Section 3

Application Summary

The **Application Summary** shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will affect the facility's operations and emissions, de-bottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

Routine or predictable emissions during Startup, Shutdown, and Maintenance (SSM): Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on SSM emissions.

This application has been prepared to file for a New Source Review (NSR) permit for the Camino Real Landfill (CRLF). CRLF currently has a Title V Permit (Permit No. P186L-R3). This application is being filed under 20.2.72.200.A.1 NMAC and its submittal was also a Title V permit condition as part of the recent Title V renewal. This will be the first NSR permit for this facility.

Regarding landfill operations, CRLF is a municipal solid waste (MSW) landfill operating pursuant to NMED Solid Waste Facility Permit No. SWM-030738. The facility is currently authorized to dispose of MSW and the following approved special wastes:

- Petroleum contaminated soils (PCS);
- Sludge; and
- Industrial solid waste.

CRLF also operates a public convenience station for residential self-hauler customers and a registered, single-stream recycling center located adjacent to the landfill office.

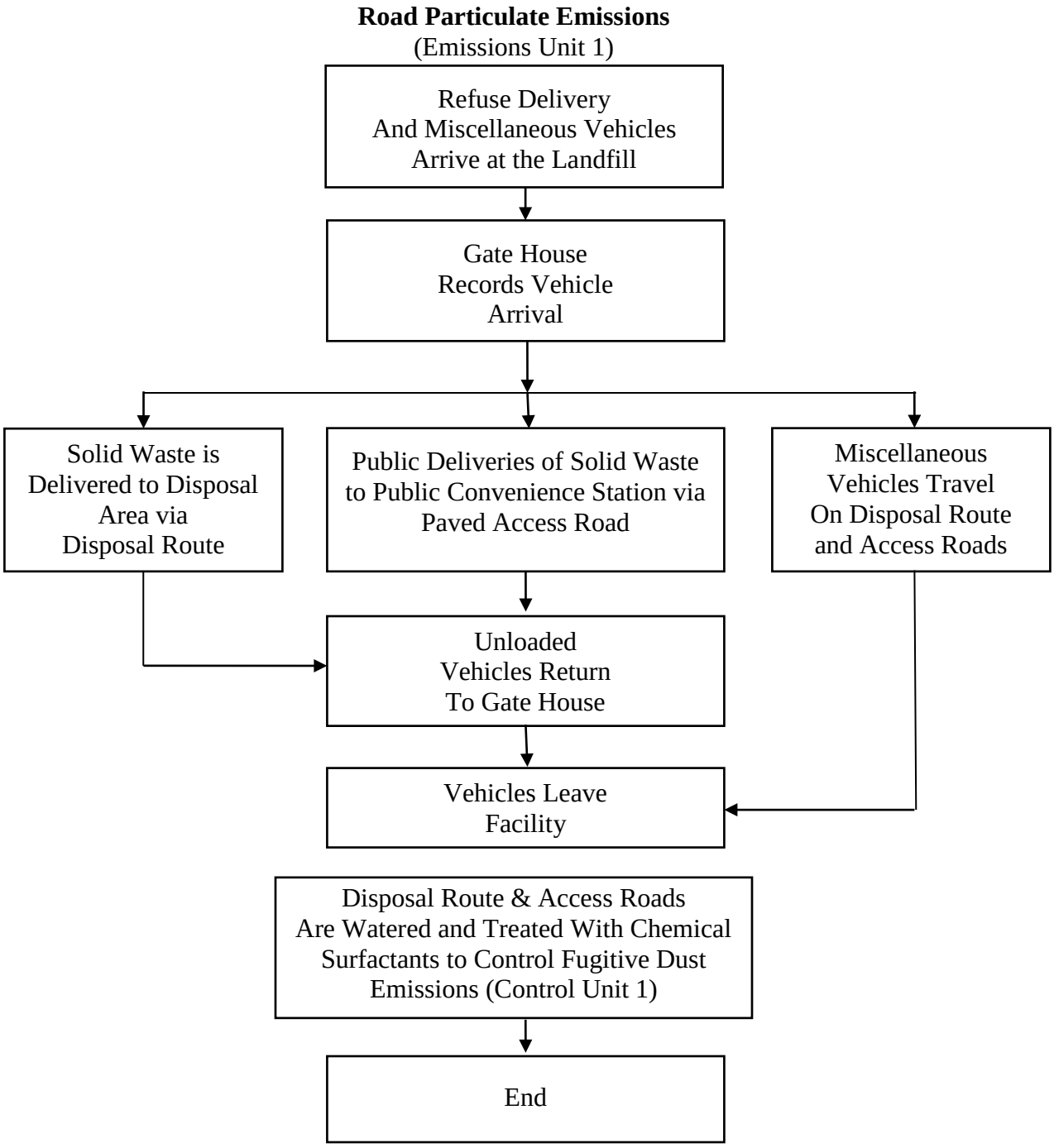
Since, March 2001, CRLF has operated a gas collection and control system (GCCS), which routes landfill gas (LFG) to either a beneficial-use gas-to-energy plant, or an on-site open flare for destruction. The LFGE Plant, is co-located on property owned by CRLF; and is owned and operated by Four Peaks Energy, Inc. of Santa Fe, New Mexico. This LFGE facility is a separate source (see Section 11). The GCCS must be operated as the landfill is subject to the control requirements of 40 CFR 60, Subpart WWW as of November 16, 2018.

Regarding Startup, Shutdown, and Maintenance (SSM) emissions, please refer to Section 14 for a description of the operational plan to mitigate these types of emissions. With regard to how any such emissions are accounted for in this application, the emissions calculations methods and assumptions included with them are conservative such that any such minor SSM emissions that might occur are encompassed within them.

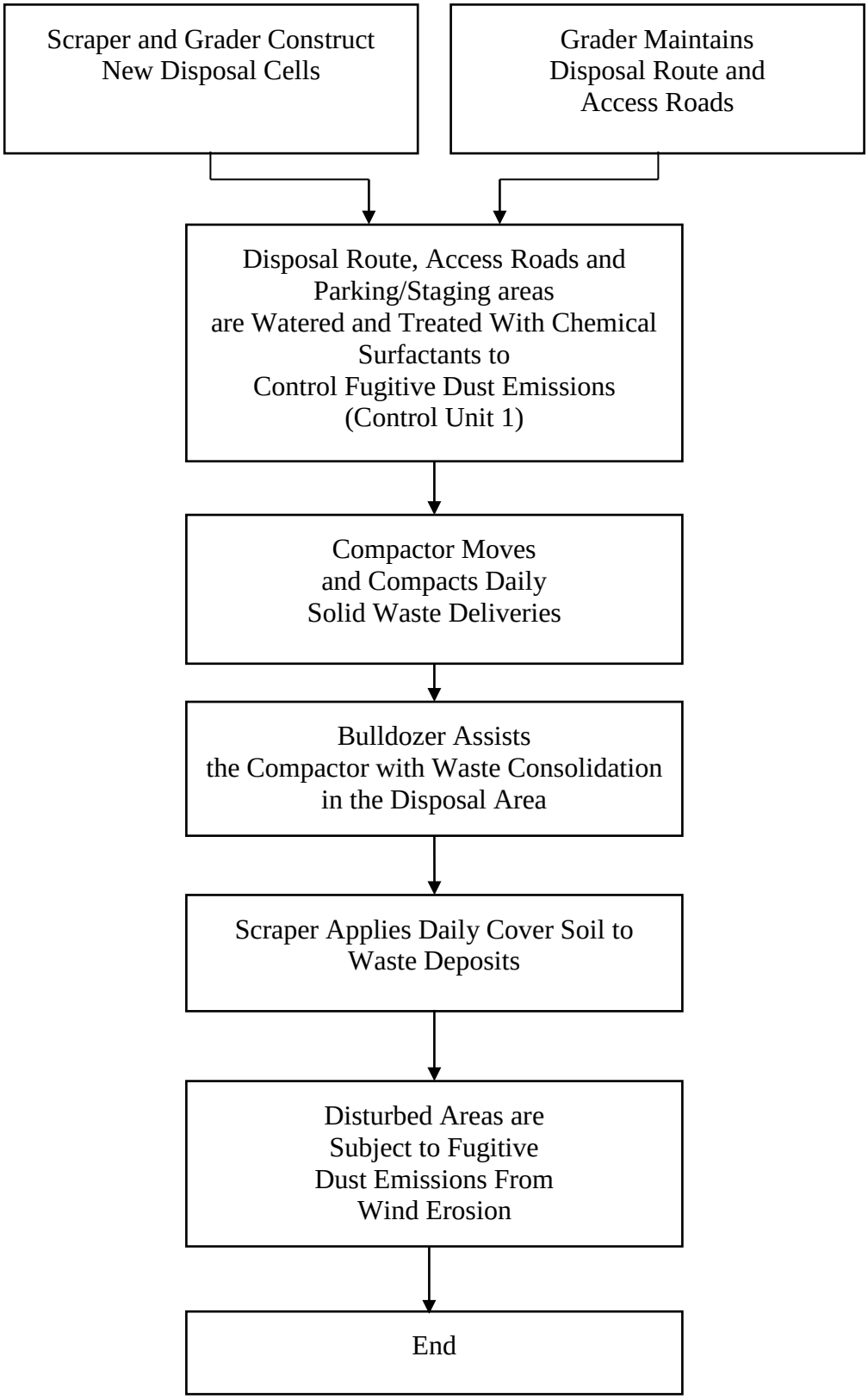
Section 4

Process Flow Sheet

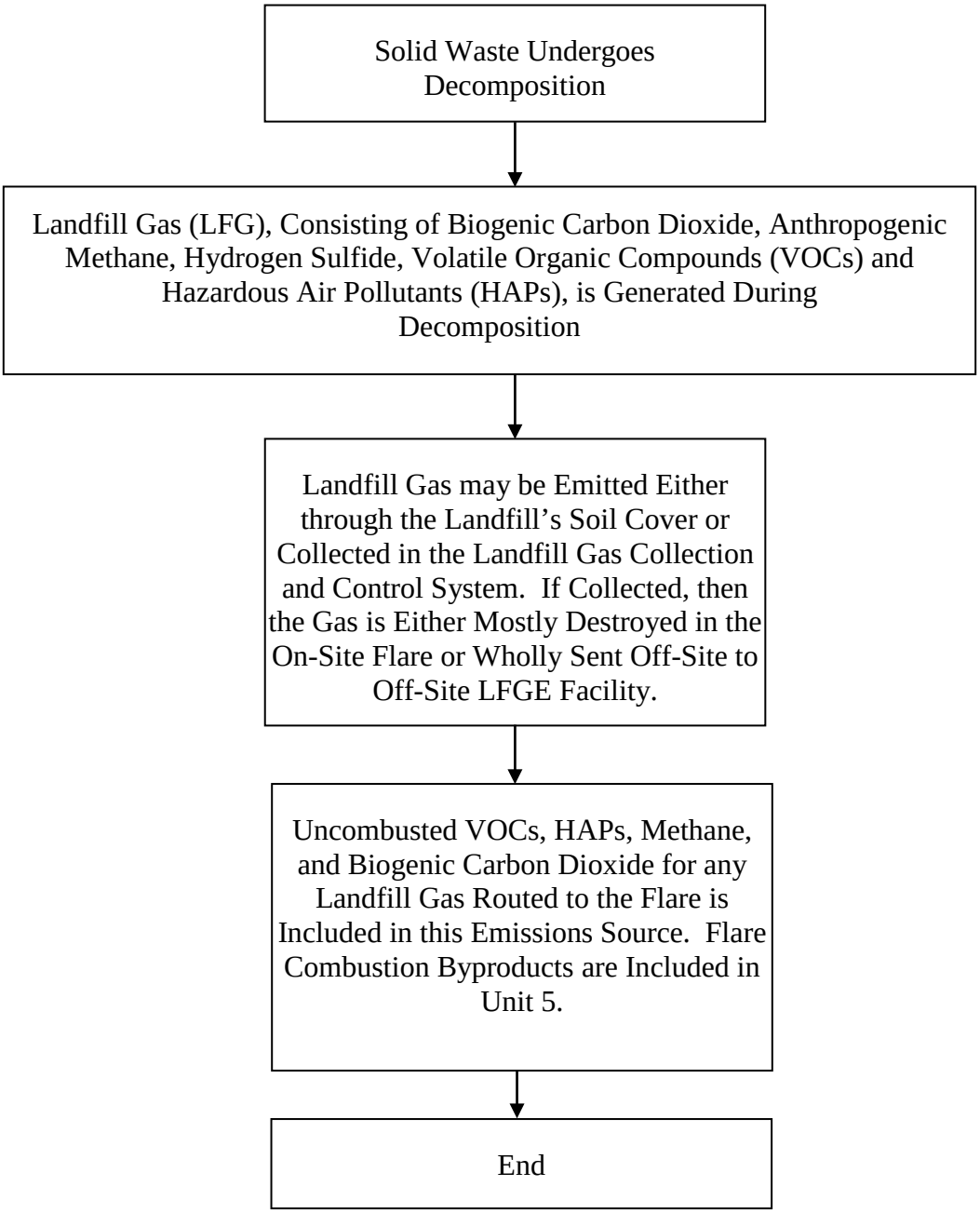
A **process flow sheet** and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. The unit numbering system should be consistent throughout this application.



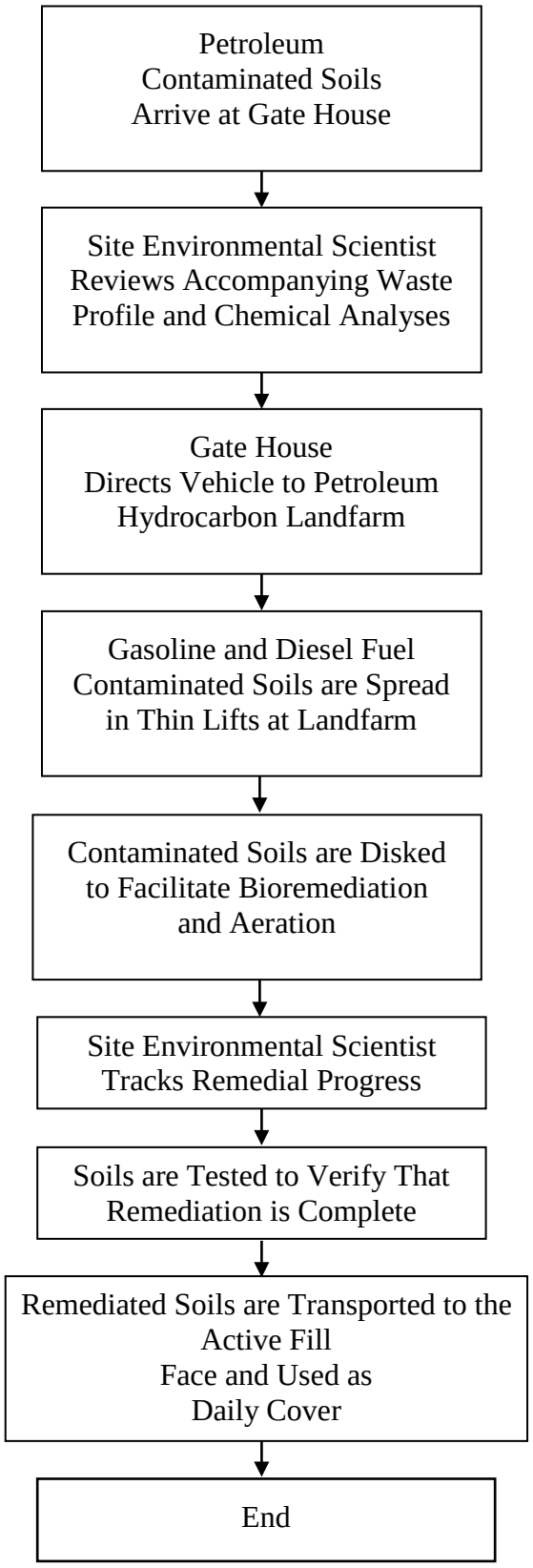
Landfill Earthmoving Particulate Emissions
(Emissions Unit 2)



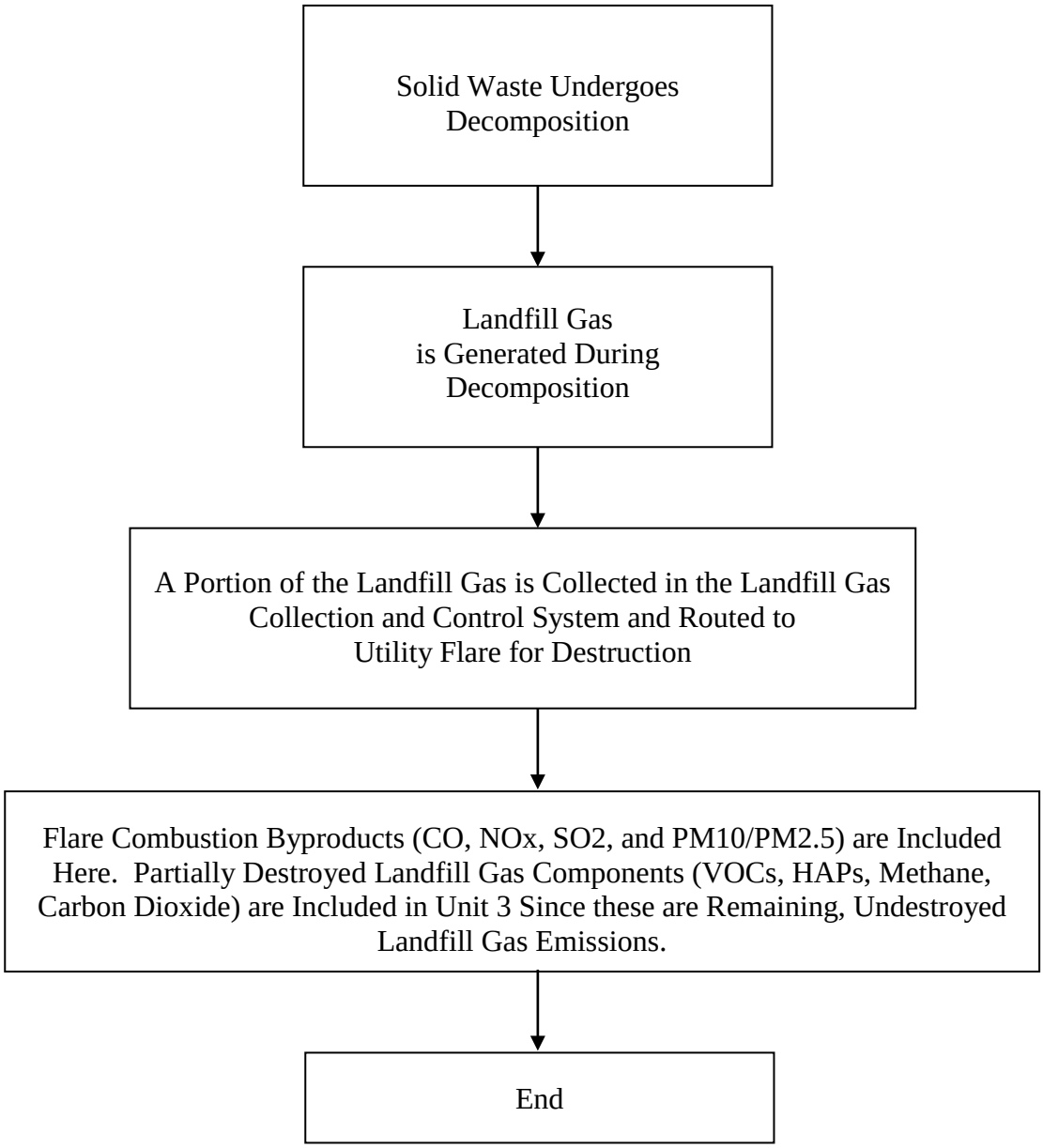
Landfill Gas Emissions
(Emissions Unit 3)



Petroleum Hydrocarbon Landfarm
(Emissions Unit 4)



Landfill Gas Flare
(Emissions Unit 5)



Section 5

Plot Plan Drawn To Scale

A **plot plan drawn to scale** showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section 1-D.12. The unit numbering system should be consistent throughout this application.

See next page for the plot plan.

Section 6

All Calculations

Show all calculations used to determine both the hourly and annual controlled and uncontrolled emission rates. All calculations shall be performed keeping a minimum of three significant figures. Document the source of each emission factor used (if an emission rate is carried forward and not revised, then a statement to that effect is required). If identical units are being permitted and will be subject to the same operating conditions, submit calculations for only one unit and a note specifying what other units to which the calculations apply. All formulas and calculations used to calculate emissions must be submitted. The "Calculations" tab in the UA2 has been provided to allow calculations to be linked to the emissions tables. Add additional "Calc" tabs as needed. If the UA2 or other spread sheets are used, all calculation spread sheet(s) shall be submitted electronically in Microsoft Excel compatible format so that formulas and input values can be checked. Format all spread sheets and calculations such that the reviewer can follow the logic and verify the input values. Define all variables. If calculation spread sheets are not used, provide the original formulas with defined variables. Additionally, provide subsequent formulas showing the input values for each variable in the formula. All calculations, including those calculations are imbedded in the Calc tab of the UA2 portion of the application, the printed Calc tab(s), should be submitted under this section.

Tank Flashing Calculations: The information provided to the AQB shall include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., NOI, permit, or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis. If Hysis is used, all relevant input parameters shall be reported, including separator pressure, gas throughput, and all other relevant parameters necessary for flashing calculation.

SSM Calculations: It is the applicant's responsibility to provide an estimate of SSM emissions or to provide justification for not doing so. In this Section, provide emissions calculations for Startup, Shutdown, and Routine Maintenance (SSM) emissions listed in the Section 2 SSM and/or Section 22 GHG Tables and the rational for why the others are reported as zero (or left blank in the SSM/GHG Tables). Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on calculating SSM emissions. If SSM emissions are greater than those reported in the Section 2, Requested Allowables Table, modeling may be required to ensure compliance with the standards whether the application is NSR or Title V. Refer to the Modeling Section of this application for more guidance on modeling requirements.

Glycol Dehydrator Calculations: The information provided to the AQB shall include the manufacturer's maximum design recirculation rate for the glycol pump. If GRI-Glycalc is used, the full input summary report shall be included as well as a copy of the gas analysis that was used.

Road Calculations: Calculate fugitive particulate emissions and enter haul road fugitives in Tables 2-A, 2-D and 2-E for:

1. If you transport raw material, process material and/or product into or out of or within the facility and have PER emissions greater than 0.5 tpy.
2. If you transport raw material, process material and/or product into or out of the facility more frequently than one round trip per day.

Significant Figures:

A. All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.

B. At least 5 significant figures shall be retained in all intermediate calculations.

C. In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:

(1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;

(2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; **and**

(3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.

(4) The final result of the calculation shall be expressed in the units of the standard.

Control Devices: In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device

regardless if the applicant takes credit for the reduction in emissions. The applicant can indicate in this section of the application if they chose to not take credit for the reduction in emission rates. For notices of intent submitted under 20.2.73 NMAC, only uncontrolled emission rates can be considered to determine applicability unless the state or federal Acts require the control. This information is necessary to determine if federally enforceable conditions are necessary for the control device, and/or if the control device produces its own regulated pollutants or increases emission rates of other pollutants.

Emissions calculations are provided for the following sources and were prepared to conform to the requirements listed above:

- Road Particulate Emissions inclusive of both paved and unpaved routes (Unit Number 1);
- Landfill Earthmoving Particulate Emissions inclusive of bulldozing operations, grading operations, scraper operations, and wind erosion (Unit Number 2);
- Landfill Gas Emissions (Unit Number 3);
- Petroleum Hydrocarbon Landfill (Unit Number 4);
- Landfill Gas Flare inclusive of flare combustion by-products (Unit Number 5); and
- Insignificant Sources inclusive of the 500 and 10,000-gallon diesel fuel storage tanks and two portable light towers.

The emissions calculations themselves are included in the following tables and include appropriate Greenhouse Gas (GHG) emissions as set forth in the calculation methods described in Section 6.a on the next page.

No potential emissions during startup, shutdown, and routine maintenance (SSM) are included in this application. A backup water truck is available for the primary control system water truck for Units 1 and 2 in case of an SSM event. Any potential SSM event for the controls system of Unit 3 (Unit 5 being the control unit) would be covered by the existing emissions reported. No SSM events are expected for Unit 4 as emissions from operations since all emissions are from this unit are from a continual process neither subject to malfunction nor “started up” or “shut down” at will.

Section 6.a

Green House Gas Emissions

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

Title V (20.2.70 NMAC), Minor NSR (20.2.72 NMAC), and PSD (20.2.74 NMAC) applicants must estimate and report greenhouse gas (GHG) emissions to verify the emission rates reported in the public notice, determine applicability to 40 CFR 60 Subparts, and to evaluate Prevention of Significant Deterioration (PSD) applicability. GHG emissions that are subject to air permit regulations consist of the sum of an aggregate group of these six greenhouse gases: carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO_2e emissions from your facility.
2. GHG mass emissions are the sum of the total annual tons of greenhouse gases without adjusting with the global warming potentials (GWPs). GHG CO_2e emissions are the sum of the mass emissions of each individual GHG multiplied by its GWP found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.
3. Emissions from routine or predictable start up, shut down, and maintenance must be included.
4. Report GHG mass and GHG CO_2e emissions in Table 2-P of this application. Emissions are reported in **short** tons per year and represent each emission unit's Potential to Emit (PTE).
5. All Title V major sources, PSD major sources, and all power plants, whether major or not, must calculate and report GHG mass and CO2e emissions for each unit in Table 2-P.
6. For minor source facilities that are not power plants, are not Title V, and are not PSD there are three options for reporting GHGs in Table 2-P: 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHGs as a second separate unit; 3) or check the following ☐ By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

Sources for Calculating GHG Emissions:

- Manufacturer's Data
- AP-42 Compilation of Air Pollutant Emission Factors at http://www.epa.gov/ttn/chief/ap42/index.html
- EPA's Internet emission factor database WebFIRE at http://cfpub.epa.gov/webfire/
- 40 CFR 98 Mandatory Green House Gas Reporting except that tons should be reported in short tons rather than in metric tons for the purpose of PSD applicability.
- API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. August 2009 or most recent version.
- Sources listed on EPA's NSR Resources for Estimating GHG Emissions at http://www.epa.gov/nsr/clean-air-act-permitting-greenhouse-gases:

Global Warming Potentials (GWP):
Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO_2 over a specified time period.

"Greenhouse gas" for the purpose of air permit regulations is defined as the aggregate group of the following six gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. **(20.2.70.7 NMAC, 20.2.74.7 NMAC).** You may also find GHGs defined in 40 CFR 86.1818-12(a).

Metric to Short Ton Conversion:
Short tons for GHGs and other regulated pollutants are the standard unit of measure for PSD and title V permitting programs. 40 CFR 98 Mandatory Greenhouse Reporting requires metric tons.
1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

Section 7

Information Used To Determine Emissions

Information Used to Determine Emissions shall include the following:

- ☐ If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation.
- ☐ If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.
- ☑ If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations.
- ☐ If an older version of AP-42 is used, include a complete copy of the section.
- ☐ If an EPA document or other material is referenced, include a complete copy.
- ☐ Fuel specifications sheet.
- ☑ If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.

Multiple sources of equipment and activity-specific data, equations and emissions factors were used in determining potential emissions produced by activities at CRLF. Information used to determine emissions is included in the following attachments:

- Attachment 7.1 – AP-42, Section 13.2.2 Unpaved Roads;
- Attachment 7.2 – AP-42, Section 11.9 Western Surface Coal Mining;
- Attachment 7.3 – AP-42, Section 13.2.4 Aggregate Handling and Storage Piles;
- Attachment 7.4 – AP-42, Section 2.4 Municipal Solid Waste Landfills;
- Attachment 7.5 – Waste Industry Air Coalition Values;
- Attachment 7.6 – LandGEM Model Output for Landfill Gas Generation (done in two parts due to site life since each model can only process 80 years);
- Attachment 7.7 – TANKs 4.09D Model Outputs for Diesel Tanks;
- Attachment 7.8 – AP-42, Section 3.3 Gasoline and Diesel Industrial Engines;
- Attachment 7.9 – Heavy Equipment Manufacturer's Specification Sheets;
- Attachment 7.10 – AP-42, Section 13.5 Industrial Flares;
- Attachment 7.11 – Dust Control Plan; and
- Attachment 7.12 – Site-Specific Hydrogen Sulfide Analysis.

Section 8

Map(s)

A map such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the following:

The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads
Topographic features of the area	Facility property boundaries
The name of the map	The area which will be restricted to public access
A graphical scale	

Four drawings as follows are included which encompass the content listed above for clarity. A current drawing showing the gas collection and control system is also included. These drawings are as follows:

Drawing 8.1 Site Location Map;
Drawing 8.2 Overall Landfill Site Plan;
Drawing 8.3 Facility Layout; and
Drawing 8.4 GCCS Site Plan.

Section 9

Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC)
(This proof is required by: 20.2.72.203.A.14 NMAC "Documentary Proof of applicant's public notice")

☑ **I have read the AQB "Guidelines for Public Notification for Air Quality Permit Applications"**
This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

Unless otherwise allowed elsewhere in this document, the following items document proof of the applicant's Public Notification. Please include this page in your proof of public notice submittal with checkmarks indicating which documents are being submitted with the application.

New Permit and **Significant Permit Revision** public notices must include all items in this list.

Technical Revision public notices require only items 1, 5, 9, and 10.

Per the Guidelines for Public Notification document mentioned above, include:

1. ☑ A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC) **(Section 9, Page 4)**
2. ☑ A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g: post office, library, grocery, etc.) **(Section 9, Page 31)**
3. ☑ A copy of the property tax record (20.2.72.203.B NMAC). **(Section 9, Page 10)**
4. ☑ A sample of the letters sent to the owners of record. **(Section 9, Page 19)**
5. ☑ A sample of the letters sent to counties, municipalities, and Indian tribes. **(Section 9, Page 19)**
6. ☑ A sample of the public notice posted and a verification of the local postings. **(Section 9, Page 40 and Page 32)**
7. ☑ A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group. **(Section 9, Page 3)**
8. ☑ A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal. **(Section 9, Page 46 and Page 44)**
9. ☑ A copy of the classified or legal ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish. **(Section 9, Page 22 and Page 26)**
10. ☑ A copy of the display ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish. **(Section 9, Page 24 and Page 27)**
11. ☑ A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail. This is necessary for verification that the correct facility boundary was used in determining distance for notifying land owners of record. **(Section 9, Page 9)**

Attachment 9.1 – Letter Notifications (Page 2);
Attachment 9.2 – Newspaper Public Notice (Page 21);
Attachment 9.3 – Postings of Public Notice (Page 30); and
Attachment 9.4 – Public Service Announcement (PSA) (Page 42).

Section 10

Written Description of the Routine Operations of the Facility

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A written description of the routine operations of the facility. Include a description of how each piece of equipment will be operated, how controls will be used, and the fate of both the products and waste generated. For modifications and/or revisions, explain how the changes will affect the existing process. In a separate paragraph describe the major process bottlenecks that limit production. The purpose of this description is to provide sufficient information about plant operations for the permit writer to determine appropriate emission sources.

There are no inherent bottlenecks to operation. The amount material brought into the landfill is a function of the generation of waste in the area and is unlikely to outstrip the landfill's capacity to efficiently landfill it in an environmentally safe manner.

Emissions calculations are provided for the following sources; this section will provide operational data on these sources:

- Road Particulate Emissions inclusive of both paved and unpaved routes (Unit Number 1);
- Landfill Earthmoving Particulate Emissions inclusive of bulldozing operations, grading operations, scraper operations, and wind erosion (Unit Number 2);
- Landfill Gas Emissions (Unit Number 3);
- Petroleum Hydrocarbon Landfill (Unit Number 4);
- Landfill Gas Flare inclusive of flare combustion by-products (Unit Number 5); and
- Insignificant Sources inclusive of the 500 and 10,000-gallon diesel fuel storage tanks and two portable light towers.

Roads Particulate Emissions – Emission Unit 1

The disposal route and landfill access roads consist of paved and unpaved surfaces, and temporary graded roadways. Vehicles traveling on the unpaved portions of the disposal route and access roads (Figure 5.1) have the potential to generate fugitive dust emissions. Cumulatively, potential fugitive dust emissions from vehicular traffic have been designated as Emission Unit 1. Unpaved road surfaces are currently watered on a daily basis, or treated with chemical surfactants for dust control. The Dust Control Plan, Attachment 7.11, provides additional information on the dust control measures. Emission rate estimates are provided for the following categories:

- Refuse Delivery Vehicles – Delivery of solid waste along the disposal route (site entrance to disposal area);
- Public Convenience Station Vehicles – For approximately 2 hours each day, a portion of incoming light/medium vehicles (residential haulers) are diverted to the Public Convenience Station; and
- Miscellaneous Vehicles – Employee vehicles (trucks, personal vehicles) which travel on the disposal route and access roads.

Detailed emissions calculations for Emission Unit 1 activities are provided in Tables 6.2a and 6.2b. References used in emissions calculations can be found in Attachment 7.1. Road lengths were conservatively estimated to ensure that any changes in the routes would not result in any emissions increase above permitted limits during the landfill's development. Road lengths were determined by:

- Refuse Delivery Vehicles – 164 feet paved and 4,938 feet unpaved, one-way each. The lengths were determined to be from the permit boundary to the edge of paved roadway leading to the active landfill face and the unpaved from the edge of paved to the most distant possible disposal cell during the landfill's development.
- Public Convenience Station Vehicles – 461 feet paved only, one-way. The length was determined from the permit boundary to the far end of the public convenience station. All vehicles routed to the public convenience station would not drive on any unpaved roadways.
- Miscellaneous Vehicles – Employee vehicles (trucks, personal vehicles) which travel on the disposal route and access roads.

To determine vehicle typical quantities for the calculations, actual values from recent emissions inventories were checked against the 2011 permit application vehicle totals. Since the overall 2011 vehicle totals were higher in total than any recent year and since the road lengths assumed here are the longest during the landfill's development, they were utilized for conservativeness.

Dust control measures are regularly employed during routine landfill operations in order to reduce fugitive dust emissions produced by landfill activities. Consistent with existing New Mexico Environment Department (NMED) Air Quality Bureau (AQB) policy, an overall water control efficiency of 60 percent was applied to unpaved access roads which receive water as a dust control measure. The disposal route is treated quarterly with surfactant and daily with water, consistent with surfactant manufacturer's application specifications and frequencies, for an overall control efficiency of 90 percent (as approved by the Bureau). Detailed calculations for fugitive dust control efficiencies for the disposal route and access roads are provided in Tables 6.2a and 6.2b, and discussions of surfactant and water application are detailed in the Dust Control Plan, Attachment 7.11.

Landfill Earthmoving Particulate Emissions – Emission Unit 2

Fugitive dust emissions from disposal area operations and daily landfill cell construction result primarily from the daily operations of heavy equipment such as scrapers, road graders, bulldozers, and compactors. Scrapers are used to excavate soil in order to prepare new landfill disposal cells and to deliver soil to the disposal area for daily cover. Road graders maintain the disposal route and access roads and perform limited finish-grading operations for new cells (which are subject to periodic watering). Compactors consolidate waste at the disposal area. Bulldozers assist the compactors at the disposal area by positioning waste so it can be easily consolidated.

Potential fugitive dust emissions from the heavy equipment associated with disposal area and cell construction operations were calculated based on CRLF equipment annual usage for each piece of equipment at the landfill and a conservative factors-of-safety. Detailed calculations of fugitive dust emissions for heavy equipment operations can be found in Tables 6.3a and 6.3b. References for the calculations can be found in Attachments 7.1, 7.2, and 7.3. Also note that heavy equipment specifications can be found in Attachment 7.9.

Wind erosion was also included as part of this emission unit. Based on guidance provided in AP-42, Section 13.2.5, Industrial Wind Erosion (November, 2006), only those areas of the landfill actively disturbed by facility operations were included in the acreage for which potential fugitive dust emissions attributable to wind erosion were calculated. It is assumed that no more than 36 acres will be actively disturbed at any one time. Detailed calculations for fugitive dust emissions due to wind erosion can be found in Table 6.3c. References for the calculations can be found in Attachments 7.1 and 7.3.

Fugitive dust control measures are employed during the operating day in order to reduce potential fugitive dust emissions during normal operations. A control efficiency of 60 percent was applied to scraper travel and grader travel on the landfill access roads, and a control efficiency of 90 percent was applied to scraper travel on the disposal route. The bulldozer and compactor operate nearly 100 percent of the time within the disposal area, which is watered to a limited degree (e.g., during high wind events). Therefore, no control efficiency was applied to bulldozer and compactor operations. Using the AP-42 guidance, wind erosion emissions estimates from approximately 36± acres of actively disturbed areas were estimated. A control efficiency of 60 percent for fugitive dust emissions due to wind erosion was applied to landfill access roads, the Maintenance Compound, and the Landfill Office parking area. The disposal route control efficiency is 90 percent for wind erosion due to quarterly application dust palliatives. For the purposes of wind erosion estimates, auxiliary roads, disposal area operations, and the daily cover soil borrow area were conservatively assumed to have a control efficiency of zero.

Landfill Gas Emissions – Emission Unit 3

A municipal solid waste landfill consists of an area of land which has been permitted under solid waste regulations for the construction and acceptance of municipal solid waste materials. Disposal operations are permitted as below and above-grade area fill. A defined area of the landfill is excavated, lined, and prepared to receive waste prior to the completion of the previous waste management unit.

Waste is hauled to the landfill in trucks during the landfill's operating hours. The trucks dispose of waste at the landfill's active fill area. The waste is spread and compacted in lifts (or layers) by landfill equipment. At the end of the daily activities, soil cover or other approved alternative daily cover (ADC) is spread over the waste to minimize odors and reduce the occurrence of vectors (e.g. insects and birds).

Complex microbial and biochemical reactions occur within the landfill's interior after the waste has been deposited for a period of time. The first stage of refuse decomposition is rapid and continues until the entrained oxygen within the refuse is depleted.

The mature stage of refuse decomposition is anaerobic. The two primary constituents of landfill gas during this phase are methane (CH_4) and carbon dioxide (CO_2). CO_2 content is typically in the 50 percent range, with CH_4 comprising the other 50 percent. The production of landfill gas is a continuous process; it begins a few months after initial waste placement and continues until the microbial reactions are limited by substrate or moisture availability.

Landfill gas generation is affected by the rate at which the solid waste is disposed and from what is collected and destroyed. Landfill gas generation varies over the lifetime of the landfill but generally increases from year to year until the peak volume is reached shortly after landfill closure. Other factors influencing production include climate (i.e. precipitation), overall moisture conditions within the landfill, and types of solid waste accepted (degradable vs. inert).

The landfill gas picks up other constituents in relatively small concentrations as it travels through the refuse. These include hydrogen sulfide, which can range from zero to several hundred parts per million (ppm), and volatile organic compounds (VOC), which can range from several hundred to several thousand ppm. Some of the VOCs are hazardous air pollutants (HAPs).

After November 16, 2018, the GCCS must be operated according to 40 CFR 60, Subpart WWW as the landfill will be subject to the full control requirements at that time. The combustion of LFG in the flare will result in the emissions of combustion byproducts, specifically SO_2, NO_x, and CO; therefore, the more LFG that is destroyed in the flare, the more combustion byproduct emissions will result. Moreover, a

small portion of the NMOCs, VOCs, and HAPs routed to the flare will not be destroyed and will pass through the flare, the degree to which is based on the flare's destruction efficiency.

Attachment 7.6 includes the output from EPA's LandGEM models which estimate landfill gas production. Two models were used since only so many years can be accommodated in one model and the landfill's site life and past history exceeds one model. Sample calculations are included after the notes section of Table 6.4 (the table which estimates landfill gas fugitive emissions as well as open flare emissions). The VOC content of the landfill gas was tested to be 999 ppmv in 2016. For HAP content in landfill gas, since site-specific values were not available, Waste Industry Air Coalition (WIAC) values were used. WIAC data is more current and believed to be more accurate than AP-42 when site-specific values are not available. All HAPs combined were less than the 25 ton per year major source limit. References for the landfill gas emissions calculations are provided in Attachments 7.4 and 7.5.

Table 6.4 Column H, utilizes the uncontrolled 2018 gas generation rate to estimate uncontrolled landfill gas emissions prior to mandatory NSPS control in late 2018 and for conservativeness. Sample calculations are included after the notes section of Table 6.4. For HAP content in landfill gas, since site-specific values were not available, Waste Industry Air Coalition (WIAC) values were used. WIAC data is more current and believed to be more accurate than AP-42 when site-specific values are not available. All HAPs combined were less than the 25 ton per year major source limit. References for the landfill gas emissions calculations are provided in Attachments 7.4 and 7.5 and the EPA's LandGEM model is included as Attachment 7.6.

GHG Emissions are included in Table 6.5. These calculations utilize the maximum uncontrolled landfill emissions condition from 2018 combined with a maximum gas total sent to the flare of 3,000 cfm for conservativeness even though these conditions would not occur simultaneously. Using the global warming potential of 25 for methane, the total anthropogenic CO_2e is below 100,000 metric tons.

Petroleum Hydrocarbon Landfarm – Emission Unit 4

CRLF is permitted to accept petroleum contaminated soils (PCS) for remediation via landfarming; for beneficial use as daily cover soil; or for direct disposal although this is not currently an active on-site source. The petroleum hydrocarbon landfarm (Figure 5.1, Section 5) has been designated as Emission Unit 4. Consistent with the New Mexico Solid Waste Rules (August 2007), PCS are considered remediated for the purpose of beneficial use when soil sample analyses meet the following conditions:

1. the sum of benzene, toluene, ethylbenzene, and xylene isomer concentrations (i.e., BTEX) is less than 500 mg/Kg, with benzene individually less than 10 mg/Kg; and
2. the total petroleum hydrocarbon (TPH) concentration is less than 1,000 mg/Kg.

Prior to acceptance by CRLF, incoming shipments of PCS will be required to be analyzed for TPH using EPA Method 418.1 and BTEX via EPA Method 8260B (or approved equals). PCS shipments will be recorded on a non-hazardous waste manifest with the approved profile number identifying the remediation project. CRLF may accept PCS for remediation (i.e., PCS exhibiting parameter concentrations above the regulatory thresholds). CRLF will electronically track the highest individual BTEX parameter concentrations from each remediation project and volume/mass of each inbound PCS shipment using the above methodologies. This approach will provide a conservative indicator of HAP emissions; and CRLF will track the accumulated daily volume of PCS accepted, by approved profile number, by using a spreadsheet similar to the one provided as Figure 6.1.

If this Emissions Unit is active during the landfill's development, CRLF will track total HAP emissions from PCS such that, on an annual basis, total site emissions do not exceed 10 tons/year for any individual

HAP or 25 tons/year of aggregate HAPs (including contributions from Emission Units 3 and 5). For the purposes of estimating emissions from the landfarm, it will be conservatively assumed that 100 percent of the VOCs are emitted as HAPs.

For the emissions shown in the Section 2 tables of this application for this source, emissions will be shown as being just below those totals which would cause the emissions levels noted above to be triggered since these would be possible maximums authorized by this application.

Landfill Gas Flare – Emission Unit 5

As of November 16, 2018 the landfill is subject to the control requirements of 40 CFR 60, Subpart WWW. The combustion of LFG in the flare will result in the emissions of combustion byproducts, specifically SO_2, NO_x, and CO; therefore, the more LFG that is destroyed in the flare, the more combustion byproduct emissions will result. Moreover, a small portion of the NMOCs, VOCs, and HAPs routed to the flare will not be destroyed and will be allowed to pass through the flare, the degree to which is based on the flare's destruction efficiency.

Emissions from the flare assuming the gas system is being operated during the landfill's development are based on a maximum flare capacity of 3,000 cfm for conservativeness since landfill gas generation may vary from that estimated here. Detailed calculations for the combustion by-products of flaring the landfill gas are provided in Table 6.4. The emissions summary table (Table 6.1) shows landfill emissions assuming no GCCS in 2018 for conservativeness as well as flare emissions assuming the maximum flow to the flare. Although these worst-case operations will not occur simultaneously, this is a conservative estimate for potential emissions with or without the gas system operating. References for the calculations are provided in Attachments 7.4 and 7.10.

Insignificant Emissions

Not included in this application are several insignificant activities or exempted equipment. These sources include 10,000-gallon and 500-gallon diesel fuel storage tanks, three 300-gallon oil tanks, and one 100-gallon oil tank, a parts degreaser, motor oil and antifreeze storage, and two portable light towers. Emissions calculations are required for the diesel fuel storage tanks and the light towers per Table 2-B and are included Table 6.6. The TANKs model output files are included in Attachment 7.7. An overly conservative annual throughput of 1,000,000 gallons was used to show that the emissions are insignificant. Reference for the portable light towers can be found in Attachment 7.8. SDS' are available upon request.

Section 11
Source Determination

Source submitting under 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC

Sources applying for a construction permit, PSD permit, or operating permit shall evaluate surrounding and/or associated sources (including those sources directly connected to this source for business reasons) and complete this section. Responses to the following questions shall be consistent with the Air Quality Bureau's permitting guidance, Single Source Determination Guidance, which may be found on the Applications Page in the Permitting Section of the Air Quality Bureau website.

Typically, buildings, structures, installations, or facilities that have the same SIC code, that are under common ownership or control, and that are contiguous or adjacent constitute a single stationary source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes. Submission of your analysis of these factors in support of the responses below is optional, unless requested by NMED.

A. Identify the emission sources evaluated in this section (list and describe)**:**

Camino Real Landfill (CRLF) and the Four Peaks Energy, Inc. Landfill Gas-to-Energy (LFGE) Plant are both situated on contiguous property owned by CRLF. Since these two operations appear to be co-located, it is necessary to analyze the relationship between the two facilities and determine whether or not they constitute a single stationary source and should be treated as one facility for this permitting action. The three factors to consider when determining whether the two operations should be considered as a single source are listed in **Section B**, below. An additional consideration for the evaluation of this relationship pertains to the role one facility plays in the other facility's daily operations, and what pertinent agreements or dependencies, if any, exist between the two facilities.

B. Apply the 3 criteria for determining a single source:

SIC Code: Surrounding or associated sources belong to the same 2-digit industrial grouping (2-digit SIC code) as this facility, OR surrounding or associated sources that belong to different 2-digit SIC codes are support facilities for this source.

☑ **Yes** ☐ **No**

Common Ownership or Control: Surrounding or associated sources are under common ownership or control as this source.

☐ **Yes** ☑ **No**

Contiguous or Adjacent: Surrounding or associated sources are contiguous or adjacent with this source.

☑ **Yes** ☐ **No**

C. Make a determination:

☑ The source, as described in this application, constitutes the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes. If in "A" above you evaluated only the source that is the subject of this application, all "**YES**" boxes should be checked. If in "A" above you evaluated other sources as well, you must check **AT LEAST ONE** of the boxes "**NO**" to conclude that the source, as

described in the application, is the entire source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes.

☐ The source, as described in this application, **does not** constitute the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):

Item B.1

CRLF and the LFGE Plant both share the same 2-digit SIC-code (Major Group 49, for electric, gas, and sanitary services), but do not share the same 4-digit SIC-code. CRLF is included under Industry Group 4953 for Refuse Systems, and the LFGE Plant is listed under Industry Group 4911 for Electric Services.

Item B.2

In order to answer "no" to item B.2, the facilities in question must not have common ownership or control. The LFGE Plant and CRLF are completely separate legal entities that do not share any kind of common control, and are unrelated in their ownership. The LFGE Plant is owned by Four Peaks Energy, Inc., a wholly-owned subsidiary of MAR Oil & Gas (MAR); and the Camino Real Landfill is owned by Camino Real Environmental Center, Inc., a wholly-owned subsidiary of Waste Connections, Inc. The LFGE Plant utilizes the methane gas produced by the decomposition of waste disposed of in the landfill as fuel for up to two Caterpillar® generators installed at the Plant. Neither operation serves as a support facility to the other, they are not engaged in the same industrial activity, nor can they be classified as being engaged in the same enterprise. An enterprise exists if the establishments in question have greater than 50 percent common direct or indirect ownership. No common control or ownership exists between the two facilities in question, so neither can be considered a support facility.

The LFGE Plant is a permitted facility which was determined in 2005 by AQB to be a separately owned and operated facility. Under the agreement between MAR and CRLF, MAR is obligated to provide CRLF with the electricity that it requires to operate, but only up to 7.5 percent of the total electricity generated. In the event that the energy demand from CRLF exceeds 7.5 percent of the total generated by the LFGE plant, MAR can stop providing CRLF with electricity. A majority of the power generated by the LFGE Plant is sold to El Paso Electric (between 92.5 percent and 100 percent of the electricity generated).

Item B.3

The LFGE Plant is located on a parcel of land (approximately 0.25-acres) leased to MAR by CRLF. This parcel is located within the CRLF property boundary. As stated in Item No. 2 of the contract between MAR and CRLF, the property on which the LFGE Plant is located is licensed to the LFGE Plant by CRLF. Item B.3 is answered "yes" because the sources in question are co-located on contiguous or adjacent parcels of land.

Since only two of the three criteria above have been met, CRLF and the LFGE Plant must be considered two separate facilities.

Section 12

Section 12.A
PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

A PSD applicability determination for all sources. For sources applying for a significant permit revision, apply the applicable requirements of 20.2.74.AG and 20.2.74.200 NMAC and to determine whether this facility is a major or minor PSD source, and whether this modification is a major or a minor PSD modification. It may be helpful to refer to the procedures for Determining the Net Emissions Change at a Source as specified by Table A-5 (Page A.45) of the EPA New Source Review Workshop Manual to determine if the revision is subject to PSD review.

A. This facility is:

- ☑ **a minor PSD source before and after this modification (if so, delete C and D below).**
- ☐ **a major PSD source before this modification. This modification will make this a PSD minor source.**
- ☐ **an existing PSD Major Source that has never had a major modification requiring a BACT analysis.**
- ☐ **an existing PSD Major Source that has had a major modification requiring a BACT analysis**
- ☐ **a new PSD Major Source after this modification.**

B. **This facility is not one of the listed 20.2.74.501 Table I – PSD Source Categories. The "project" emissions** for this modification are **not applicable to a significance analysis since this is not an existing major PSD source. The "project" emissions listed below are totals inclusive of all existing and prior revisions or modifications, past or future to this facility. "De-bottlenecking", or other associated emissions resulting in higher emissions is not applicable. The project emissions (before netting) for this project as taken from Section 2 of this application are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:**

a. **NOx: 20.10 TPY**
b. **CO: 91.64 TPY**
c. **VOC: <38.65 TPY**
d. **SOx: 4.56 TPY**
e. **TSP (PM): 83.68 TPY**
f. **PM10: 23.40 TPY**
g. **PM2.5: 2.59 TPY**
h. **HAPs: <25.00 TPY**
i. **Sulfur compounds (listed in Table 2): 0.41 TPY (hydrogen sulfide)**
j. **GHG: 81,495 TPY (non-fugitive anthropogenic methane)**

Section 13

Determination of State & Federal Air Quality Regulations

This section lists each state and federal air quality regulation that may apply to your facility and/or equipment that are stationary sources of regulated air pollutants.

Not all state and federal air quality regulations are included in this list. Go to the Code of Federal Regulations (CFR) or to the Air Quality Bureau's regulation page to see the full set of air quality regulations.

Required Information for Specific Equipment:
For regulations that apply to specific source types, in the 'Justification' column **provide any information needed to determine if the regulation does or does not apply**. **For example**, to determine if emissions standards at 40 CFR 60, Subpart IIII apply to your three identical stationary engines, we need to know the construction date as defined in that regulation; the manufacturer date; the date of reconstruction or modification, if any; if they are or are not fire pump engines; if they are or are not emergency engines as defined in that regulation; their site ratings; and the cylinder displacement.

Required Information for Regulations that Apply to the Entire Facility:
See instructions in the 'Justification' column for the information that is needed to determine if an 'Entire Facility' type of regulation applies (e.g. 20.2.70 or 20.2.73 NMAC).

Regulatory Citations for Regulations That Do Not, but Could Apply:
If there is a state or federal air quality regulation that does not apply, but you have a piece of equipment in a source category for which a regulation has been promulgated, you must **provide the low level regulatory citation showing why your piece of equipment is not subject to or exempt from the regulation. For example** if you have a stationary internal combustion engine that is not subject to 40 CFR 63, Subpart ZZZZ because it is an existing 2 stroke lean burn stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, your citation would be 40 CFR 63.6590(b)(3)(i). **We don't want a discussion of every non-applicable regulation, but if it is possible a regulation could apply, explain why it does not. For example,** if your facility is a power plant, you do not need to include a citation to show that 40 CFR 60, Subpart OOO does not apply to your non-existent rock crusher.

Regulatory Citations for Emission Standards:
For each unit that is subject to an emission standard in a source specific regulation, such as 40 CFR 60, Subpart OOO or 40 CFR 63, Subpart HH, include the low level regulatory citation of that emission standard. Emission standards can be numerical emission limits, work practice standards, or other requirements such as maintenance. **Here are examples:** a glycol dehydrator is subject to the general standards at 63.764C(1)(i) through (iii); an engine is subject to 63.6601, Tables 2a and 2b; a crusher is subject to 60.672(b), Table 3 and all transfer points are subject to 60.672(e)(1)

Federally Enforceable Conditions:
All federal regulations are federally enforceable. All Air Quality Bureau State regulations are federally enforceable except for the following: affirmative defense portions at 20.2.7.6.B, 20.2.7.110(B)(15), 20.2.7.11 through 20.2.7.113, 20.2.7.115, and 20.2.7.116; 20.2.37; 20.2.42; 20.2.43; 20.2.62; 20.2.63; 20.2.86; 20.2.89; and 20.2.90 NMAC. Federally enforceable means that EPA can enforce the regulation as well as the Air Quality Bureau and federally enforceable regulations can count toward determining a facility's potential to emit (PTE) for the Title V, PSD, and nonattainment permit regulations.

INCLUDE ANY OTHER INFORMATION NEEDED TO COMPLETE AN APPLICABILITY DETERMINATION OR THAT IS RELEVENT TO YOUR FACILITY'S NOTICE OF INTENT OR PERMIT.

EPA Applicability Determination Index for 40 CFR 60, 61, 63, etc: http://cfpub.epa.gov/adi/

To save paper and to standardize the application format, delete this sentence, and begin your submittal for this attachment on this page.

Example of a Table for STATE REGULATIONS:

STATE REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	Yes	Facility	The facility is subject to NMAAQS. Conformance with these requirements is addressed in the modeling section of this application.
20.2.7 NMAC	Excess Emissions	Yes	Facility	Records kept of any excess emission periods and notifications provided to NMED. Verbal (< 24 hours) and written (< 10 days) notice of excess emissions.
20.2.8 NMAC	Emissions Leaving New Mexico	Yes	Facility	No regulation or reciprocal action in effect with Texas or Mexico. Since emissions limits for New Mexico are met by the landfill, other programs should be satisfied also.
20.2.23 NMAC	Fugitive Dust Control	No		Facility is exempt since it is permitted.
20.2.60 NMAC	Open Burning	Yes	Facility	Although applicable to this and other landfills in New Mexico, Open burning does not occur at and is prohibited at the facility.
20.2.61 NMAC	Smoke & Visible Emissions	Yes	5	This regulation applies to the open flare (Unit 5) and limits opacity to 20%.
20.2.62 NMAC	Municipal Waste Combustion	No		No affected facilities at the landfill.
20.2.63 NMAC	Biomedical Waste Combustion	No		No affected facilities at the landfill.
20.2.64 NMAC	Municipal Solid Waste Landfills	Yes	3	20.2.64.110(A) requires that Title V permit be obtained for “new” or “existing” facilities; same as requirements of 40 CFR 60, Subpart WWW. The landfill is “new” not “existing” by definition and not subject to other requirements of this part.
20.2.70 NMAC	Operating Permits	Yes	Facility	Although this is a minor Title V source, 40 CFR 60, Subpart WWW requires that a Title V permit be maintained due to the landfill’s overall capacity.
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	This facility is subject to 20.2.70 NMAC and is in turn subject to 20.2.71 NMAC.
20.2.72 NMAC	Construction Permits	Yes	Facility	During the landfill’s recent Title V renewal, it was determined that the facility is subject to this rule. This NSR permit application is being prepared to comply with 20.2.72 NMAC.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	Landfill subject to emissions-related requirements to complete an annual emissions inventory (20.2.73.300 NMAC) based on emissions rates. Would also possibly be subject to notice of intent requirements under 20.2.73.200 if a modification met the thresholds included in 20.2.73.200(A)(2) NMAC.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No		The facility is not an existing PSD major source.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	This regulation applies since this is an NSR application per 20.2.72 NMAC. Since this is an application under 20.2.72, it is subject to 20.2.75.10, 11 permit fee, and 11.E annual fees.
20.2.77 NMAC	New Source Performance	Yes	3,5	See discussion of NSPS below (40 CFR 60). The landfill and flare are subject to control requirements in 40 CFR 60.
20.2.78 NMAC	Emission Standards for HAPS	No		This facility emits hazardous air pollutants but which **are not** subject to the requirements of 40 CFR Part 61, as amended through December 31, 2010. Asbestos disposal is the most common type of 40 CFR 61 requirement that some landfills are subject to. However, this landfill does not accept any form of asbestos.
20.2.79 NMAC	Permits – Nonattainment Areas	No		The landfill (all sources) is not a major source nor is a major modification being proposed at this time.

STATE REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.80 NMAC	Stack Heights	Yes	5	Flare has no additional height above good engineering practices which would trigger this rule. However, this is marked as being applicable since this will be a 20.2.72 NMAC permit and, as such, the Bureau will consider stack height.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	3,5	See discussion of NESHAPS below (40 CFR 63). The flare and landfill are subject to provisions in 40 CFR 63.

Example of a Table for Applicable FEDERAL REGULATIONS (Note: This is not an exhaustive list):

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 50	NAAQS	Yes	Facility	This applies since the facility is subject to 20.2.70 and 20.2.72 NMAC.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	3,5	Applicable since, as noted in 40 CFR §60.1(a), provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility. At this time, the landfill is not subject to control requirements under 40 CFR 60, Subpart WWW which became effective on November 16, 2018. Unit 5 will be required to meet 40 CFR §60.18 requirements also.
NSPS 40 CFR 60 Subpart Cc	NSPS – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills	No		The Facility is subject to 40 CFR 60, Subpart WWW since it meets the definition of a "new" landfill under that rule. It is not an "existing" facility as defined in 40 CFR 60, Subpart Cc.
NSPS 40 CFR 60 Subpart Cf	NSPS – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills	Yes	3,5	The Facility meets the definition of an existing site under 40 CFR 60, Subpart Cf. However, until a final Emissions Guideline rule is approved at the State or Federal level, there are no current requirements under this rule. When the Emissions Guideline rule is finalized, the site will transition from 40 CFR, Subpart WWW to the new Emissions Guideline rule (at which point that rule will become applicable).
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for **Electric Utility Steam Generating Units**	No		No steam generating units are present at the landfill.
NSPS 40 CFR60.40b Subpart Db	**Electric Utility Steam Generating Units**	No		No steam generating units are present at the landfill.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	No		No steam generating units are present at the landfill.

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for **Storage Vessels for Petroleum Liquids** for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and **Prior** to July 23, 1984	No		No applicable storage vessels are present on-site.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for **Volatile Organic Liquid Storage Vessels** (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced **After** July 23, 1984	No		The landfill has no storage vessels with a capacity greater than or equal to 75 cubic meters (m 3) (19,813 US gallons) that used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.
NSPS 40 CFR 60.330 Subpart GG	**Stationary Gas Turbines**	No		The landfill has no stationary gas turbines.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from **Onshore Gas Plants**	No		This rule is not applicable to this facility.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for **Onshore Natural Gas Processing**: SO_2 Emissions	No		This rule is not applicable to this facility.
NSPS 40 CFR 60 Subpart WWW	NSPS – Standards of Performance for Municipal Waste Solid Landfills	Yes	3,5	The landfill now subject to NSPS control requirements at this time that became effective on November 16, 2018.
NSPS 40 CFR 60 Subpart XXX	NSPS – Standards of Performance for Municipal Waste Solid Landfills	No		The Facility is currently subject to 40 CFR 60, Subpart WWW since it does not meets the definition of a “new” landfill under 40 CFR 60, Subpart XXX. It is an “existing” facility as defined in 40 CFR 60, Subpart Cf. When the State or Federal Emissions Guideline Rule under 40 CFR 60, Subpart Cf is finalized, the site will transition from 40 CFR 60, Subpart WWW to that rule.
NSPS 40 CFR 60 Subpart AAAA	Standards of Performance for Small Municipal Waste Combustion Units for Which Commenced After August 30, 1999 or for Which Modifications or Reconstruction is Commenced After June 6, 2001	No		The landfill includes no applicable incineration units on-site (no incineration of any kind takes place on-site).

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NSPS 40 CFR 60 Subpart CCCC	Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for Which Construction is Commenced After November 30, 1999 or for Which Modification or Reconstruction is Commenced After June 1, 2001	No		The landfill includes no applicable incineration units on-site (no incineration of any kind takes place on-site).
NSPS 40 CFR 60 Subpart EEEE	Standards of Performance for Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	No		The landfill includes no applicable incineration units on-site (no incineration of any kind takes place on-site).
NSPS 40 CFR 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	No		The landfill has no applicable stationary compression ignition internal combustion engines.
NSPS 40 CFR 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	No		The landfill has no applicable stationary spark ignition engines.
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015	No		The rule applies to “affected” facilities that are constructed, modified, or reconstructed after Aug 23, 2011 (40 CFR 60.5365): gas wells, including fractured and hydraulically refractured wells, centrifugal compressors, reciprocating compressors, pneumatic controllers, certain equipment at natural gas processing plants, sweetening units at natural gas processing plants, and storage vessels. No such facilities exist at the Camino Real Landfill.

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	No		No such facilities exist at the Camino Real Landfill.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No		There are no such units at the landfill.
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No		There are no such units at the landfill.
NESHAP 40 CFR 61 Subpart A	General Provisions	No		The landfill is not subject to an 40 CFR 61 sections and, as such, is not subject to the general provisions of 40 CFR 61, Subpart A.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for **Mercury**	No		The landfill does not contain a stationary source which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge.
40 CFR 61, Subpart M	National Emission Standards for Asbestos	No		The landfill does not dispose of asbestos (not friable or non-friable).
NESHAP 40 CFR 61 Subpart V	National Emission Standards for **Equipment Leaks** (Fugitive Emission Sources)	No		The provisions of this subpart apply to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart. VHAP service means a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 10 percent by weight of VHAP. VHAP means a substance regulated under this subpart for which a standard for equipment leaks of the substance has been promulgated. Benzene is a VHAP (See 40 CFR 61 Subpart J). The landfill has no such applicable sources.
MACT 40 CFR 63, Subpart A	General Provisions	Yes	3,5	Applies if any other subpart under 40 CFR 63 applies. Since there is a NESHAP rule for MSW landfills (40 CFR 63, Subpart AAAA), this rule applies to the landfill. Since the landfill's NMOC emissions were over 50 Mg/yr, the flare and landfill became fully subject to this rule on November 16, 2018.
MACT 40 CFR 63.760 Subpart HH	**Oil and Natural Gas Production Facilities**	No		
MACT 40 CFR 63 Subpart HHH		No		The facility does not include natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions as defined in §63.1271.

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 63, Subpart AAAA	NESHAP for MSW Landfills	Yes	3,5	Per 40 CFR §63.1935(a)(3), this rule applies since the landfill has accepted waste since November 8, 1987, is an area source, exceeds the capacity limits shown here, and currently emits in excess of 50 Mg/yr of NMOCs. The landfill will follow its SSM Plan as of November 16, 2018 and after. It is also not a bioreactor as defined in this subpart.
40 CFR 63, Subpart MMMM	National Emission Standard for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products	No		The landfill does not conduct surface coating operations that would trigger requirements in this subpart.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (**RICE MACT**)	No		Facilities are subject to this subpart if they own or operate a stationary RICE, except if the stationary RICE is being tested at a stationary RICE test cell/stand. The landfill includes no stationary engines.
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	No		The facility does not include any sources applicable to this rule.
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No		The facility does not include any sources applicable to this rule.
40 CFR 63 Subpart CCCCCC	NESHAP for Gasoline Dispensing Facilities	No		The facility does not include a stationary gasoline tank.
40 CFR 63, Subpart HHHHHH	National Emission Standard for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing	No		The landfill does not conduct surface coating operations that would trigger requirements in this subpart.
40 CFR 64	**Compliance Assurance Monitoring**	No		No affected facilities.
40 CFR 68	**Chemical Accident Prevention**	Yes	Facility	Facility-wide risk management plan in –place.

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
Title IV – Acid Rain 40 CFR 72	**Acid Rain**	No		Not an affected source under 40 CFR §72. This facility does not generate commercial electric power or electric power for sale.
Title IV – Acid Rain 40 CFR 73	**Sulfur Dioxide** Allowance Emissions	No		Not an affected source under 40 CFR §73. This facility does not generate commercial electric power or electric power for sale.
Title IV-Acid Rain 40 CFR 75	**Continuous Emissions Monitoring**	No		Not an affected source under 40 CFR §75. This facility does not generate commercial electric power or electric power for sale.
Title IV – Acid Rain 40 CFR 76	**Acid Rain** Nitrogen Oxides **Emission Reduction Program**	No		This facility does not generate commercial electric power or electric power for sale.
Title VI – 40 CFR 82	Protection of **Stratospheric Ozone**	No	N/A	The facility does not produce, transfer, destroy, import or export substances controlled under this regulation.
40 CFR 98 Subpart HH	Greenhouse Gas Reporting Requirements	Yes	3,5	Landfill reports annual GHG emissions under this rule since it generates GHGs over the reporting threshold.
CAA Section 112(r)	Chemical Accident Prevention Provisions	No		The facility does not store or use any of the chemicals listed in Section 112(r) in or above the threshold quantities specified in this section.

Section 14

Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

☑ **Title V Sources** (20.2.70 NMAC)**:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies** defining the measures to be taken to mitigate source emissions during startups, shutdowns, and emergencies as required by 20.2.70.300.D.5(f) and (g) NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.

☑ **NSR** (20.2.72 NMAC)**, PSD** (20.2.74 NMAC) **& Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Source Emissions During Malfunction, Startup, or Shutdown** defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.

☑ **Title V** (20.2.70 NMAC)**, NSR** (20.2.72 NMAC)**, PSD** (20.2.74 NMAC) **& Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has established and implemented a Plan to Minimize Emissions During Routine or Predictable Startup, Shutdown, and Scheduled Maintenance through work practice standards and good air pollution control practices as required by 20.2.7.14.A and B NMAC. This plan shall be kept on site or at the nearest field office to be made available to the Department upon request. This plan should not be submitted with this application.

The measures taken to mitigate excessive fugitive particulate emissions during startup, shutdown, and emergencies consist of a backup water wagon that is available on-site and access to water stored in three water storage tanks. As an additional emergency measure, the site could purchase additional water from the City of Sunland Park. The City maintains a 1.2 million gallon water tank, which is located approximately 500 feet northeast of the maintenance compound.

The landfill is subject to all control requirements of 40 CFR 60, Subpart WWW by no later than November 16, 2018. The landfill operates GCCS by sending gas to the off-site landfill gas-to-energy facility or to the flare as a backup if the other facility cannot accept the gas.

As of November 16, 2018, the landfill became subject to the SSM Plan requirements of 40 CFR 63, Subpart AAAA – and now fully follows that SSM Plan. This plan is designed to minimize emissions during routine or predictable startups, shutdowns, malfunctions (emergencies), and scheduled maintenance; consistent with the applicable provisions noted above.

Section 15

Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

Alternative Operating Scenarios: Provide all information required by the department to define alternative operating scenarios. This includes process, material and product changes; facility emissions information; air pollution control equipment requirements; any applicable requirements; monitoring, recordkeeping, and reporting requirements; and compliance certification requirements. Please ensure applicable Tables in this application are clearly marked to show alternative operating scenario.

Construction Scenarios: When a permit is modified authorizing new construction to an existing facility, NMED includes a condition to clearly address which permit condition(s) (from the previous permit and the new permit) govern during the interval between the date of issuance of the modification permit and the completion of construction of the modification(s). There are many possible variables that need to be addressed such as: Is simultaneous operation of the old and new units permitted and, if so for example, for how long and under what restraints? In general, these types of requirements will be addressed in Section A100 of the permit, but additional requirements may be added elsewhere. Look in A100 of our NSR and/or TV permit template for sample language dealing with these requirements. Find these permit templates at: https://www.env.nm.gov/aqb/permit/aqb_pol.html. Compliance with standards must be maintained during construction, which should not usually be a problem unless simultaneous operation of old and new equipment is requested.

In this section, under the bolded title "Construction Scenarios", specify any information necessary to write these conditions, such as: conservative-realistic estimated time for completion of construction of the various units, whether simultaneous operation of old and new units is being requested (and, if so, modeled), whether the old units will be removed or decommissioned, any PSD ramifications, any temporary limits requested during phased construction, whether any increase in emissions is being requested as SSM emissions or will instead be handled as a separate Construction Scenario (with corresponding emission limits and conditions, etc.

No discreet alternate operating scenario/construction scenario is being proposed with this application. However, since this landfill, like all landfills, has varying gas composition; year-over-year waste intake; and varying landfill gas collection quantities overall, to the flare, and off-site to the landfill gas-to-energy facility; it is reasonable to expect variation within the proposed emissions limits. To cover these possible fluctuations, the potential emissions included in this application have been conservatively set to encompass the expected variability of these different facets of the landfill's operation.

Section 16

Air Dispersion Modeling

1) Minor Source Construction (20.2.72 NMAC) and Prevention of Significant Deterioration (PSD) (20.2.74 NMAC) ambient impact analysis (modeling): Provide an ambient impact analysis as required at 20.2.72.203.A(4) and/or 20.2.74.303 NMAC and as outlined in the Air Quality Bureau's Dispersion Modeling Guidelines found on the Planning Section's modeling website. If air dispersion modeling has been waived for one or more pollutants, attach the AQB Modeling Section modeling waiver approval documentation.
2) SSM Modeling: Applicants must conduct dispersion modeling for the total short term emissions during routine or predictable startup, shutdown, or maintenance (SSM) using realistic worst case scenarios following guidance from the Air Quality Bureau's dispersion modeling section. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on SSM emissions modeling requirements.
3) Title V (20.2.70 NMAC) ambient impact analysis: Title V applications must specify the construction permit and/or Title V Permit number(s) for which air quality dispersion modeling was last approved. Facilities that have only a Title V permit, such as landfills and air curtain incinerators, are subject to the same modeling required for preconstruction permits required by 20.2.72 and 20.2.74 NMAC.

What is the purpose of this application?	Enter an X for each purpose that applies
New PSD major source or PSD major modification (20.2.74 NMAC). See #1 above.	
New Minor Source or significant permit revision under 20.2.72 NMAC (20.2.72.219.D NMAC). See #1 above. **Note:** Neither modeling nor a modeling waiver is required for VOC emissions.	**X**
Reporting existing pollutants that were not previously reported.	
Reporting existing pollutants where the ambient impact is being addressed for the first time.	
Title V application (new, renewal, significant, or minor modification. 20.2.70 NMAC). See #3 above.	
Relocation (20.2.72.202.B.4 or 72.202.D.3.c NMAC)	
Minor Source Technical Permit Revision 20.2.72.219.B.1.d.vi NMAC for like-kind unit replacements.	
Other: i.e. SSM modeling. See #2 above.	
This application does not require modeling since this is a No Permit Required (NPR) application.	
This application does not require modeling since this is a Notice of Intent (NOI) application (20.2.73 NMAC).	
This application does not require modeling according to 20.2.70.7.E(11), 20.2.72.203.A(4), 20.2.74.303, 20.2.79.109.D NMAC and in accordance with the Air Quality Bureau's Modeling Guidelines.	

Check each box that applies:

☐ See attached, approved modeling **waiver for all** pollutants from the facility.

☐ See attached, approved modeling **waiver for some** pollutants from the facility.

X Attached in Universal Application Form 4 (UA4) is a **modeling report for all** pollutants from the facility.

☐ Attached in UA4 is a **modeling report for some** pollutants from the facility.

☐ No modeling is required.

Section 17

Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

To show compliance with existing NSR permits conditions, you must submit a compliance test history. The table below provides an example.

Unit No.	Test Description	Test Date
3	Tier 3 sampling under NSPS Rule (40 CFR 60, Subpart WWW), EPA Method 2E.	9/31/1999
3	Tier 2 sampling under NSPS Rule (40 CFR 60, Subpart WWW), EPA Methods 3C and 25C (40 CFR 60).	5/11/2016
5	Observed for opacity on a quarterly basis per Section A504 of the Title V Permit No. P186LR2M1 via EPA Method 9 (40 CFR 60).	4/26/2017

Compliance testing performed at the landfill is included in the table above and described below. The compliance testing at the landfill (Unit 3) is included from 40 CFR 60, Subpart WWW requirements (the NSPS rule for municipal solid waste landfills). This testing did not show compliance as much as allowed for site-specific landfill gas testing for gas generation and non-methane organic compound content. However, it is important testing and is therefore listed here. The third type of compliance testing listed here is the most recent quarterly opacity reading submitted to NMED under the Title V permit.

Tier 3 sampling, which is only required once during the life of a site under the NSPS rules (40 CFR 60.754(a)(4)(ii)), was performed on August 31, 1999.

Tier 2 sampling and analysis was performed in 2016 at the landfill per 40 CFR 60, Subpart WWW. This testing was performed in years past as well. However, each new event supersedes the prior testing. As such, this most recent event is provided in this renewal application (Section 21, Attachment D).

Opacity observations were performed on the flare quarterly in the prior Title V Permit (P186LR2M1). The most recently reported opacity event is provided here. New flare source testing will be performed and reported within 180 days of the NSPS control date of November 16, 2018.

Section 20

Other Relevant Information

Other relevant information. Use this attachment to clarify any part in the application that you think needs explaining. Reference the section, table, column, and/or field. Include any additional text, tables, calculations or clarifying information.

Additionally, the applicant may propose specific permit language for AQB consideration. In the case of a revision to an existing permit, the applicant should provide the old language and the new language in track changes format to highlight the proposed changes. If proposing language for a new facility or language for a new unit, submit the proposed operating condition(s), along with the associated monitoring, recordkeeping, and reporting conditions. In either case, please limit the proposed language to the affected portion of the permit.

No other relevant information is being presented at this time.

Section 21

Addendum for Landfill Applications

Do not print this section unless this is a landfill application.

Landfill Applications are not required to complete Sections 1-C Input Capacity and Production Rate, 1-E Operating Schedule, 17 Compliance Test History, and 18 Streamline Applications. Section 12 – PSD Applicability is required only for Landfills with Gas Collection and Control Systems and/or landfills with other non-fugitive stationary sources of air emissions such as engines, turbines, boilers, heaters. All other Sections of the Universal Application Form are required.

EPA Background Information for MSW Landfill Air Quality Regulations:
https://www3.epa.gov/airtoxics/landfill/landflpg.html

NM Solid Waste Bureau Website: https://www.env.nm.gov/swb/

21-A: Municipal Solid Waste Landfill Information

1	How long will the landfill be operated? **Current landfill projections in this application show a closure date of approximately 2081; however, this will vary into the future depending on waste intake, capacity increases or decreases as cells are designed, waste placement efficiency, and other factors.**			
2	Maximum operational hours per year: **3,443 hours/year**			
3	Landfill Operating hours (open to the public) M-F: **5:30am–5:00pm**		Sat. **5:30am–2:00pm**	Sun. **Closed**
4	To determine to what NSPS and emissions guidelines the landfill is subject, what is the date that the landfill was constructed, modified, or reconstructed as defined at 40 CFR 60, Subparts A, WWW, XXX, Cc, and Cf. **Per the initial Tier 1/Design Capacity Report included in Attachment 21.1 the landfill began accepting waste in April 1987 as a permitted landfill, and was previously a municipal dump. Permit No. SW-91-04 was issued by NMED on December 20, 1991 and, as such, the landfill was classified as a "new" facility under 40 CFR 60, Subpart WWW. Per 40 CFR 60. Subpart XXX/Cf, to date the landfill has not had a capacity increase since July 17, 2014 and, as such, at this time it remains an "existing" site and subject to 40 CFR 60, Subpart Cf.**			
5	Landfill Design Capacity. Enter all 3	Tons: **2,746,000**[1]	Megagrams (Mg): **2,490,622**[1]	Cubic meters: **4,198,935**[1]
[1]Volume in m^3 based on reported capacity of 5,492,000 yd^3 in Attachment 4 of the Initial Design Capacity and Tier 1 NMOC Report included in Attachment 21.1. Tons and Mg conversions were made using the factors also shown in Attachment 4 of the Initial Design Capacity and Tier 1 NMOC Report included in Attachment 21.1.				
6	Landfill NMOC Emission Rate (NSPS XXX) **Not a XXX site will likely be above 34 Mg/yr for "EG" rule when finalized by State of New Mexico**	☐ Less than 34 Mg/year using Tiers 1 to 3	☐ Equal to or Greater than 34 Mg/year using Tiers 1 to 3	
	Landfill NMOC Emission Rate (NSPS XXX) **Not tested at this time**	☐ Less than 500 ppm using Tier 4	☐ Equal to or Greater than 500 ppm using Tier 4	
	Landfill NMOC Emission Rate (NSPS WWW)	☐ Less than 50 Mg/yr	☑ Equal to or Greater than 50 Mg/yr	
7	Annual Waste Acceptance Rate: **458,460 tons in calendar year 2016**			
8	Is Petroleum Contaminated Soil Accepted? **Yes**		If so, what is the annual acceptance rate? **Acceptance rate limited by BTEX concentration and calculated emissions (Section 6).**	
9	NM Solid Waste Permit No.: **SWM-030738**		SW Permit Date: **July 24, 2008**	
10	Describe NM Solid Waste Permit, Status, and Type of waste deposited at landfill			

	The Camino Real Landfill is operating pursuant to NMED Solid Waste Facility Permit SWM-030738. The permit was issued July 24, 2008, and will expire twenty years later (July 24, 2028). The landfill is currently authorized to dispose of municipal solid waste (MSW) and the following three special wastes: petroleum contaminated soils, sludge, and industrial solid waste.
11	Describe briefly any process(es) or any other operations conducted at the landfill **The Camino Real Landfill is authorized to dispose of municipal solid wastes and specific special wastes as detailed in item 10 above. Waste types approved for acceptance at the Camino Real Landfill were detailed in the solid waste Application For Permit Renewal. The landfill's maintenance compound is equipped with a diesel tank, whose fuel is used exclusively for on-site equipment. Currently, the landfill operates a gas collection and control system (GCCS) that collects landfill gas which is routed to an open flare for destruction or the on-site landfill gas-to-energy plant owned and operated by Four Peaks Energy, Inc.. The GCCS' is required as of November 11, 2018 per 40 CFR 60, Subpart WWW. The landfill also operates a public convenience station as a convenience to self-hauler customers. CRLF also operates a registered, source-separated recycling center located adjacent to the administrative offices. CRLF does not engage in the following processes/activities nor does it operate the following equipment:** • **Transfer station operations;** • **Composting;** • **Paint booths/surface coating;** • **Chipping or shredding of wood wastes; or** • **Boilers.**

21-B: NMOC Emissions Determined Pursuant to 40 CFR 60, Subparts WWW or XXX

	Enter the regulatory citation of all Tier 1, 2, 3, and/or 4 procedures used to determine NMOC emission rates and the date(s) that each Tier procedure was conducted. In Section 7 of the application, include the input data and results.
1	Tier 1 equations (e.g. LandGEM): **>50 Mg/yr** (1996 Initial Design Capacity and Tier 1 NMOC Report included in Attachment 21.1)
2	Tier 2 Sampling: **>50 Mg/yr** (2016 Tier 2 NMOC Report included in Attachment 21.3)
3	Tier 3 Rate Constant: **a Tier 3 was performed in 1999 that set the k value for the landfill at 0.007 year $^{-1}$** (1999 Tier 3 is included in Attachment 21.2)
4	Tier 4 Surface Emissions Monitoring: **This has not been performed.**
5	Attach all Tier Procedure calculations, procedures, and results used to determine the Gas Collection and Control System (GCCS) requirements. **See attachments in this section.**

Facilities that have a landfill GCCS must complete Section 21-C.

21-C: Landfill Gas Collection and Control System (GCCS) Design Plan

1	Was the GCCS design certified by a Professional Engineer? **Yes**
2	Attach a copy of the GCCS Design Plan and enter the submittal date of the Plan pursuant to the deadlines in either NSPS WWW or NSPS XXX. The NMOC applicability threshold requiring a GCCS plan is 50Mg/yr for NSPS WWW and 34 Mg/yr or 500 ppm for NSPS XXX. **The GCCS Design Plan is included as Attachment 21.4. It was submitted to AQB May 10, 2017 and was due by May 16, 2017 (12 months after the Tier 2 testing showed emissions in excess of 50 Mg/yr). These milestones were under the 40 CFR 60, Subpart WWW rules. The 40 CFR 60, Subpart XXX/Cf rules have not required GCCS Design Plan submittal at this time.**
3	Is/Was the GCCS planned to be operational within 30 months of reporting NMOC emission rates equal to or greater than 50 Mg/yr, 34 Mg/yr, or 500 ppm pursuant to the deadlines specified in NSPS WWW or NSPS XXX? F**ull NSPS control requirements under the GCCS Design Plan took effect on November 16, 2018 per 40 CFR 60, Subpart WWW. The owner is also prepared to comply with 40 CFR 60, Subpart XXX/Cf as required.**

4	Does the GCCS comply with the design and operational requirements found at 60.752, 60.753, and 69.759 (NSPS WWW) or at 60.762, 60.763, and 60.769 (NSPS XXX)? **Yes, the GCCS Design Plan conforms to all applicable requirements.**
5	Enter the control device(s) to which the landfill gas will be/is routed such as an open flare, enclosed combustion device, boiler, process heater, or other. **As of November 16, 2018, landfill is routed to either the landfill's open flare, or the third-party LFGE facility that has a landfill gas-to-electricity CAT generator. These are the current control devices.**
6	Do the control device(s) meet the operational requirements at 60.752 and 60.756 (NSPS WWW) or 60.762, 60.763, 60.766 (NSPS XXX)? **Yes, the control devices will be shown to meet all applicable requirements through source testing as required under 40 CFR 60, Subpart WWW and XXX/Cf, as applicable.**

ATTACHMENT 21.1
NSPS INITIAL DESIGN CAPACITY AND TIER 1 NMOC EMISSIONS REPORT
(1996)

ATTACHMENT 21.2
NSPS TIER 3 NMOC REPORT (1999)

ATTACHMENT 21.3
NSPS TIER 2 NMOC REPORT (2016)

ATTACHMENT 21.4

GCCS DESIGN PLAN (40 CFR 60, SUBPART WWW) (2017)

Section 22: Certification

Company Name: Camino Real Environmental Center, Inc.

I, Dr. Juan Carlos Tomas, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience.

Signed this ____ day of _____, _____, upon my oath or affirmation, before a notary of the State of

_____.

_____ _____
*Signature Date

Dr. Juan Carlos Tomas Landfill Manager
Printed Name Title

Scribed and sworn before me on this ____ day of _____, _____.

My authorization as a notary of the State of _____ expires on the

_____ day of _____, _____.

_____ _____
Notary's Signature Date

_____
Notary's Printed Name

*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.