of watering are increased to minimize potential dust emissions.

2.0 Wind Barriers

Wind barriers are discussed in Section IV.D.3.

B. Temporary Disturbed Surface Areas

1.0 New Cell Construction

Areas subject to excavation for preparation of a new cell are routinely scheduled for when high winds are less likely. Excavation of a new cell area is performed on a daily basis and conducted as expeditiously as possible in order to deploy the composite liner system. Once the liner material is installed, potential dust emissions from the new cell approach zero.

2.0 Temporary and Permanent Access Roadways

Temporary access roadways and parking lots are maintained with gravel base course material, crushed aggregate, and/or select C & D debris. Recycled asphalt and on-site caliche are also used for road construction and maintenance. The locations of temporary roadways are placed below surrounding grade to the extent practical in order to minimize the effects of wind erosion.

3.0 Operational Requirements Using the Area Fill Landfill Method

The area fill method is the most common landfill method employed today. This method allows excavation of new cells to the desired depth, followed by construction of liners and leachate collection systems. Once the liner and leachate collection systems are installed, waste placement commences. Construction of new cells using the area fill method necessarily requires a temporary disturbance. During excavation of new cells, potential dust emissions are controlled by watering the area subject to excavation, watering access roads, and confining soil stockpiles to the smallest area practicable. The elevations of the landfill cell floors are all below the surrounding terrain, minimizing dust dispersion.

AIR QUALITY BUREAU
NEW SOURCE REVIEW PERMIT
Issued under 20.2.72 NMAC

GENERAL CONDITIONS AND MISCELLANEOUS

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PART B GENERAL CONDITIONS

B100 Introduction

A. The Department has reviewed the permit application for the proposed construction/modification/revision and has determined that the provisions of the Act and ambient air quality standards will be met. Conditions have been imposed in this permit to assure continued compliance. 20.2.72.210.D NMAC, states that any term or condition imposed by the Department on a permit is enforceable to the same extent as a regulation of the Environmental Improvement Board.

B101 Legal

A. The contents of a permit application specifically identified by the Department shall become the terms and conditions of the permit or permit revision. Unless modified by conditions of this permit, the permittee shall construct or modify and operate the Facility in accordance with all representations of the application and supplemental submittals that the Department relied upon to determine compliance with applicable regulations and ambient air quality standards. If the Department relied on air quality modeling to issue this permit, any change in the parameters used for this modeling shall be submitted to the Department for review. Upon the Department's request, the permittee shall submit additional modeling for review by the Department. Results of that review may require a permit modification. (20.2.72.210.A NMAC)

B. Any future physical changes, changes in the method of operation or changes in restricted area may constitute a modification as defined by 20.2.72 NMAC, Construction Permits. Unless the source or activity is exempt under 20.2.72.202 NMAC, no modification shall begin prior to issuance of a permit. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)

C. Changes in plans, specifications, and other representations stated in the application documents shall not be made if they cause a change in the method of control of emissions or in the character of emissions, will increase the discharge of emissions or affect modeling results. Any such proposed changes shall be submitted as a revision or modification. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)

D. The permittee shall establish and maintain the property's Restricted Area as identified in plot plan submitted with the application. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)

E. Applications for permit revisions and modifications shall be submitted to:

Program Manager, Permits Section
New Mexico Environment Department

Air Quality Bureau
525 Camino de los Marquez, Suite 1
Santa Fe, NM 87505

F. The owner or operator of a source having an excess emission shall, to the extent practicable, operate the source, including associated air pollution control equipment, in a manner consistent with good air pollutant control practices for minimizing emissions. (20.2.7.109 NMAC). The establishment of allowable malfunction emission limits does not supersede this requirement.

B102 Authority

A. This permit is issued pursuant to the Air Quality Control Act (Act) and regulations adopted pursuant to the Act including Title 20, Chapter 2, Part 72 of the New Mexico Administrative Code (NMAC), (20.2.72 NMAC), Construction Permits and is enforceable pursuant to the Act and the air quality control regulations applicable to this source.

B. The Department is the Administrator for 40 CFR Parts 60, 61, and 63 pursuant to the delegation and exceptions of Section 10 of 20.2.77 NMAC (NSPS), 20.2.78 NMAC (NESHAP), and 20.2.82 NMAC (MACT).

B103 Annual Fee

A. The Department will assess an annual fee for this Facility. The regulation 20.2.75 NMAC set the fee amount at $1,500 through 2004 and requires it to be adjusted annually for the Consumer Price Index on January 1. The current fee amount is available by contacting the Department or can be found on the Department's website. The AQB will invoice the permittee for the annual fee amount at the beginning of each calendar year. This fee does not apply to sources which are assessed an annual fee in accordance with 20.2.71 NMAC. For sources that satisfy the definition of "small business" in 20.2.75.7.F NMAC, this annual fee will be divided by two. (20.2.75.11 NMAC)

B. All fees shall be remitted in the form of a corporate check, certified check, or money order made payable to the "NM Environment Department, AQB" mailed to the address shown on the invoice and shall be accompanied by the remittance slip attached to the invoice.

B104 Appeal Procedures

A. Any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for hearing before the Environmental Improvement Board. The petition shall be made in writing to the

Environmental Improvement Board within thirty (30) days from the date notice is given of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered and attach a copy of the permitting action for which review is sought. Unless a timely request for hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to: (20.2.72.207.F NMAC)

For Mailing:
Administrator, New Mexico Environmental Improvement Board
P.O. Box 5469
Santa Fe, NM 87502-5469

For Hand Delivery:
Administrator, New Mexico Environmental Improvement Board
1190 St. Francis Drive, Harold Runnels Bldg.
Santa Fe, New Mexico 87505

B105 Submittal of Reports and Certifications

A. Stack Test Protocols and Stack Test Reports shall be submitted electronically to Stacktest.AQB@state.nm.us or as directed by the Department.

B. Excess Emission Reports shall be submitted as directed by the Department. (20.2.7.110 NMAC)

C. Routine reports shall be submitted to the mailing address below, or as directed by the Department:

Manager, Compliance and Enforcement Section
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1
Santa Fe, NM 87505

B106 NSPS and/or MACT Startup, Shutdown, and Malfunction Operations

A. If a facility is subject to a NSPS standard in 40 CFR 60, each owner or operator that installs and operates a continuous monitoring device required by a NSPS regulation shall comply with the excess emissions reporting requirements in accordance with 40 CFR 60.7(c), unless specifically exempted in the applicable subpart.

B. If a facility is subject to a NSPS standard in 40 CFR 60, then in accordance with 40 CFR 60.8(c), emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction shall not be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

C. If a facility is subject to a MACT standard in 40 CFR 63, then the facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40 CFR 63.6(e)(3), unless specifically exempted in the applicable subpart.

B107 Startup, Shutdown, and Maintenance Operations

A. The establishment of permitted startup, shutdown, and maintenance (SSM) emission limits does not supersede the requirements of 20.2.7.14.A NMAC. Except for operations or equipment subject to Condition B106, the permittee shall establish and implement a plan to minimize emissions during routine or predictable start up, shut down, and scheduled maintenance (SSM work practice plan) and shall operate in accordance with the procedures set forth in the plan. (SSM work practice plan) (20.2.7.14.A NMAC)

B108 General Monitoring Requirements

A. These requirements do not supersede or relax requirements of federal regulations.

B. The following monitoring requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.

C. If the emission unit is shutdown at the time when periodic monitoring is due to be completed, the permittee is not required to restart the unit for the sole purpose of conducting the monitoring. Using electronic or written mail, the permittee shall notify the Department's Compliance and Enforcement Section of a delay in emission tests prior to the deadline for completing the tests. Upon recommencing operation, the permittee shall submit pre-test notification(s) to the Department's Compliance and Enforcement Section and shall complete the monitoring.

D. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke the monitoring period exemption at B108.D(2), hours of operation shall be monitored and recorded.

(1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.

(2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.

(3) If invoking the monitoring **period** exemption in B108.D(2), the actual operating time of a unit shall not exceed the monitoring period required by this permit before the required monitoring is performed. For example, if the monitoring period is annual, the operating hours of the unit shall not exceed 8760 hours before monitoring is conducted. Regardless of the time that a unit actually operates, a minimum of one of each type of monitoring activity shall be conducted during any five-year period.

E. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the unit's capacity as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report.

F. When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.

G. If monitoring is new or is in addition to monitoring imposed by an existing applicable requirement, it shall become effective 120 days after the date of permit issuance. For emission units that have not commenced operation, the associated new or additional monitoring shall not apply until 120 days after the units commence operation. All pre-existing monitoring requirements incorporated in this permit shall continue to apply from the date of permit issuance.

H. Unless otherwise indicated by Specific Conditions or regulatory requirements, all instrumentation used to measure parameters including but not limited to flow, temperature, pressure and chemical composition, or used to continuously monitor

emission rates and/or other process operating parameters, shall be subject to the following requirements:

(1) The owner or operator shall install, calibrate, operate and maintain monitoring instrumentation (monitor) according to the manufacturer's procedures and specifications and the following requirements.

(a) The monitor shall be located in a position that provides a representative measurement of the parameter that is being monitored.

(b) At a minimum, the monitor shall complete one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(c) At a minimum, the monitor shall be spanned to measure the normal range +/- 5% of the parameter that is being monitored.

(d) At least semi-annually, perform a visual inspection of all components of the monitor for physical and operational integrity and all electrical connections for oxidation and galvanic corrosion.

(e) Recalibrate the monitor in accordance with the manufacturer's procedures and specifications at the frequency specified by the manufacturer, or every two years, whichever is less.

(2) Except for malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), the permittee shall operate and maintain all monitoring equipment at all times that the emissions unit or the associated process is operating.

(3) The monitor shall measure data for a minimum of 90 percent of the time that the emissions unit or the associated process is in operation, based on a calendar monthly average.

(4) The owner or operator shall maintain records in accordance with Section B109 to demonstrate compliance with the requirements in B108H (1)-(3) above, as applicable.

B109 General Recordkeeping Requirements

A. The permittee shall maintain records to assure and verify compliance with the terms and conditions of this permit and any other applicable requirements that become effective after permit issuance. The minimum information to be included in these records is as follows:

(1) Records required for testing and sampling:

(a) equipment identification (include make, model and serial number for all tested equipment and emission controls)

(b) date(s) and time(s) of sampling or measurements

(c) date(s) analyses were performed

(d) the qualified entity that performed the analyses

(e) analytical or test methods used

(f) results of analyses or tests

(g) operating conditions existing at the time of sampling or measurement

(2) Records required for equipment inspections and/or maintenance required by this permit:

(a) equipment identification number (including make, model and serial number)

(b) date(s) and time(s) of inspection, maintenance, and/or repair

(c) date(s) any subsequent analyses were performed (if applicable)

(d) name of the person or qualified entity conducting the inspection, maintenance, and/or repair

(e) copy of the equipment manufacturer's or the owner or operator's maintenance or repair recommendations (if required to demonstrate compliance with a permit condition)

(f) description of maintenance or repair activities conducted

(g) all results of any required parameter readings

(h) a description of the physical condition of the equipment as found during any required inspection

(i) results of required equipment inspections including a description of any condition which required adjustment to bring the equipment back into compliance and a description of the required adjustments

B. Except as provided in the Specific Conditions, records shall be maintained on-site or at the permittee's local business office for a minimum of two (2) years from the time of recording and shall be made available to Department personnel upon request. Sources subject to 20.2.70 NMAC "Operating Permits" shall maintain records on-site for a minimum of five (5) years from the time of recording.

C. Unless otherwise indicated by Specific Conditions, the permittee shall keep the following records for malfunction emissions and routine or predictable emissions during startup, shutdown, and scheduled maintenance (SSM):

(1) The owner or operator of a source subject to a permit shall establish and implement a plan to minimize emissions during routine or predictable startup, shutdown, and scheduled maintenance through work practice standards and good air pollution control practices. This requirement shall not apply to any affected facility defined in and subject to an emissions standard and an equivalent plan under 40 CFR Part 60 (NSPS), 40 CFR Part 63 (MACT), or an equivalent plan under 20.2.72 NMAC

- Construction Permits, 20.2.70 NMAC - Operating Permits, 20.2.74 NMAC - Permits - Prevention of Significant Deterioration (PSD), or 20.2.79 NMAC - Permits - Nonattainment Areas. The permittee shall keep records of all sources subject to the plan to minimize emissions during routine or predictable SSM and shall record if the source is subject to an alternative plan and therefore, not subject to the plan requirements under 20.2.7.14.A NMAC.

(2) If the facility has allowable SSM emission limits in this permit, the permittee shall record all SSM events, including the date, the start time, the end time, a description of the event, and a description of the cause of the event. This record also shall include a copy of the manufacturer's, or equivalent, documentation showing that any maintenance qualified as scheduled. Scheduled maintenance is an activity that occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source. The authorization of allowable SSM emissions does not supersede any applicable federal or state standard. The most stringent requirement applies.

(3) If the facility has allowable malfunction emission limits in this permit, the permittee shall record all malfunction events to be applied against these limits. The permittee shall also include the date, the start time, the end time, and a description of the event. **Malfunction means** any sudden and unavoidable failure of air pollution control equipment or process equipment beyond the control of the owner or operator, including malfunction during startup or shutdown. A failure that is caused entirely or in part by poor maintenance, careless operation, or any other preventable equipment breakdown shall not be considered a malfunction. (20.2.7.7.E NMAC) The authorization of allowable malfunction emissions does not supersede any applicable federal or state standard. The most stringent requirement applies. This authorization only allows the permittee to avoid submitting reports under 20.2.7 NMAC for total annual emissions that are below the authorized malfunction emission limit.

(4) The owner or operator of a source shall meet the operational plan defining the measures to be taken to mitigate source emissions during malfunction, startup or shutdown. (20.2.72.203.A(5) NMAC)

B110 General Reporting Requirements

(20.2.72 NMAC Sections 210 and 212)

A. Records and reports shall be maintained on-site or at the permittee's local business office unless specifically required to be submitted to the Department or EPA by another condition of this permit or by a state or federal regulation. Records for unmanned sites may be kept at the nearest business office.

B. The permittee shall notify the Department's Compliance Reporting Section using the current Submittal Form posted to NMED's Air Quality web site under Compliance and

Enforcement/Submittal Forms in writing of, or provide the Department with (20.2.72.212.A and B):

(1) the anticipated date of initial startup of each new or modified source not less than thirty (30) days prior to the date. Notification may occur prior to issuance of the permit, but actual startup shall not occur earlier than the permit issuance date;

(2) after receiving authority to construct, the equipment serial number as provided by the manufacturer or permanently affixed if shop-built and the actual date of initial startup of each new or modified source within fifteen (15) days after the startup date; and

(3) the date when each new or modified emission source reaches the maximum production rate at which it will operate within fifteen (15) days after that date.

C. The permittee shall notify the Department's Permitting Program Manager, in writing of, or provide the Department with (20.2.72.212.C and D):

(1) any change of operators or any equipment substitutions within fifteen (15) days of such change;

(2) any necessary update or correction no more than sixty (60) days after the operator knows or should have known of the condition necessitating the update or correction of the permit.

D. Results of emission tests and monitoring for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. The number of significant figures corresponding to the full accuracy inherent in the testing instrument or Method test used to obtain the data shall be used to calculate and report test results in accordance with 20.2.1.116.B and C NMAC. Upon request by the Department, CEMS and other tabular data shall be submitted in editable, MS Excel format.

E. The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.

F. Allowable Emission Limits for Excess Emissions Reporting for Flares and Other Regulated Sources with No Pound per Hour (pph) and/or Ton per Year (tpy) Emission Limits.

(1) When a flare has no allowable pph and/or tpy emission limits in Sections A106 and/or A107, the authorized allowable emissions include only the combustion of pilot and/or purge gas. Compliance is demonstrated by limiting the gas stream to the flare to only pilot and/or purge gas.

(2) For excess emissions reporting as required by 20.2.7 NMAC, the allowable emission limits are 1.0 pph and 1.0 tpy for each regulated air pollutant (except for H2S) emitted by that source as follows:

(a) For flares, when there are no allowable emission limits in Sections A106 and/or A107.

(b) For regulated sources with emission limits in Sections A106 or A107 represented by the less than sign ("<").

(c) For regulated sources that normally would not emit any regulated air pollutants, including but not limited to vents, pressure relief devices, connectors, etc.

(3) For excess emissions reporting as required by 20.2.7 NMAC for H2S, the allowable limits are 0.1 pph and 0.44 tpy for each applicable scenario addressed in paragraph (2) above.

B111 General Testing Requirements

Unless otherwise indicated by Specific Conditions or regulatory requirements, the permittee shall conduct testing in accordance with the requirements in Sections B111A, B, C, D and E, as applicable.

A. Initial Compliance Tests

The permittee shall conduct initial compliance tests in accordance with the following requirements:

(1) Initial compliance test requirements from previous permits (if any) are still in effect, unless the tests have been satisfactorily completed. Compliance tests may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions. (20.2.72 NMAC Sections 210.C and 213)

(2) Initial compliance tests shall be conducted within sixty (60) days after the unit(s) achieve the maximum normal production rate. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source.

(3) The default time period for each test run shall be **at least** 60 minutes and each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with an applicable emission limit, the arithmetic mean of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department approval, be determined using the arithmetic mean of the results of the two other runs.

(4) Testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operating rate allowed by the permit. If it is not possible to test at that rate, the source may test at a lower operating rate

(5) Testing performed at less than 90 percent of permitted capacity will limit emission unit operation to 110 percent of the tested capacity until a new test is conducted.

(6) If conditions change such that unit operation above 110 percent of tested capacity is possible, the source must submit a protocol to the Department within 30 days of such change to conduct a new emissions test.

B. EPA Reference Method Tests

The test methods in Section B111.B(1) shall be used for all initial compliance tests and all Relative Accuracy Test Audits (RATAs), and shall be used if a permittee chooses to use EPA test methods for periodic monitoring. Test methods that are not listed in Section B111.B(1) may be used in accordance with the requirements at Section B111.B(2).

(1) All compliance tests required by this permit shall be conducted in accordance with the requirements of CFR Title 40, Part 60, Subpart A, General Provisions, and the following EPA Reference Methods as specified by CFR Title 40, Part 60, Appendix A:

(a) Methods 1 through 4 for stack gas flowrate

(b) Method 5 for particulate matter (PM) (TSP)

(c) Method 6C SO_2

(d) Method 7E for NO_X (test results shall be expressed as nitrogen dioxide (NO_2) using a molecular weight of 46 lb/lb-mol in all calculations (each ppm of NO/NO_2 is equivalent to 1.194 x 10-7 lb/SCF)

(e) Method 9 for visual determination of opacity

(f) Method 10 for CO

(g) Method 19 for particulate, sulfur dioxide and nitrogen oxides emission rates. In addition, Method 19 may be used in lieu of Methods 1-4 for stack gas flowrate. The permittee shall provide a contemporaneous fuel gas analysis (preferably on the day of the test, but no earlier than three months prior to the test date) and a recent fuel flow meter calibration certificate (within the most recent quarter) with the final test report.

(h) Method 7E or 20 for Turbines per §60.335 or §60.4400

(i) Method 22 for visual determination of fugitive emissions from material sources and smoke emissions from flares

(j) Method 25A for VOC reduction efficiency

(k) Method 29 for Metals

(l) Method 30B for Mercury from Coal-Fired Combustion Sources Using Carbon Sorbent Traps

(m) Method 201A for filterable PM_{10} and $PM_{2.5}$

(n) Method 202 for condensable PM

(o) Method 320 for organic Hazardous Air Pollutants (HAPs)

(2) Permittees may propose test method(s) that are not listed in Section B111.B(1). These methods may be used if prior approval is received from the Department.

C. Periodic Monitoring and Portable Analyzer Requirements for the Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters

Periodic emissions tests (periodic monitoring) shall be conducted in accordance with the following requirements:

(1) Periodic emissions tests may be conducted in accordance with EPA Reference Methods or by utilizing a portable analyzer. Periodic monitoring utilizing a portable analyzer shall be conducted in accordance with the requirements of the current version of ASTM D 6522. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be operated in accordance with that criterion until it is replaced.

(2) The default time period for each test run shall be **at least** 20 minutes.

Each performance test shall consist of three separate runs. The arithmetic mean of results of the three runs shall be used to determine compliance with the applicable emission limit.

(3) Testing of emissions shall be conducted in accordance with the requirements at Section B108.E.

(4) During emissions tests, pollutant and diluent concentration shall be monitored and recorded. Fuel flow rate shall be monitored and recorded if stack gas flow rate is determined utilizing Reference Method 19. This information shall be included with the test report furnished to the Department.

(5) Stack gas flow rate shall be calculated in accordance with Reference Method 19 utilizing fuel flow rate (scf) determined by a dedicated fuel flow meter and fuel heating value (Btu/scf). The permittee shall provide a contemporaneous fuel gas analysis (preferably on the day of the test, but no earlier than three months prior to the test date) and a recent fuel flow meter calibration certificate (within the most recent quarter) with the final test report. Alternatively, stack gas flow rate may be determined by using EPA Reference Methods 1-4.

(6) The permittee shall submit a notification and protocol for periodic emissions tests upon the request of the Department.

D. Initial Compliance Test and RATA Procedures

Permittees required to conduct initial compliance tests and/or RATAs shall comply with the following requirements:

(1) The permittee shall submit a notification and test protocol to the Department's Program Manager, Compliance and Enforcement Section, at least thirty (30) days before the test date and allow a representative of the Department to be present at the test. Proposals to use test method(s) that are not listed in Section B111.B(1) (if applicable) shall be included in this notification.

(2) Contents of test notifications, protocols and test reports shall conform to the format specified by the Department's Universal Test Notification, Protocol and Report Form and Instructions. Current forms and instructions are posted to NMED's Air Quality web site under Compliance and Enforcement Testing.

(3) The permittee shall provide (a) sampling ports adequate for the test methods applicable to the facility, (b) safe sampling platforms, (c) safe access to sampling platforms and (d) utilities for sampling and testing equipment.

(4) Where necessary to prevent cyclonic flow in the stack, flow straighteners shall be installed

E. General Compliance Test Procedures

The following requirements shall apply to all initial compliance and periodic emissions tests and all RATAs:

(1) Equipment shall be tested in the "as found" condition. Equipment may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.

(2) The stack shall be of sufficient height and diameter and the sample ports shall be located so that a representative test of the emissions can be performed in accordance with the requirements of EPA Reference Method 1 or the current version of ASTM D 6522, as applicable.

(3) Test reports shall be submitted to the Department no later than 30 days after completion of the test.

B112 Compliance

A. The Department shall be given the right to enter the facility at all reasonable times to verify the terms and conditions of this permit. Required records shall be organized by

date and subject matter and shall at all times be readily available for inspection. The permittee, upon verbal or written request from an authorized representative of the Department who appears at the facility, shall immediately produce for inspection or copying any records required to be maintained at the facility. Upon written request at other times, the permittee shall deliver to the Department paper or electronic copies of any and all required records maintained on site or at an off-site location. Requested records shall be copied and delivered at the permittee's expense within three business days from receipt of request unless the Department allows additional time. Required records may include records required by permit and other information necessary to demonstrate compliance with terms and conditions of this permit. (NMSA 1978, Section 74-2-13)

B. A copy of the most recent permit(s) issued by the Department shall be kept at the permitted facility or (for unmanned sites) at the nearest company office and shall be made available to Department personnel for inspection upon request. (20.2.72.210.B.4 NMAC)

C. Emissions limits associated with the energy input of a Unit, i.e. lb/MMBtu, shall apply at all times unless stated otherwise in a Specific Condition of this permit. The averaging time for each emissions limit, including those based on energy input of a Unit (i.e. lb/MMBtu) is one (1) hour unless stated otherwise in a Specific Condition of this permit or in the applicable requirement that establishes the limit.

B113 Permit Cancellation and Revocation

A. The Department may revoke this permit if the applicant or permittee has knowingly and willfully misrepresented a material fact in the application for the permit. Revocation will be made in writing, and an administrative appeal may be taken to the Secretary of the Department within thirty (30) days. Appeals will be handled in accordance with the Department's Rules Governing Appeals From Compliance Orders.

B. The Department shall automatically cancel any permit for any source which ceases operation for five (5) years or more, or permanently. Reactivation of any source after the five (5) year period shall require a new permit. (20.2.72 NMAC)

C. The Department may cancel a permit if the construction or modification is not commenced within two (2) years from the date of issuance or if, during the construction or modification, work is suspended for a total of one (1) year. (20.2.72 NMAC)

B114 Notification to Subsequent Owners

A. The permit and conditions apply in the event of any change in control or ownership of the Facility. No permit modification is required in such case. However, in the event of any such change in control or ownership, the permittee shall notify the succeeding

owner of the permit and conditions and shall notify the Department's Program Manager, Permits Section of the change in ownership within fifteen (15) days of that change. (20.2.72.212.C NMAC)

B. Any new owner or operator shall notify the Department's Program Manager, Permits Section, within thirty (30) days of assuming ownership, of the new owner's or operator's name and address. (20.2.73.200.E.3 NMAC)

B115 Asbestos Demolition

A. Before any asbestos demolition or renovation work, the permittee shall determine whether 40 CFR 61 Subpart M, National Emissions Standards for Asbestos applies. If required, the permittee shall notify the Department's Program Manager, Compliance and Enforcement Section using forms furnished by the Department.

B116 Short Term Engine Replacement

A. The following Alternative Operating Scenario (AOS) addresses engine breakdown or periodic maintenance and repair, which requires the use of a short term replacement engine. The following requirements do not apply to engines that are exempt per 20.2.72.202.B(3) NMAC. Changes to exempt engines must be reported in accordance with 20.2.72.202.B NMAC. A short term replacement engine may be substituted for any engine allowed by this permit for no more than 120 days in any rolling twelve month period per permitted engine. The compliance demonstrations required as part of this AOS are in addition to any other compliance demonstrations required by this permit.

(1) The permittee may temporarily replace an existing engine that is subject to the emission limits set forth in this permit with another engine regardless of manufacturer, model, and horsepower without modifying this permit. The permittee shall submit written notification to the Department within 15 days of the date of engine substitution according to condition B110.C(1).

(a) The potential emission rates of the replacement engine shall be determined using the replacement engine's manufacturer specifications and shall comply with the existing engine's permitted emission limits.

(b) The direction of the exhaust stack for the replacement engine shall be either vertical or the same direction as for the existing engine. The replacement engine's stack height and flow parameters shall be at least as effective in the dispersion of air pollutants as the modeled stack height and flow parameters for the existing permitted engine. The following equation may be used to show that the replacement engine disperses pollutants as well as the existing engine. The value calculated for the replacement engine on the right side of the equation shall be equal to or greater than the value for the

existing engine on the left side of the equation. The permitting page of the Air Quality Bureau website contains a spreadsheet that performs this calculation.

EXISTING ENGINE REPLACMENT ENGINE

$$\frac{[(g) \times (h1)] + [(v1)^2/2] + [(c) \times (T1)]}{q1} <= \frac{[(g) \times (h2)] + [(v2)^2/2] + [(c) \times (T2)]}{q2}$$

Where
g = gravitational constant = 32.2 ft/sec^2
h1 = existing stack height, feet
v1 = exhaust velocity, existing engine, feet per second
c = specific heat of exhaust, 0.28 BTU/lb-degree F
T1 = absolute temperature of exhaust, existing engine = degree F + 460
q1 = permitted allowable emission rate, existing engine, lbs/hour
h2 = replacement stack height, feet
v2 = exhaust velocity, replacement engine, feet per second
T2 = absolute temperature of exhaust, replacement engine = degree F + 460
q2 = manufacturer's potential emission rate, replacement engine, lbs/hour

The permittee shall keep records showing that the replacement engine is at least as effective in the dispersion of air pollutants as the existing engine.

(c) Test measurement of NOx and CO emissions from the temporary replacement engine shall be performed in accordance with Section B111 with the exception of Condition B111A(2) and B111B for EPA Reference Methods Tests or Section B111C for portable analyzer test measurements. Compliance test(s) shall be conducted within fifteen (15) days after the unit begins operation, and records of the results shall be kept according to section B109.B. This test shall be performed even if the engine is removed prior to 15 days on site.

i. These compliance tests are not required for an engine certified under 40CFR60, subparts IIII, or JJJJ, or 40CFR63, subpart ZZZZ if the permittee demonstrates that one of these requirements causes such engine to comply with all emission limits of this permit. The permittee shall submit this demonstration to the Department within 48 hours of placing the new unit into operation. This submittal shall include documentation that the engine is certified, that the engine is within its useful life, as defined and specified in the applicable requirement, and shall include calculations showing that the applicable emissions standards result in compliance with the permit limits.

ii. These compliance tests are not required if a test was conducted by portable analyzer or by EPA Method test (including any required by 40CFR60, subparts IIII and JJJJ and 40CFR63, subpart ZZZZ) within the last 12 months. These previous tests are valid only if conducted at the same or lower elevation as the existing engine location prior to commencing operation as a temporary replacement. A copy of the test results shall be kept according to section B109.B.

(d) Compliance tests for NOx and CO shall be conducted if requested by the Department in writing to determine whether the replacement engine is in compliance with applicable regulations or permit conditions.

(e) Upon determining that emissions data developed according to B116.A.1(c) fail to indicate compliance with either the NOx or CO emission limits, the permittee shall notify the Department within 48 hours. Also within that time, the permittee shall implement one of the following corrective actions:

i. The engine shall be adjusted to reduce NOx and CO emissions and tested per B116.A.1(c) to demonstrate compliance with permit limits.

ii. The engine shall discontinue operation or be replaced with a different unit.

(2) Short term replacement engines, whether of the same manufacturer, model, and horsepower, or of a different manufacturer, model, or horsepower, are subject to all federal and state applicable requirements, regardless of whether they are set forth in this permit (including monitoring and recordkeeping), and shall be subject to any shield afforded by this permit.

(3) The permittee shall maintain a contemporaneous record documenting the unit number, manufacturer, model number, horsepower, emission factors, emission test results, and serial number of any existing engine that is replaced, and the replacement engine. Additionally, the record shall document the replacement duration in days, and the beginning and end dates of the short term engine replacement.

(4) The permittee shall maintain records of a regulatory applicability determination for each replacement engine (including 40CFR60, subparts IIII and JJJJ and 40CFR63, subpart ZZZZ) and shall comply with all associated regulatory requirements.

B. Additional requirements for replacement of engines at sources that are major as defined in regulation 20.2.74 NMAC, Permits – Prevention of Significant Deterioration, section 7.AG. For sources that are major under PSD, the total cumulative operating hours of the replacement engine shall be limited using the following procedure:

(1) Daily, the actual emissions from the replacement engine(s) of each pollutant regulated by this permit for the existing engine shall be calculated and recorded.

(2) The sum of the total actual emissions since the commencement of operation of the replacement engine(s) shall not equal or exceed the significant emission rates in Table 2 of 20.2.74 NMAC, section 502 for the time that the replacement engine is located at the facility.

C. All records required by this section shall be kept according to section B109.

PART C MISCELLANEOUS

C100 Supporting On-Line Documents

A. Copies of the following documents can be downloaded from NMED's web site under Compliance and Enforcement or requested from the Bureau.

(1) Excess Emission Form (for reporting deviations and emergencies)

(2) Universal Stack Test Notification, Protocol and Report Form and Instructions

C101 Definitions

A. **"Daylight"** is defined as the time period between sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at http://aa.usno.navy.mil/. Alternatively, these times can be obtained from a Farmer's Almanac or from http://www.almanac.com/rise/).

B. **"Decommission"** and **"Decommissioning"** applies to units left on site (not removed) and is defined as the complete disconnecting of equipment, emission sources or activities from the process by disconnecting all connections necessary for operation (i.e. piping, electrical, controls, ductwork, etc.).

C. **"Exempt Sources"** and **"Exempt Activities"** is defined as those sources or activities that are exempted in accordance with 20.2.72.202 NMAC. Note; exemptions are only valid for most 20.2.72 NMAC permitting actions.

D. **"Fugitive Emission"** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

E. **"Insignificant Activities"** means those activities which have been listed by the department and approved by the administrator as insignificant on the basis of size, emissions or production rate. Note; insignificant activities are only valid for 20.2.70 NMAC permitting actions.

F. **"Malfunction"** for the requirements under 20.2.7 NMAC, means any sudden and unavoidable failure of air pollution control equipment or process equipment beyond the control of the owner or operator, including malfunction during startup or shutdown. A failure that is caused entirely or in part by poor maintenance, careless operation, or any other preventable equipment breakdown shall not be considered a malfunction. (20.2.7.7.E NMAC)

G. **"Natural Gas"** is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (SCF) and is either composed of at least 70% methane by volume or has a gross calorific value of between 950 and 1100 Btu per standard cubic foot. (40 CFR 60.631)

H. **"Natural Gas Liquids"** means the hydrocarbons, such as ethane, propane, butane, and pentane, that are extracted from field gas. (40 CFR 60.631)

I. **"National Ambient air Quality Standards"** means, unless otherwise modified, the primary (health-related) and secondary (welfare-based) federal ambient air quality standards promulgated by the US EPA pursuant to Section 109 of the Federal Act.

J. **"Night"** is the time period between sunset and sunrise, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at http://aa.usno.navy.mil/. Alternatively, these times can be obtained from a Farmer's Almanac or from http://www.almanac.com/rise/).

K. **"Night Operation** or **Operation at Night"** is operating a source of emissions at night.

L. **"NO2"** or "Nitrogen dioxide" means the chemical compound containing one atom of nitrogen and two atoms of oxygen, for the purposes of ambient determinations. The term **"nitrogen dioxide,"** for the purposes of stack emissions monitoring, shall include nitrogen dioxide (the chemical compound containing one atom of nitrogen and two atoms of oxygen), nitric oxide (the chemical compound containing one atom of nitrogen and one atom of oxygen), and other oxides of nitrogen which may test as nitrogen dioxide and is sometimes referred to as NOx or NO_2. (20.2.2 NMAC)

M. "**NOx**" see NO_2

N. "**Paved Road**" is a road with a permanent solid surface that can be swept essentially free of dust or other material to reduce air re-entrainment of particulate matter. To the extent these surfaces remain solid and contiguous they qualify as paved roads: concrete, asphalt, chip seal, recycled asphalt and other surfaces approved by the Department in writing.

O. **"Potential Emission Rate"** means the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the federal Act.

P. "**Restricted Area**" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.

Q. **"Shutdown"** for requirements under 20.2.72 NMAC, means the cessation of operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing out of batch process units.

R. **"SSM"** for requirements under 20.2.7 NMAC, means routine or predictable startup, shutdown, or scheduled maintenance.

(1) **"Shutdown"** for requirements under 20.2.7 NMAC, means the cessation of operation of any air pollution control equipment or process equipment.

(2) **"Startup"** for requirements under 20.2.7 NMAC, means the setting into operation of any air pollution control equipment or process equipment.

S. **"Startup"** for requirements under 20.2.72 NMAC, means the setting into operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing in of batch process units.

C102 Acronyms

2SLB ..... 2-stroke lean burn
4SLB ..... 4-stroke lean burn
4SRB ..... 4-stroke rich burn
acfm ..... actual cubic feet per minute
AFR ..... air fuel ratio
AP-42 ..... EPA Air Pollutant Emission Factors
AQB ..... Air Quality Bureau
AQCR ..... Air Quality Control Region
ASTM ..... American Society for Testing and Materials
Btu ..... British thermal unit
CAA ..... Clean Air Act of 1970 and 1990 Amendments
CEM ..... continuous emissions monitoring
cfh ..... cubic feet per hour
cfm ..... cubic feet per minute
CFR ..... Code of Federal Regulation
CI ..... compression ignition
CO ..... carbon monoxides
COMS ..... continuous opacity monitoring system
EIB ..... Environmental Improvement Board

EPA ..... United States Environmental Protection Agency
gr/100 cf ..... grains per one hundred cubic feet
gr/dscf ..... grains per dry standard cubic foot
GRI ..... Gas Research Institute
HAP ..... hazardous air pollutant
hp ..... horsepower
H_2S ..... hydrogen sulfide
IC ..... internal combustion
KW/hr ..... kilowatts per hour
lb/hr ..... pounds per hour
lb/MMBtu ..... pounds per million British thermal unit
MACT ..... Maximum Achievable Control Technology
MMcf/hr ..... million cubic feet per hour
MMscf ..... million standard cubic feet
N/A ..... not applicable
NAAQS ..... National Ambient Air Quality Standards
NESHAP ..... National Emission Standards for Hazardous Air Pollutants
NG ..... natural gas
NGL ..... natural gas liquids
NMAAQS ..... New Mexico Ambient Air Quality Standards
NMAC ..... New Mexico Administrative Code
NMED ..... New Mexico Environment Department
NMSA ..... New Mexico Statues Annotated
NOx ..... nitrogen oxides
NSCR ..... non-selective catalytic reduction
NSPS ..... New Source Performance Standard
NSR ..... New Source Review
PEM ..... parametric emissions monitoring
PM ..... particulate matter (equivalent to TSP, total suspended particulate)
PM_{10} ..... particulate matter 10 microns and less in diameter
$PM_{2.5}$ ..... particulate matter 2.5 microns and less in diameter
pph ..... pounds per hour
ppmv ..... parts per million by volume
PSD ..... Prevention of Significant Deterioration
RATA ..... Relative Accuracy Test Assessment
RICE ..... reciprocating internal combustion engine
rpm ..... revolutions per minute
scfm ..... standard cubic feet per minute
SI ..... spark ignition
SO_2 ..... sulfur dioxide
SSM ..... Startup Shutdown Maintenance (see SSM definition)
TAP ..... Toxic Air Pollutant
TBD ..... to be determined
THC ..... total hydrocarbons

TSP..... Total Suspended Particulates
tpy .....tons per year
ULSD .....ultra low sulfur diesel
USEPA..... United States Environmental Protection Agency
UTM.....Universal Transverse Mercator Coordinate system
UTMH.....Universal Transverse Mercator Horizontal
UTMV.....Universal Transverse Mercator Vertical
VHAP.....volatile hazardous air pollutant
VOC ..... volatile organic compounds