



Santa Barbara County  
Air Pollution Control District

NOV 20 2012

Certified Mail 7011 3500 0002 7298 9776  
Return Receipt Requested

Claudia Stine  
City of Lompoc  
1300 W. Laurel Avenue  
Lompoc, CA 93436

FID: 08774  
Permit: P7 13563  
SSID: 08772

Re: Final Part 70 Permit 13563

Dear Ms. Stine:

Enclosed is the final Part 70 Permit (PT-70) No. 13563 for the Lompoc Sanitary Landfill off of W. Olive in Lompoc.

Please carefully review the enclosed documents to ensure that they accurately describe your facility and that the conditions are acceptable to you. Note that your permitted emission limits may, in the future, be used to determine emission fees.

You should become familiar with all District rules pertaining to your facility. This permit does not relieve you of any requirements to obtain authority or permits from other governmental agencies.

This permit requires you to:

- Follow the conditions listed on your permit. Pay careful attention to the recordkeeping and reporting requirements.
- Ensure that a copy of the enclosed permit is posted or kept readily available near the permitted equipment.
- Promptly report changes in ownership, operator, or your mailing address to the District.

If you are not satisfied with the conditions of this permit, **you have thirty (30) days from the date of this issuance to appeal this permit to the Air Pollution Control District Hearing Board** (ref: California Health and Safety Code, §42302.1). Any contact with District staff to discuss the terms of this permit will not stop or alter the 30-day appeal period.

Please include the facility identification (FID) and permit numbers as shown at the top of this letter on all correspondence regarding this permit. If you have any questions, please contact Ben Ellenberger of my staff at (805) 961-8879.

Sincerely,

A handwritten signature in black ink, appearing to read 'M Goldman', with a long horizontal line extending to the right.

Michael Goldman, Manager  
Engineering & Compliance Division

enc: Final PT-70 13563  
Final Permit Evaluation  
Air Toxics "Hot Spots" Fact Sheet District Form 12B

cc: Lompoc Sanitary Landfill 08774 Project File  
ECD Chron File  
Craig Strommen (Cover letter only)  
Richard Merrill (Cover letter only)

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**FINAL**

**PERMIT to OPERATE No. 13563  
and  
PART 70 OPERATING PERMIT No. 13563**

**CITY OF LOMPOC LANDFILL**

**SOUTH END OF AVALON STREET  
LOMPOC, CALIFORNIA 93436**

**OWNERS/OPERATORS**

**City of Lompoc  
100 Civic Center Plaza  
Lompoc, CA 93436**

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**Santa Barbara County  
Air Pollution Control District**

**November 2012**

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## ABBREVIATIONS/ACRONYMS

AP-42	USEPA's <i>Compilation of Emission Factors</i>
District	Santa Barbara County Air Pollution Control District
ASTM	American Society for Testing Materials
ATC	Authority to Construct
BACT	Best Available Control Technology
Bhp	brake horsepower
Btu	British thermal unit
CAAA	Clean Air Act Amendments
CAC	California Administrative Code
CCR	California Code of Regulations
CEMS	continuous emissions monitoring
CFR	Code of Federal Regulations
CI	compression ignition
CO	carbon monoxide
dscf	dry standard cubic foot
EQ	equipment
ESE	entire source emissions
EU	emission unit
°F	degree Fahrenheit
°C	degree Celsius
FID	facility identification
gal	gallon
gpm	gallons per minute
gr	grain
HAP	hazardous air pollutant (as defined by CAAA, Section 112(b))
H&SC	California Health and Safety Code
H <sub>2</sub> S	hydrogen sulfide
IC	internal combustion
I&M	Inspection & Maintenance
ISO	International Standards Organization
k	kilo (thousand)
l	liter
lb	pound
lbs/day	pounds per day
lbs/hr	pounds per hour
LFG	landfill gas
M	mega (million)
MACT	Maximum Achievable Control Technology
MM	million
MW	megawatt
mw	molecular weight
NAR	Nonattainment Review
NEI	net emissions increase
NG	natural gas
NMOC	non-methane organic compounds
NO <sub>x</sub>	oxides of nitrogen
NO <sub>2</sub>	nitrogen dioxide
NSPS	New Source Performance Standards
NESHAP	National Emissions Standards for Hazardous Air Pollutants
O <sub>2</sub>	oxygen

PM	particulate matter
PM <sub>10</sub>	particulate matter less than 10 microns
ppm(vd or w)	parts per million (volume dry or weight)
psia	pounds per square inch absolute
psig	pounds per square inch gauge
PTO	Permit to Operate
ROC	reactive organic compounds, same as "VOC" as used in this permit
scf	standard cubic foot
scfd (or scfm)	standard cubic feet per day (or per minute)
SIP	State Implementation Plan
SMMR	Surface Monitoring Maintenance and Recordkeeping
SO <sub>x</sub>	oxides of sulfur
SSID	stationary source identification
STP	standard temperature (60°F) and pressure (29.92 inches of mercury)
THC, TOC	total hydrocarbons, total organic compounds
tpq, TPQ	tons per quarter
tpy, TPY	tons per year
USEPA	United States Environmental Protection Agency
VE	visible emissions
w.c.	water column

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## 1.0 Introduction

### 1.1 Purpose

General. The Santa Barbara County Air Pollution Control District (District) is responsible for implementing all applicable federal, state and local air pollution requirements which affect any stationary source of air pollution in Santa Barbara County. The County is designated as an ozone nonattainment area for the state ambient air quality standards. The County is also designated a nonattainment area for the state PM<sub>10</sub> ambient air quality standard. The federal requirements include regulations listed in the Code of Federal Regulations: 40 CFR Parts 50, 51, 52, 55, 60, 61, 63, 68, 70 and 82. The State regulations may be found in the California Health & Safety Code, Division 26, Section 39000 et seq. The applicable local regulations can be found in the District's Rules and Regulations.

Part 70 Permitting. This permitting action is required as the result of the submittal by the City of Lompoc to the District of a revised landfill design capacity. This revised design capacity of 6.1 million cubic meters exceeds the applicability threshold of 2.5 million cubic meters in Subpart WWW of the Federal Clean Air Act Title I New Source Performance Standards (NSPS) which triggers the requirement that the City obtain a Federal Part 70 (Title V) permit/District Operating Permit. The City of Lompoc Landfill (FID = 8774) is a Class III sanitary landfill as defined in CCR Title 27 §20260. The landfill accepts municipal solid waste (MSW) from the city of Lompoc. Conditions listed in this permit are based on federal, state or local rules and requirements. Sections 9.A, 9.B and 9.C of this permit are enforceable by the District, the USEPA and the public since these sections are federally enforceable under Part 70. Where any reference contained in Sections 9.A, 9.B or 9.C refers to any other part of this permit that part of the permit is federally enforceable. Conditions listed in Section 9.D are "District-only" enforceable.

Pursuant to the stated aims of Title V of the CAAA of 1990 (i.e., the Part 70 operating permit program), this permit has been designed to meet two objectives: first, compliance with all conditions in this permit will ensure compliance with all federally enforceable requirements for the facility; second, the permit is a comprehensive document to be used as a reference by the City of Lompoc, the regulatory agencies and the public to assess compliance.

### 1.2 Stationary Source/Facility Overview

The City of Lompoc Landfill is owned and operated by the City and is located at the south end of Avalon Street in Lompoc, California. The landfill began operation in 1961 and has historically not been subject to District permit. As noted above, a revised design capacity has triggered the NSPS requirement to obtain a Federal Part 70 (Title V) permit and therefore a District operating permit. For District regulatory purposes, the facility location is in the Northern Zone of Santa Barbara County.

Authority to Construct (ATC) 13778 was issued on May 11, 2012, for the installation of a diesel-fired IC engine powering a portable grinder. The grinder is used to process wood and green waste at the facility. When the Permit to Operate (PTO) is issued for the diesel-fired IC engine, this operating permit will be modified to incorporate the provisions of that PTO.

Attachment 10.5 shows the lay-out of the landfill.

### **1.3 Emission Sources**

The emissions from the landfill come from landfill gas (LFG) generated below the surface by anaerobic biological decomposition, which escapes to the atmosphere through the landfill surface. In addition, emissions come from various fugitive sources such as particulates from vehicles and earthmoving equipment. Section 4 of this permit provides the District's engineering analyses of these emission sources. Section 5 of this permit describes the landfill's allowable emissions and non-permitted emission units.

### **1.4 Emission Control Overview**

The landfill is subject to certain District regulations as described in Section 9 of this permit. Since there is no LFG collection and handling system or flare, no emission control devices are subject to District permit at this facility.

### **1.5 Offsets/Emission Reduction Credit Overview**

Offsets: No emissions from the landfill are required to be offset.

ERCs: The landfill does not generate emission reduction credits.

### **1.6 Part 70 Operating Permit Overview**

- 1.6.1. Federally-Enforceable Requirements: All federally enforceable requirements are listed in 40 CFR Part 70.2 (Definitions) under "applicable requirements." These include all SIP-approved District Rules, all conditions in the District-issued Authority to Construct permits and all conditions applicable to major sources under federally promulgated rules and regulations. All these requirements are also enforceable by the public under CAAA. (see Tables 3.1 and 3.2 for a list of federally enforceable requirements).
- 1.6.2. Insignificant Emissions Units: Insignificant emission units are defined under District Rule 1301 as any regulated air pollutant emitted from the unit, excluding Hazardous Air Pollutants (HAPs), that are less than 2 tons per year based on the unit's potential to emit and any HAP regulated under section 112(g) of the Clean Air Act that does not exceed 0.5 ton per year based on the unit's potential to emit. Insignificant activities must be listed in the Part 70 application with supporting calculations. Applicable requirements may apply to insignificant units. (See Attachment 10.3 for the Insignificant Emissions Unit list)
- 1.6.3. Federal Potential to Emit: The federal potential to emit (PTE) of a stationary source does not include fugitive emissions of any pollutant, unless the source is: (1) subject to a federal NSPS/NESHAP requirement which was in effect as of August 7, 1980, or (2) included in the 29-category source list specified in 40 CFR 70.2. The federal PTE does include all emissions from any insignificant emissions units. Note that the landfill is subject to NSPS (40 CFR 60, Subpart WWW) for the LFG emissions units but this subpart was not in effect as of August 7, 1980; thus, fugitive LFG/ROC emissions are not included in the federal PTE. (See Section 5.4 for the federal PTE for this source.)
- 1.6.4. Permit Shield: The operator of a major source may be granted a shield: (a) specifically stipulating any federally enforceable conditions that are no longer applicable to the source and

(b) stating the reasons for such non-applicability. The permit shield must be based on a request from the source and its detailed review by the District. Permit shields cannot be granted indiscriminately with respect to all federal requirements. The landfill has not made a request for a permit shield.

- 1.6.5. Alternate Operating Scenarios: A major source may be permitted to operate under different operating scenarios, if appropriate descriptions of such scenarios are included in its Part 70 permit application and if such operations are allowed under federally-enforceable rules. The City has made no request for permitted alternative operating scenarios.
- 1.6.6. Compliance Certification: Part 70 permit holders must certify compliance with all applicable federally enforceable requirements including permit conditions. Such certification must accompany each Part 70 permit application; and, be re-submitted annually on or before March 1<sup>st</sup> or on a more frequent schedule, as specified in the permit. Each certification is signed by a “responsible official” of the owner/operator company whose name and address is listed prominently in the Part 70 permit. (See Section 1.6.10 below.)
- 1.6.7. Permit Reopening: Part 70 permits are re-opened and revised if the source becomes subject to a new rule or new permit conditions are necessary to ensure compliance with existing rules. The permits are also re-opened if they contain a material mistake or the emission limitations or other conditions are based on inaccurate permit application data. (See Part 70 Rule, 40 CFR 70.7)
- 1.6.8. MACT/Hazardous Air Pollutants (HAPs): Part 70 permits also regulate emission of HAPs from major sources through the imposition of maximum achievable control technology (MACT), where applicable. MACT is not triggered for this facility.
- 1.6.9. Compliance Assurance Monitoring (CAM): The CAM rule became effective on April 22, 1998. This rule affects emission units at the source subject to a federally enforceable emission limit or standard that uses a control device to comply with the emission standard, and either pre-control or post-control emissions exceed the Part 70 source emission thresholds. Sources subject to CAM Rule must submit a CAM Rule Compliance Plan along with their Part 70 operating permit renewal applications. The District has determined that no emissions unit at this facility is subject to the CAM Rule. (See section 3.2.5).
- 1.6.10 Responsible Official: The designated responsible official and their mailing address are:

Mr. Larry Bean  
Utilities Director  
City of Lompoc  
100 Civic Center Plaza  
Lompoc, CA 93436

## 2.0 Source and Process Description

### 2.1 Source and Process Description

2.1.2 Facility Description: The landfill currently encompasses 115.4 acres with 2.0 million tons of waste in place as of 2010. The site is situated in a canyon at the south end of Avalon Street and has a current waste disposal footprint of 39 acres. The maximum elevation at the site is 460 feet above MSL while the maximum depth is 90 feet below grade surface. The estimated closure date is 2045.

The City originally prepared and submitted an initial design capacity report to the District on June 25, 1997, that listed the design capacity as 2.3 million tons (2.1 million Mg). At that time, the facility was determined to be exempt from NSPS Subpart WWWW requirements on the basis of the reported design capacity. Recently, the City submitted a revised design capacity of 6.1 million cubic meters as noted in Section 1.1, which requires that the landfill comply with certain requirements of Subpart WWWW. Since the calculated landfill Non-Methane Organic Compound (NMOC) emissions are below the NSPS threshold of 55.1 tons/yr (50 Mg/yr), an LFG collection and control system is not required as described in Section 3.2.1.

2.1.3 Facility Operations: The landfill currently receives an average of 188 tons of municipal solid waste (MSW) per day with a maximum of 500 tpd. Of this amount, 117 tpd (average) and 400 tpd (maximum) are landfilled while an average of 30 tpd recyclables and 41 tpd water treatment plant filter material is diverted. The landfill operates under a California Integrated Waste Management Board Solid Waste Facility Permit, which allows the landfill to handle up to 400 tons of waste per day and 6000 vehicles per month. The facility includes designated areas for various types of recyclable materials including electronic waste. Landfill operations consist of a 'fill-and-cover method' using native soil or alternative daily cover (ADC) including ground wood and green waste, water treatment plant filter material (WTPFM) mixed with soil, ground construction and demolition (C&D) materials and tarps. Native soil and all ADC, except tarps, are compacted to a minimum depth of six inches and an average compacted thickness of less than or equal to 12 inches. Cover materials are applied at the end of each operating day to control vectors, fires, odors, blowing litter and scavenging

Dust Control Measures. The site access road is paved and the site haul roads and dumping aprons are watered as required during dry weather conditions. Ground road base (asphalt and concrete) and leftover street slurry seal materials are used to control dust.

Recycling Activities. The facility has designated areas for recycling the following materials: metal and appliances, cardboard, tires, electronic waste, used oil and oil filters, treated wood waste, concrete, and topsoil.

Greenwaste Processing Activities. Wood and green waste received from self-haul customers is processed on-site and used for ADC. Source separated wood or green waste material is diverted to the recycling area where the material is off-loaded by the customer. A portable grinder powered by a diesel engine is used to grind the wood and green waste. The ground green and wood waste is used as ADC. ATC 13778 has been issued for the engine. The grinder is exempt from permit. The engine will be incorporated into the Part 70 permit when the permit to operate is issued for the equipment.

**Landfill Emissions:** LFG emissions result from anaerobic biological decomposition of organic matter deposited in the landfill escaping to the surface. LFG consists primarily of methane (CH<sub>4</sub>) and carbon dioxide (CO<sub>2</sub>), with smaller amounts of non-methane organic compounds (NMOC). Some NMOCs are reactive organic compounds (ROC).

### **2.3 Detailed Process Equipment Listing**

A detailed listing of permitted and exempt equipment authorized under this permit is included in Attachment 10.2.

## **3.0 Regulatory Review**

### **3.1 Rule Exemptions**

⇒ **District Rule 202 (Exemptions to Rule 201):** The landfill qualifies for a number of exemptions under this rule. An exemption from permit, however, does not grant relief from any applicable prohibitory rule unless specifically exempted by that prohibitory rule. The following exemptions apply to this landfill:

- Section I.3 for routine surface coating maintenance activities.
- Section F.1.c for IC engines associated with propelling vehicles.
- Section U.3 for routine maintenance solvent cleaning activities.
- Section V.2 for storage of refined fuel oils with a gravity of <40° API Gravity.
- Section V.3 for storage of lubricating oils.

⇒ **District Rule 326 (Storage of Reactive Organic Compound Liquids):** Per Section B.1.b, the following emission units are exempt from all provisions of the rule:

- Waste Oil Storage Tanks

⇒ **District Rule 333 (Control of Emissions From Reciprocating Internal Combustion Engines):** Section B.1.b exempts engines that are exempt from permit per Rule 202 from all the requirements of this rule. These include IC engines propelling vehicles that also power operational equipment at the landfill, such as compactors, loaders etc. A list of exempt mobile equipment was provided in the application.

⇒ **District Rule 341 (Municipal Solid Waste Landfills):** Section B exempts landfills which are subject to the requirements of Subpart WWW. This landfill is subject to the requirements of Subpart WWW, therefore Rule 341 does not apply.

### **3.2 Compliance with Applicable Federal Rules and Regulations**

**3.2.1 40 CFR Part 60 {New Source Performance Standards}:** The following NSPS apply to the facility:

Subpart A                      General Provisions

Subpart WWW Standards of Performance for New Stationary Sources and Guidelines for Control of Existing Sources: Municipal Solid Waste Landfills

Information submitted by the City on June 28, 2010, indicates a revised design capacity of 6.1 million cubic meters. Increasing the permitted design capacity is considered a modification. Because the modification occurred after May 30, 1991, the landfill is subject to Subpart WWW. The City of Lompoc calculated uncontrolled emissions from the landfill based on the Tier 2 methods specified in Section 60.754. Because the calculated uncontrolled NMOC emission rate is less than 55 tons/yr (50 Mg/yr), Sections 60.753, 60.755, and 60.756 do not apply to the landfill.

The landfill's compliance status with its requirements is tabulated below.

Item	Subpart WWW Requirement Summary	Compliance Status
§ 60.752 - Standards for Air Emissions from MSW Landfills		
1	An initial design capacity must be submitted.	In compliance. The City submitted the required design capacity report.
2	A revised design capacity report shall be submitted as necessary.	In compliance. The City submitted the required revised design capacity report on June 24, 2010 showing a capacity in excess of 2.5 MM m <sup>3</sup> .
3	Install emission controls or calculate NMOC emissions.	In compliance. NMOC Tier 2 calculation submitted October 2010 showing emissions less than 50 Mg/year.
§ 60.753 – Operational Standards for Collection and Control Systems		
Does not apply.		
§ 60.754 – Test Methods and Procedures		
1	Calculate NMOC emissions.	In compliance. Sampling was conducted in accordance with Section (a)(3) and the NMOC Tier 2 calculation submitted October 2010 showing emissions less than 50 Mg/year.
2	Re-test the site-specific NMOC concentration every five years.	In compliance. The City will re-test the site-specific NMOC concentration every five years.
§ 60.755 - Compliance Provisions		
Does not apply.		
§ 60.756 - Monitoring of Operations		
Does not apply.		
§ 60.757 – Reporting Requirements		
1	An amended design capacity report must be submitted within 90 days of an increase in design capacity to at or above 2.5 million cubic meters or 2.5 million megagrams.	In compliance. The City submitted the required revised design capacity report on June 24, 2010.

Item	Subpart WWW Requirement Summary	Compliance Status
2	An NMOC emissions rate report shall be submitted initially and annually thereafter.	In compliance. The City submitted the required initial report and will submit subsequent annual reports as a condition of this permit.
§ 60.758 – Recordkeeping Requirements		
1	Maintain records of the design capacity report, the current amount of solid waste in-place, and the year-by-year waste acceptance rate.	In compliance. The City maintains the required records.
§ 60.759 – Specifications for Active Control Systems		
Does not apply.		

The following NSPS does not apply to the facility:

Subpart Cc Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills

This Subpart applies to landfills which were constructed, reconstructed, or modified before May 30, 1991. Because the landfill was modified after May 30, 1991, this Subpart does not apply.

- 3.2.3 40 CFR Part 61 {*NESHAP*}: The facility is not subject to the provisions of this Subpart.
- 3.2.4 40 CFR Part 63 {*MACT*}: The facility is not subject to the provisions of Part 63. Specifically, Subpart AAAA (*NESHAPS* for Solid Waste Management Landfills) does not apply because the landfill is not a major source or collocated with a major source as defined in 40 CFR 63.2 of Subpart A, does not have estimated emissions in excess of 55.1 tons per year (50 Mg/yr), and does not include a bioreactor.
- 3.2.5 40 CFR Part 70 {*Operating Permits*}: Part 70 operating permits are required for sources subject to an NSPS. Since the landfill is subject to Subpart WWW this Subpart is applicable. Table 3.1 lists the federally enforceable District promulgated rules that are “generic” and apply to the landfill. Tables 3.2.A and 3.2.B list the federally enforceable promulgated rules that are “unit-specific” and apply to the landfill. These tables are based on data available from the District’s administrative files and on the landfill’s Part 70 Operating Permit Application No. 13563, deemed complete on February 28, 2011.

In its permit application, the landfill certified compliance with all existing District rules and permit conditions. Verification of ongoing compliance is required of the landfill semi-annually. Issuance of this permit and compliance with all its terms and conditions as well as with the compliance schedule will ensure that the landfill complies with the provisions of all applicable Subparts.

### 3.3 ***Compliance with Applicable State Rules and Regulations***

- 3.3.1 Division 26. Air Resources {*California Health & Safety Code*}: The administrative provisions of the Health & Safety Code apply to this facility.

- 3.3.2 California Administrative Code Title 17: These sections specify the standards by which abrasive blasting activities are governed throughout the State. All abrasive blasting activities at the landfill facility are required to conform to these standards. Compliance is typically assessed through onsite inspections. However, CAC Title 17 does not preempt enforcement of any SIP-approved rule that may be applicable to abrasive blasting activities.

### **3.4 Compliance with Applicable Local Rules and Regulations**

- 3.4.1 Applicability Tables: Tables 3.1 and 3.2 list the federally enforceable District rules that apply to the facility. Table 3.3 lists the non-federally-enforceable District rules that apply to the facility. Table 3.4 lists the adoption date of all rules that apply to the facility.
- 3.4.2 Rules Requiring Further Discussion: This section provides a more detailed discussion regarding the applicability and compliance of certain rules.

The following is a rule-by-rule evaluation of compliance for the landfill:

**Rule 301 - Circumvention**: This rule prohibits the concealment of any activity that would otherwise constitute a violation of Division 26 (Air Resources) of the California H&SC and the District rules and regulations. To the best of the District's knowledge, the landfill is operating in compliance with this rule.

**Rule 302 - Visible Emissions**: This rule prohibits the discharge from any single source any air contaminants for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade than a reading of 1 on the Ringelmann Chart or of such opacity to obscure an observer's view to a degree equal to or greater than a reading of 1 on the Ringelmann Chart. Earthmoving activities at the landfill have the potential to create visible emissions. Compliance will be assured by taking appropriate dust control measures and conducting visible emissions monitoring.

**Rule 303 - Nuisance**: This rule prohibits the landfill from causing a public nuisance due to the discharge of air contaminants. There are no recent nuisance complaints in the District files that can be attributable to operation of the landfill. All nuisance complaints are investigated by the District and follow the guidelines outlined in Policy & Procedure I.G.2 (Compliance Investigations).

**Rule 306 - Dust and Fumes - Northern Zone**: The landfill facility is considered a Northern Zone source. This rule prohibits the discharge into the atmosphere from any source particulate matter in excess of specified rates measured in lb/hr. The maximum allowable rate is determined as a function of the process weight. Earthmoving activities at the landfill have the potential to emit particulate matter. Compliance will be assured by taking appropriate dust control measures and limiting visible emissions.

**Rule 310 - Odorous Organic Compounds**: This rule prohibits the discharge of H<sub>2</sub>S and organic sulfides that result in a ground level impact beyond the property boundary in excess of either 0.06 ppmv averaged over 3 minutes and 0.03 ppmv averaged over 1 hour. There are no recent complaints of H<sub>2</sub>S or organic sulfide odors related to this source in the District files.

Rule 311 - Sulfur Content of Fuels: This rule limits the sulfur content of fuels combusted at the landfill to 50 gr/100 scf (calculated as H<sub>2</sub>S) {or 796 ppmvd} for gaseous fuels and 0.5 percent by weight for liquid or solid fuels.

Rule 317 - Organic Solvents: This rule sets specific prohibitions against the usage of both photochemically and non- photochemically reactive organic solvents (40 lb/day and 3,000 lb/day respectively). Solvents may be used at the landfill during normal operations for degreasing by wipe cleaning and for use in paints and coatings in maintenance operations. There is the potential to exceed the limits under Section B.2 during significant surface coating activities. Per condition C.2 of this permit, the landfill is required to maintain records to ensure compliance with this rule.

Rule 321 - Control of Degreasing Operations: This rule sets equipment and operational standards for degreasers using organic solvents. Small-unheated solvent cleaners that are less than 1 gallon in capacity or having an evaporative surface area of less than 1 square foot (aggregate cap of 10 square feet) are exempt from all rule provisions, except Section G.2. Compliance is determined via facility inspections.

Rule 322 - Metal Surface Coating Thinner and Reducer: This rule prohibits the use of photochemically reactive solvents for use as thinners or reducers in metal surface coatings. Per condition C.2 of this permit, the landfill is required to maintain records during maintenance operations to ensure compliance with this rule.

Rule 323 - Architectural Coatings: This rule sets standards for many types of architectural coatings. The primary coating standard that will apply to the landfill is for Industrial Maintenance Coatings that have a limit of 340 gram ROC per liter of coating, as applied. The landfill is required to comply with the Administrative requirements under Section F for each container at the facility.

Rule 324 - Disposal and Evaporation of Solvents: This rule prohibits any source from disposing more than one and a half gallons of any photochemically reactive solvent per day by means that will allow the evaporation of the solvent into the atmosphere. Per condition C.2 of this permit, the landfill is required to maintain records to ensure compliance with this rule.

Rule 326 - Storage of Reactive Organic Liquids: This rule applies to equipment used to store reactive organic compound liquids with a vapor pressure greater than 0.5 psia. No equipment at the landfill is subject to this rule. Compliance will be assessed via District inspections.

Rule 327 - Organic Liquid Cargo Tank Vessel Loading: There are no organic liquid cargo tank vessel loading operations associated with this facility.

Rule 330 - Surface Coating of Metal Parts and Products: This rule sets standards for many types of coatings applied to metal parts and products. In addition to the ROC standards, this rule sets operating standards for application of the coatings, labeling and recordkeeping. This rule does not apply to architectural coatings. It is not anticipated that the landfill will trigger the requirements of this rule. Compliance shall be based on site inspections.

Rule 333 - Control of Emissions From Reciprocating Internal Combustion Engines: This rule applies to all engines with a rated brake horsepower of 50 or greater. The rule includes an

exemption from the control requirements of the rule for engines which operate less than 200 hours per calendar year.

**Rule 341 – Municipal Solid Waste Landfills:** This rule applies to all municipal solid waste landfills that commenced construction, reconstruction, or modification prior to May 30, 1991 and has accepted waste at any time since November 8, 1987 or has additional design capacity available for future expansion. Municipal solid waste landfills that are subject to the provisions of NSPS subpart WWW are exempt from Rule 341 requirements. The landfill is subject to subpart WWW and therefore is exempt from Rule 341.

**Rule 346 - Loading of Organic Liquids:** This rule applies to the transfer of organic liquids into an organic liquid cargo vessel. For this rule only, an organic liquid cargo vessel is defined as a truck, trailer or railroad car. No loading of organic liquids occurs at the landfill.

**Rule 353 – Adhesives and Sealants:** This rule applies to the use of adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primers. Compliance shall be based on site inspections, recordkeeping, and reporting.

**Rule 505 - Breakdown Conditions:** This rule describes the procedures that the landfill must follow when a breakdown condition occurs to any emissions unit associated with the landfill. A breakdown condition is defined as an unforeseeable failure or malfunction of (1) any air pollution control equipment or related operating equipment which causes a violation of an emission limitation or restriction prescribed in the District Rules and Regulations, or by State law, or (2) any in-stack continuous monitoring equipment, provided such failure or malfunction:

- a. Is not the result of neglect or disregard of any air pollution control law or rule or regulation;
- b. Is not the result of an intentional or negligent act or omission on the part of the owner or operator;
- c. Is not the result of improper maintenance;
- d. Does not constitute a nuisance as defined in Section 41700 of the Health and Safety Code;
- e. Is not a recurrent breakdown of the same equipment.

**Rule 810 – Federal Prevention of Significant Deterioration:** This rule was adopted January 20, 2011 to incorporate the federal Prevention of Significant Deterioration rule requirements into the District's Rules and Regulations by reference. Future projects at the facility will be evaluated to determine whether they constitute a new major stationary source or a major modification.

### **3.5 Compliance History**

This facility came under permit on May 11, 2012, with issuance of ATC 13778 for the operation of a diesel-fired internal combustion engine powering a grinder to grind wood and green waste.

Violations: There is no record of violations issued to this facility in the District data base.

Complaints: There is no record of nuisance complaints involving this facility in the District data base.

Table 3.1 - Generic Federally Enforceable District Rules

<b>Generic Requirements</b>	<b>Affected Emission Units</b>	<b>Basis for Applicability</b>
<u>RULE 101</u> : Compliance by Existing Installations	All emission units	Emission of pollutants
<u>RULE 102</u> : Definitions	All emission units	Emission of pollutants
<u>RULE 103</u> : Severability	All emission units	Emission of pollutants
<u>RULE 201</u> : Permits Required	All emission units	Emission of pollutants
<u>RULE 202</u> : Exemptions to Rule 201	Applicable emission units	Insignificant activities/emissions, per size/rating/function
<u>RULE 203</u> : Transfer	All emission units	Change of ownership
<u>RULE 204</u> : Applications	All emission units	Addition of new equipment or modification to existing equipment.
<u>RULE 205</u> : Standards for Granting Permits	All emission units	Emission of pollutants
<u>RULE 206</u> : Conditional Approval of Authority to Construct or Permit to Operate	All emission units	Applicability of relevant Rules
<u>RULE 212</u> : Emission Statements	All emission units	Administrative
<u>RULE 301</u> : Circumvention	All emission units	Any pollutant emission
<u>RULE 302</u> : Visible Emissions	All emission units	Particulate matter emissions
<u>RULE 303</u> : Nuisance	All emission units	Emissions that can injure, damage or offend.
<u>RULE 306</u> : PM Concentration – North Zone	Each PM source	Emission of PM in effluent gas
<u>RULE 309</u> : Specific Contaminants	All emission units	Combustion contaminants
<u>RULE 311</u> : Sulfur Content of Fuel	All combustion units	Use of fuel containing sulfur
<u>RULE 317</u> : Organic Solvents	Emission units using solvents	Solvent used in process operations.
<u>RULE 321</u> : Solvent Cleaning Operations	Emission units using solvents	Solvent used in process operations.
<u>RULE 322</u> : Metal Surface Coating Thinner and Reducer	Emission units using solvents	Solvent used in process operations.
<u>RULE 323</u> : Architectural Coatings	Paints used in maintenance and surface coating activities	Application of architectural coatings.

Generic Requirements	Affected Emission Units	Basis for Applicability
<u>RULE 324</u> : Disposal and Evaporation of Solvents	Emission units using solvents	Solvent used in process operations.
<u>RULE 353</u> : Adhesives and Sealants	Emission units using adhesives and sealants	Adhesives and sealants use.
<u>RULE 505</u> : Breakdown Conditions	All emission units	Breakdowns where permit limits are exceeded or rule requirements are not complied with.
<u>REGULATION VIII</u> : New Source Review	All emission units	Addition of new equipment or modification to existing equipment. Applications to generate ERC Certificates.

Table 3.2.A - Unit-Specific Federally Enforceable District Rules

Unit-Specific Requirements	Affected Emission Units	Basis for Applicability
NONE		

Table 3.2.B - Unit-Specific Federally Enforceable NSPS Rule

40 CFR Part 60, Subpart WWW	Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills (9/21/2006)	Federally Enforceable (Y/N)
60.752(b)	Requirements for MSW Landfills with Design Capacity equal to or greater than 2.5 million Mg and 2.5 million m <sup>3</sup> (Large Designated Facilities)	Y
60.752(b)(1)	Submit annual emission report and recalculate emissions annually.	Y
60.754(a)(3)	Calculate NMOC emissions in accordance with specified procedures. Perform NMOC sampling every five years. If emissions exceed 50 Mg/year, install controls per 60.752(b)(2).	Y
60.757	Reporting Requirements	Y
60.757(a)	Submit an Initial Design Capacity Report	Y
60.757(b)	Submit Initial and Annual NMOC Emission Rate Report	Y
60.757(c)	Submit a Collection and Control System Design Plan within 1 year of first NMOC emission rate report showing NMOC > 50 Mg/year, except as noted.	Y
60.758	Recordkeeping Requirements	Y
60.758(a)	Design Capacity and Waste Acceptance Records (retain 5 years)	Y

Table 3.3 – Non Federally-Enforceable District Rules

Requirement	Affected Emission Units	Basis for Applicability
<u>RULE 210</u> : Fees	All emission units	Administrative
<u>RULES 501-504</u> : Variance Rules	All emission units	Administrative
<u>RULES 506-519</u> : Variance Rules	All emission units	Administrative

Table 3.4 – Adoption Dates of District Rules Applicable at Issuance of Permit

Rule No.	Rule Name	Adoption Date
Rule 101	Compliance by Existing Installations: Conflicts	June 1981
Rule 102	Definitions	June 21, 2012
Rule 103	Severability	October 23, 1978
Rule 201	Permits Required	June 19, 2008
Rule 202	Exemptions to Rule 201	June 21, 2012
Rule 203	Transfer	April 17, 1997
Rule 204	Applications	April 17, 1997
Rule 205	Standards for Granting Permits	April 17, 1997
Rule 206	Conditional Approval of Authority to Construct or Permit to Operate	October 15, 1991
Rule 208	Action on Applications - Time Limits	April 17, 1997
Rule 212	Emission Statements	October 20, 1992
Rule 301	Circumvention	October 23, 1978
Rule 302	Visible Emissions	June 1981
Rule 303	Nuisance	October 23, 1978
Rule 306	Particulate Matter Concentration - Northern Zone	October 23, 1978
Rule 309	Specific Contaminants	October 23, 1978
Rule 311	Sulfur Content of Fuels	October 23, 1978
Rule 317	Organic Solvents	October 23, 1978
Rule 321	Solvent Cleaning Operations	June 21, 2012

<b>Rule No.</b>	<b>Rule Name</b>	<b>Adoption Date</b>
Rule 322	Metal Surface Coating Thinner and Reducer	October 23, 1978
Rule 323	Architectural Coatings	November 15, 2001
Rule 324	Disposal and Evaporation of Solvents	October 23, 1978
Rule 333	Reciprocating IC Engines	June 19, 2008
Rule 353	Adhesives and Sealants	June 21, 2012
Rule 505	Breakdown Conditions (Section A, B1 and D)	October 23, 1978
Rule 603	Emergency Episode Plans	June 15, 1981
Rule 801	New Source Review	April 17, 1997
Rule 802	Nonattainment Review	April 17, 1997
Rule 803	Prevention of Significant Deterioration	April 17, 1997
Rule 804	Emission Offsets	April 17, 1997
Rule 805	Air Quality Impact and Modeling	April 17, 1997
Rule 806	Emission Reduction Credits	April 17, 1997
Rule 808	New Source Review for Major Sources of Hazardous Air Pollutants	May 20, 1999
Rule 810	Federal Prevention of Significant Deterioration	January 20, 2011
Rule 901	New Source Performance Standards (NSPS)	September 20, 2010
Rule 1001	National Emission Standards for Hazardous Air Pollutants (NESHAPS)	October 26, 1993
Rule 1301	General Information	January 20, 2011
Rule 1302	Permit Application	November 9, 1993
Rule 1303	Permits	January 18, 2001
Rule 1304	Issuance, Renewal, Modification and Reopening	January 18, 2001
Rule 1305	Enforcement	November 9, 1993

## 4.0 Engineering Analysis

### 4.1 General

The engineering analyses performed for this permit were limited to the review of

- Emission sampling and calculation methods for the fugitive landfill gas

The landfill generates air emissions from the following sources:

- Landfill Operations: Excluding Title II-regulated vehicular emissions at the facility, there are two basic sources and types of emissions:
  - ⇒ Fugitive hydrocarbon emissions from the soil cover associated with the aerobic and anaerobic decomposition of the municipal solid waste deposited into the landfill.
  - ⇒ PM and PM<sub>10</sub> fugitive dust emissions associated with earthmoving, disturbed ground areas of the landfill, as well as traffic on the landfill's unpaved roads.

### 4.2 Landfill Fugitive Emissions

4.2.1 General: Landfill fugitive emissions are evaluated within this permit for compliance with Subpart W of Federal Title I New Source Performance Standards (NSPS) and District Rules and Regulations.

The City initially conducted a Tier 1 analysis of landfill fugitive emissions pursuant to 40 CFR Subpart W 60.754(a)(1) using a default NMOC concentration of 4000 ppmv which indicated that the landfill emissions exceeded the 55.1 tons NMOC/year (50 Mg/yr) threshold for triggering landfill gas control system requirements. The landfill then elected to perform a Tier 2 analysis pursuant to Subpart W 60.754(a)(3) to more accurately quantify NMOC concentrations.

The Tier 2 *Sampling Protocol for Calculation of Landfill Gas NMOC Concentration* was submitted by Golder Associates on behalf of the City on June 10, 2010 and approved by the District on August 19, 2010. The Tier 2 analysis resulted in an estimated NMOC concentration of 66.8 ppmv as hexane on an undiluted basis. The resulting data were incorporated into the *2010 Tier 2 NMOC Generation Rate* submitted by Golder on behalf of the City in October 2010 and approved by the District on February 28, 2011. Using this refined NMOC concentration, fugitive emissions from the landfill soil cover were estimated to occur at the rate of 2.2 tons NMOC per year (2 Mg/yr). Landfills which do not exceed an emission rate of 55.1 tons per year (50 Mg/yr) are not subject to Subpart W emission control requirements; however, landfills which exceed 2.5 million cubic meters in design capacity must recalculate NMOC emissions annually to demonstrate that the landfill remains below the emission control threshold. This requirement applies. In addition, the landfill is required to conduct a Tier 2 sampling program every five years to confirm fugitive NMOC concentrations.

4.2.2 Emission Factors: Uncontrolled landfill gas emissions are calculated by using the landfill emission equation found in 40 CFR 60.754 (a) (1) (ii). Default values for  $L_0$  and  $k$  given in

AP-42 are used and  $C_{\text{NMOC}}$  is based on the measured concentration from Tier 2 sampling at the landfill.

$$M_{\text{NMOC}} = 2 * L_0 * R * (e^{-kc} - e^{-kt}) * C_{\text{NMOC}} * (3.6 \times 10^{-9});$$

where,

- $M_{\text{NMOC}}$  = uncontrolled mass emission rate of NMOC in mega-grams per year
- $L_0$  = methane generation potential (170 m<sup>3</sup> per mega-gram of waste, arid area default value)
- $R$  = Average annual acceptance rate (2 million tons in place/49 years = 40,744 tons/year = 36,973 Mg/year)
- $k$  = methane generation rate constant (0.02/year, default value)
- $t$  = age of landfill (in years, 50 years)
- $C_{\text{NMOC}}$  = concentration of NMOC (68.8 ppmv as hexane)
- $c$  = time since closure, in years; for active landfills,  $c = 0$  and  $e^{-kc} = 1.0$

### 4.3 Other Emission Sources

Fugitive Dust: As noted in Section 4.1, fugitive dust at the landfill is created through earthmoving activities, wind action on disturbed ground areas, and vehicular traffic on unpaved roads. Ground road base (asphalt and concrete) and leftover street slurry seal materials are used to control dust. These emissions are not under District permit and no estimate of fugitive dust emissions is available.

4.3.1 Blasting: No blasting activities were indicated in the permit application.

4.3.2 Exempt Mobile Source Emissions: The California Integrated Waste Management Board Solid Waste Facility Permit allows an average of 6000 vehicles per month to use the facility. In addition, onsite mobile equipment used at the facility is listed in the permit application. No emission estimates are available for these exempt sources.

### 4.4 BACT/NSPS/NESHAP/MACT

4.4.1 BACT: This permit action does not trigger BACT requirements based on District's NSR Rules.

4.4.2 NSPS: Discussion of applicability and compliance status regarding 40 CFR 60, Subpart WWW was presented in Section 3.2.

4.4.3 NESHAP: The landfill has not identified any equipment or processes that are subject to an applicable National Emission Standard for Hazardous Air Pollutants.

### 4.5 CEMS/Process Monitoring/Meter Calibration

4.5.1 CEMS: The landfill is not required to install Continuous Emissions Monitor Systems ("CEMS").

4.5.2 Process Monitoring: The landfill is not required to install process monitors.

### 4.6 Source Testing/Sampling

Pursuant to Section 60.752(b) and 60.754(a)(3) of Subpart WWW (New Source Performance Standards), the City is required to perform Tier 2 sampling every five years to determine the NMOC concentration of the gas from the landfill. This sampling will be conducted in

accordance with Subpart WWW and the Sampling Plan submitted by the City and approved by the District on August 19, 2010.

As necessary to ensure compliance with this permit and applicable rules and regulations, the District may require the project, by written notice, to conduct additional sampling in a manner and frequency specified by the District. All sampling and analyses are required to be performed according to District-approved procedures and methodologies. Typically, the appropriate ASTM methods are acceptable. It is important that all sampling and analysis be traceable by chain of custody procedures.

#### **4.7 Part 70 Engineering Review: Hazardous Air Pollutant Emissions**

Hazardous air pollutant (HAP) emissions were determined based on the calculated landfill gas emission rate. Component concentrations were based on the results of a 2009 source test conducted at the Santa Maria Landfill.

### **5.0 Emissions**

#### **5.1 General**

Emissions calculations are divided into "permitted" and "exempt" categories. District Rule 202 lists equipment exempt from permit. The permitted emissions for each emissions unit are based on the equipment's potential-to-emit (as defined by Rule 102). Section 5.2 details the permitted emission limits for each emission unit. Section 5.3 details the overall permitted emissions for the facility based on reasonable worst-case scenarios using the potential-to-emit for each emissions unit. Section 5.4 provides the federal potential to emit calculation using the definition of potential to emit used in Rule 1301. Section 5.5 provides the estimated HAP emissions from the landfill. Section 5.6 provides the estimated emissions from permit exempt equipment. Section 5.7 provides the net emissions increase calculation for the facility and the stationary source. In order to accurately track the emissions from a facility, the District uses a computer database. Table 10.4 contains the District's documentation for the information entered into that database.

#### **5.2 Permitted Emission Limits - Emission Units**

The landfill fugitive NMOC emissions are computed using the formula provided in Section 4.2.2 and are listed in Table 5.1-4.

#### **5.3 Permitted Emission Limits - Facility Totals**

Total permitted facility emissions, based on permitted emissions from each emissions unit, are reported in Table 5.2. In this case, the only permit limit pertains to the fugitive emissions from the landfill.

#### **5.4 Part 70: Federal Potential to Emit for the Facility**

Fugitive emissions are excluded from the federal definition of potential to emit unless the source belongs to one of the categories listed in 40 CFR 70.2. Since landfills are not listed in 40 CFR 70.2, fugitive LFG emissions are not included in the federal potential to emit. Since the facility has no other sources subject to permit, the federal Part 70 potential to emit is zero as documented in Table 5.3.

**5.5 Part 70: Hazardous Air Pollutant Emissions for the Facility**

Total emissions of hazardous air pollutants (HAP) attributed to the landfill fugitive surface emissions are shown in Table 5.4.

**5.6 Permit-Exempt Emission Sources/Part 70 Insignificant Emissions**

Except as noted in Section 3.1 no equipment unit at the landfill is exempt from District permits, pursuant to Rule 202.

*Insignificant emission levels* are defined under District Rule 1301 as regulated air pollutant emissions from any unit that are less than 2 tons per year based on the unit's potential to emit, excluding HAPs, and any HAP regulated under section 112(g) of the Clean Air Act that does not exceed 0.5 ton per year based on the unit's potential to emit. The landfill uses two 400-gallon waste oil storage tanks and a 10,000 gallon water storage tank which have insignificant emission levels.

**5.7 Net Emissions Increase Calculation**

All emissions subject to NSR after November 1990 contribute to the Net Emissions Increase Calculation (NEI). Since this permit action does not require NSR, there is no Net Emissions Increase.

Tables 5.1-1 through 5.1-3

RESERVED

Table No.	Table Title	Table Description
5.1-1	Table 5.1-1	Table 5.1-1
5.1-2	Table 5.1-2	Table 5.1-2
5.1-3	Table 5.1-3	Table 5.1-3

Table 5.1-4

City of Lompoc Landfill Fugitive Emissions

Date Landfill Opened	1961	
Current Date	2010	
$M_{\text{NMOC}} = 2L_0R(e^{-kc} - e^{-kt})(C_{\text{NMOC}})(3.6 \times 10^{-9})$ (see Note 2)		
Refuse methane generation potential <sup>2</sup>	170	$L_0$ ( $\text{m}^3/\text{Mg}$ )
Average annual acceptance <sup>3</sup>	36973	R (Mg/yr)
Methane generation constant <sup>2</sup>	0.02	k (1/yr)
Years since closure	0	c (yrs)
Age of landfill	50	t (yrs)
Concentration of NMOC <sup>4</sup>	68.8	$C_{\text{NMOC}}$ (ppm as hexane)
Conversion factor	3.60E-09	
Uncontrolled NMOC Emissions, Mg/yr	1.97	Mg NMOC/yr
Uncontrolled NMOC Emissions, tons/yr	2.17	tons NMOC/year
Fugitive ROC <sup>5</sup> Emissions to Atmosphere, tons/yr	2.02	tons ROC/year

Notes:

- 1 Mass Conversion Constant (Mg/ton) = 1.1024
- 2 Ref: AP-42; methane generation constant = arid area default value
- 3 Calculated using current waste in place and age of landfill  
(ref: City of Lompoc/Golder Assoc. 2010 Tier 2 NMOC Generation Rate submitted October 2010)
- 4 (ref: City of Lompoc/Golder Assoc. 2010 Tier 2 NMOC Generation Rate submitted October 2010)
- 5 ROC/NMOC = 0.93 (ref: SBCAPCD Rule 341, Staff Report September 18, 1997)

Table 5.2  
 City of Lompoc Landfill Part 70/APCD PTO 103563  
 Total Permitted Facility Emissions

A. HOURLY (lb/hr)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Fugitive - LFG		0.46				
Totals =	0.00	0.46	0.00	0.00	0.00	0.00

B. DAILY (lb/day)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Fugitive - LFG		11.06				
Totals =	0.00	11.06	0.00	0.00	0.00	0.00

C. ANNUAL (ton/yr)

Equipment Category	NOx	NMOC	CO	SOx	PM	PM10
Fugitive - LFG	-	2.02	-	-	-	-
Totals =	0.00	2.0	0.00	0.00	0.00	0.00

Table 5.3  
 City of Lompoc Landfill Part 70/APCD PTO 103563  
 Federal Potential to Emit

A. HOURLY (lb/hr)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Fugitive - LFG	-	-	-	-	-	-
Totals =	0.00	0.00	0.00	0.00	0.00	0.00

B. DAILY (lb/day)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Fugitive - LFG	-	-	-	-	-	-
Totals =	0.00	0.00	0.00	0.00	0.00	0.00

C. ANNUAL (ton/yr)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Fugitive - LFG	-	-	-	-	-	-
Totals =	0.00	0.00	0.00	0.00	0.00	0.00

Table 5.4 Landfill Fugitive Hazardous Air Pollutant Emissions

Component <sup>(1)</sup>	Concentration (ppmv) <sup>(1)</sup>	Molecular Weight (g/mol)	Density (g/l) <sup>(2)</sup>	Density (lbs/scf)	Emission Rate (lbs/hr)	Emission Rate (tons/year)
1,4-Dichlorobenzene	0.079	147.00	4.75E-07	2.96E-08	9.49E-04	4.16E-03
2-Butanone	0.066	72.11	1.95E-07	1.21E-08	3.89E-04	1.70E-03
Benzene	0.212	78.11	6.77E-07	4.22E-08	1.35E-03	5.93E-03
Carbon disulfide	0.035	76.14	1.09E-07	6.80E-09	2.18E-04	9.54E-04
Chloroethane	0.046	64.51	1.21E-07	7.57E-09	2.42E-04	1.06E-03
Ethylbenzene	0.598	106.17	2.60E-06	1.62E-07	5.19E-03	2.27E-02
m & p-Xylene	0.377	106.16	1.64E-06	1.02E-07	3.27E-03	1.43E-02
Methyl tert butyl ether	0.061	88.15	2.20E-07	1.37E-08	4.39E-04	1.92E-03
n-Hexane	0.600	86.18	2.11E-06	1.32E-07	4.22E-03	1.85E-02
o-xylene	0.190	106.16	8.24E-07	5.14E-08	1.65E-03	7.22E-03
Toluene	0.410	92.14	1.54E-06	9.63E-08	3.09E-03	1.35E-02
Vinyl chloride	0.680	62.50	1.74E-06	1.08E-07	3.47E-03	1.52E-02
Total HAPs					0.02	0.11

**ASSUMPTIONS:**

Monthly Fugitive LFG Emissions

32,034 scf/hr

**FACTORS:**

453.6	g/lb
28.3	l/scf

<sup>(1)</sup> Based on Environmental Analytical Service, Inc. Laboratory Analysis Report on Santa Maria Landfill flare fuel gas, sampled March 3, 2009.

<sup>(2)</sup> Calculated using Molar Volume of Gas = 24.464 L/mol at pressure = 1 atm, temperature = 25°C.

## **6.0 Air Quality Impact Analyses**

### **6.1 Modeling**

Air quality modeling was not required for this stationary source.

### **6.2 Increments**

An air quality increment analysis was not required for this stationary source

### **6.3 Monitoring**

Air quality monitoring is not required for this stationary source.

### **6.4 Health Risk Assessment**

A Health Risk Assessment was not required for this stationary source.

## **7.0 CAP Consistency, Offset Requirements and ERC's**

### **7.1 General**

Santa Barbara County is in attainment of the federal ozone standard but is in nonattainment of the state eight-hour ozone ambient air quality standard. In addition, the County is in nonattainment of the state PM<sub>10</sub> ambient air quality standards. The County is either in attainment or unclassified with respect to all other ambient air quality standards. Therefore, emissions from all emission units at the stationary source and its constituent facilities must be consistent with the provisions of the USEPA and State approved Clean Air Plans (CAP) and must not interfere with maintenance of the federal ambient air quality standards and progress towards attainment of the state ambient air quality standards. Under District regulations, any modifications at this facility that result in an emissions increase of any nonattainment pollutant exceeding 25 lbs/day must apply BACT (NAR). Additional increases may trigger offsets at the source or elsewhere so that there is a net air quality benefit for Santa Barbara County. These offset threshold levels are 55 lbs/day for all non-attainment pollutants except PM<sub>10</sub> for which the level is 80 lbs/day.

### **7.2 Clean Air Plan**

The 2007 Clean Air Plan, adopted by the District Board on August 16, 2007, addressed both federal and state requirements, serving as the maintenance plan for the federal eight-hour ozone standard and as the state triennial update required by the Health and Safety Code to demonstrate how the District will expedite attainment of the state eight-hour ozone standard. The plan was developed for Santa Barbara County as required by both the 1998 California Clean Air Act and the 1990 Federal Clean Air Act Amendments.

On January 20, 2011 the District Board adopted the 2010 Clean Air Plan. The 2010 Plan provides a three-year update to the 2007 Clean Air Plan. As Santa Barbara County has yet to attain the state eight-hour ozone standard, the 2010 Clean Air Plan demonstrates how the District plans to attain that standard. The 2010 Clean Air Plan therefore satisfies all state triennial planning requirements.

### **7.3 Offset Requirements**

The landfill Stationary Source does not currently require emission offsets.

### **7.4 Emission Reduction Credits**

The landfill Stationary Source does not generate or provide emission reduction credits.

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## **8.0 Lead Agency Permit Consistency**

The District is the lead agency for this permitting process. Pursuant to CEQA Guidelines Section 15300.4 and Section 1 of Appendix A (District List of Exempt Projects) of the District's *Environmental Review Guidelines* document (dated November 2000), the issuance of this Permit to Operate is exempt from CEQA.

## 9.0 Permit Conditions

This section lists the applicable permit conditions for the landfill. Section A lists the standard administrative conditions. Section B lists 'generic' permit conditions, including emission standards, for all equipment in this permit. Section C lists conditions affecting specific equipment. Section D lists non-federally enforceable (i.e., District only) permit conditions. Conditions listed in Sections A, B, and C are enforceable by the USEPA, the District, the State of California and the public. Conditions listed in Section D are enforceable only by the District and the State of California. Where any reference contained in Sections 9.A, 9.B, or 9.C refers to any other part of this permit, that part of the permit referred to is federally enforceable. In case of a discrepancy between the wording of a condition and the applicable federal or District rule(s), the wording of the rule shall control.

For the purposes of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this permit, nothing in the permit shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed.

### 9.A Standard Administrative Conditions

The following federally enforceable administrative permit conditions apply to the landfill:

- A.1 **Consistency with Analysis.** Operation under this permit shall be conducted by the City consistent with all written data, specifications and assumptions included with the application and supplements thereof (as documented in the District's project file) and with the District's analyses under which this permit is issued as documented in the permit analyses prepared for and issued with this permit. [Re: PTO 13563]
- A.2 **Reimbursement of Costs.** All reasonable expenses, as defined in District Rule 210, incurred by the District, District contractors, and legal counsel for all activities that follow the issuance of this PTO permit, including but not limited to permit condition implementation, compliance verification and emergency response, directly and necessarily related to enforcement of this operating permit shall be reimbursed by the City as required by Rule 210. [Re: PTO 13563, District Rule 210]
- A.3 **Compliance.** Nothing contained within this permit shall be construed by the City to allow the violation of any local, State or Federal rule, regulation, ambient air quality standard or air quality increment. [Re: PTO 13563]
- A.4 **Compliance with Permit Conditions.**
- (a) The City shall comply with all permit conditions.
  - (b) This permit does not convey property rights or exclusive privilege of any sort to the City.
  - (c) Noncompliance with any permit conditions is grounds for permit termination, revocation and re-issuance, modification, enforcement action, or for denial of permit renewal. Any permit non-compliance constitutes a violation of the Clean Air Act and its implementing regulations or of District Rules or both, as applicable.
  - (d) The permittee shall not use the "need to halt or reduce a permitted activity in order to maintain compliance" as a defense for noncompliance with any permit condition.

- (e) A pending permit action or notification of anticipated noncompliance by the City does not stay any permit condition.
  - (f) Within a reasonable time period, the City shall furnish any information requested by the Control Officer, in writing, for the purpose of determining:
    - (i) compliance with the permit, or
    - (ii) whether or not cause exists to modify, revoke and reissue, or terminate a permit or for an enforcement action.
  - (ii) In the event that any condition herein is determined to be in conflict with any other condition contained herein, then, if principles of law do not provide to the contrary, the condition most protective of air quality and public health and safety shall prevail to the extent feasible.  
[Re: 40 CFR Part 70.6.(a)(6), District Rule 1303.D.1]
- A.5 **Emergency Provisions.** The City shall comply with the requirements of the District, Rule 505 (Upset/Breakdown rule) and/or District Rule 1303.F, whichever is applicable to the emergency situation. In order to maintain an affirmative defense under Rule 1303.F, the City shall provide the District, in writing, a “notice of emergency” within 2 working days of the emergency. The “notice of emergency” shall contain the information/documentation listed in Sections (1) through (5) of Rule 1303.F. [Re: 40 CFR 70.6(g), District Rule 1303.F]
- A.6 **Compliance Plan.**
- (a) The City shall comply with all federally enforceable requirements that become applicable during the permit term, in a timely manner.
  - (b) For all applicable equipment, the City shall implement and comply with any specific compliance plan required under any federally-enforceable rules or standards.  
[Re: District Rule 1302.D.2]
- A.7 **Right of Entry.** The Regional Administrator of USEPA, the Control Officer, or their authorized representatives, upon the presentation of credentials, shall be permitted by the City to enter upon the premises where its Part 70 Source is located or where records must be kept:
- (a) To inspect the stationary source, including monitoring and control equipment, work practices, operations, and emission-related activity;
  - (b) To inspect and duplicate, at reasonable times, records required by this Permit to Operate;
  - (c) To sample substances or monitor emissions from the source or assess other parameters to assure compliance with the permit or applicable requirements, at reasonable times. Monitoring of emissions can include source testing.  
[Re: District Rule 1303.D.2]
- A.8 **Indemnity and Separation Clauses.** The Applicant shall defend, indemnify and hold harmless the District or its agents, officers and employees from any claim, action or proceeding against the District or its agents, officers or employees, to attack, set aside, void, or annul, in whole or in part, the approval granted herein. In the event that the District fails promptly to notify the Applicant of any such claim, action or proceeding, or that the District fails to cooperate fully in the defense of said claim, this condition shall thereafter be of no force or effect. In the event that any condition contained herein is determined to be invalid, then all remaining conditions shall remain in force. [Re: District Rules 103, 1303.D.1.j]
- A.9 **Permit Life.** The Part 70 permit shall become invalid three years from the date of issuance, unless a timely and complete renewal application is submitted to the District. Any operation of the source by the City to which this Part 70 permit is issued beyond the expiration date of this

Part 70 permit and without a valid Part 70 operating permit (or a complete Part 70 permit renewal application) shall be a violation of the CAAA, § 502(a) and 503(d) and of the District rules.

The City shall apply for renewal of the Part 70 permit no later than 6 months before the date of the permit expiration. Upon submittal of a timely and complete renewal application, the Part 70 permit shall remain in effect until the Control Officer issues or denies the renewal application. [Re: District Rule 1304.D.1]

- A.10 **Payment of Fees.** The City shall reimburse the District for all its Part 70 permit processing and compliance monitoring expenses for the stationary source on a timely basis. Failure to reimburse on a timely basis shall be a violation of this permit and of applicable requirements and can result in forfeiture of the Part 70 permit. Operation without a Part 70 permit subjects the source to potential enforcement action by the District and the USEPA pursuant to section 502(a) of the Clean Air Act. [Re: District Rules 1303.D.1 and 1304.D.11, 40 CFR 70.6(a)(7)]
- A.11 **Deviations from Permit Requirements.** The City shall submit a written report to the District documenting each and every deviation from the requirements of this permit or any applicable federal requirements within 7 days after discovery of the violation, but not later than 180 days after the date of occurrence. The report shall clearly document (1) the probable cause and extent of the deviation, (2) equipment involved, (3) the quantity of excess pollutant emissions, if any, and (4) actions taken to correct the deviation. The requirements of this condition shall not apply to deviations reported to District in accordance with Rule 505. Breakdown Conditions or Rule 1303.F Emergency Provisions. [District Rule 1303.D.1, 40 CFR 70.6(a) (3)]
- A.12 **Reporting Requirements/Compliance Certifications.** The City shall submit compliance certification reports to the USEPA *annually* and to the Control Officer every six months. These reports shall be submitted on District forms and shall identify each applicable requirement/condition of the permit, the compliance status with each requirement/condition, the monitoring methods used to determine compliance, whether the compliance was continuous or intermittent, and include detailed information on the occurrence and correction of any deviations (excluding emergency upsets) from permit requirement. The reporting periods shall be each half of the calendar year, e.g., January through June for the first half of the year. These reports shall be submitted by September 1 and March 1, respectively, each year. Supporting monitoring data shall be submitted in accordance with the “Semi-Annual Monitoring/Compliance Verification Report” condition in section 9.C. the City shall include a written statement from the responsible official, which certifies the truth, accuracy, and completeness of the reports. [Re: District Rules 1303.D.1, 1302.D.3, 1303.2.c]
- A.13 **Federally-enforceable Conditions.** Each federally enforceable condition in this permit shall be enforceable by the USEPA and members of the public. None of the conditions in the District-only enforceable section of this permit are federally enforceable or subject to the public/USEPA review [Re: CAAA, § 502(b)(6), 40 CFR 70.6(b)]
- A.14 **Recordkeeping Requirements.** The City shall maintain records of required monitoring information that include the following:
- (a) The date, place and time of sampling or measurements or maintenance activity ;
  - (b) operating conditions at the time of sampling or measurement or maintenance activity;
  - (c) date, place, name of company or entity that performed the analyses or measurement or maintenance activity and the methods used; and

- (d) results of the analyses or measurement or maintenance. Additionally, records must be kept that document the date of analysis and the analytical techniques or methods used.

The records (electronic or hard copy), as well as all supporting information including calibration and maintenance records, shall be maintained for a minimum of five (5) years from date of initial entry by the City and shall be made available to the District upon request. [Re: District Rule 1303.D.1.f, 40 CFR 70.6(a)(3)(ii)(A)]

**A.15 Conditions for Permit Reopening.** The permit shall be reopened and revised for cause under any of the following circumstances:

- (a) **Additional Requirements:** If additional applicable requirements (e.g., NSPS or MACT) become applicable to the source which has an unexpired permit term of three (3) or more years, the permit shall be reopened. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. However, no such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended. All such re-openings shall be initiated only after a 30 day notice of intent to reopen the permit has been provided to the City, except that a shorter notice may be given in case of an emergency.
- (b) **Inaccurate Permit Provisions:** If the District or the USEPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit, the permit shall be reopened. Such re-openings shall be made as soon as practicable.
- (c) **Applicable Requirement:** If the District or the USEPA determines that the permit must be revised or revoked to assure compliance with any applicable requirement including a federally enforceable requirement, the permit shall be reopened. Such re-openings shall be made as soon as practicable.

Administrative procedures to reopen and revise/revoke/reissue a permit shall follow the same procedures as apply to initial permit issuance. Re-openings shall affect only those parts of the permit for which cause to reopen exists. If the permit is reopened, and revised, it will be reissued with the expiration date that was listed in the permit before the re-opening.

[Re: 40 CFR 70.7(f), 40 CFR 70.6(a)]

**A.16 Emission Factor Revisions.** The District may update the emission factors for any calculation based on USEPA AP-42 or District emission factors at the next permit modification or permit reevaluation to account for USEPA and/or District revisions to the underlying emission factors.

## **9.B Generic Conditions**

The generic conditions listed below apply to all emission units, regardless of their category or emission rates. These conditions are federally enforceable. These rules apply to the equipment and operations at the landfill facility, as they currently exist. Compliance with these requirements is discussed in Section 3.4.2. In the case of a discrepancy between the wording of a condition and the applicable District rule, the wording of the rule shall control.

- B.1 **Circumvention (Rule 301).** A person shall not build, erect, install, or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Division 26 (Air Resources) of the Health and Safety Code of the State of California or of these Rules and Regulations. This Rule shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code of the State of California, or of District Rule 303. [Re: District Rule 301]
- B.2 **Visible Emissions (Rule 302).** The landfill shall not discharge into the atmosphere from any single source of emission any air contaminants for a period or periods aggregating more than three minutes in any one hour that is:
- (a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or
  - (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection B.2.(a) above.
- B.3 **Nuisance (Rule 303).** No pollutant emissions from any source at the landfill shall create nuisance conditions. No operations shall endanger health, safety or comfort, nor shall they damage any property or business. [Re: District Rule 303]
- B.4 **PM Concentration - North Zone (Rule 306).** The landfill shall not discharge into the atmosphere, from any source, particulate matter in excess of the concentrations listed in Table 306(a) of Rule 306. [Re: District Rule 306]
- B.5 **Specific Contaminants (Rule 309).** The landfill shall not discharge into the atmosphere from any single emission source any sulfur compounds, hydrogen sulfide, combustion contaminants and carbon monoxide in excess of the standards listed in Sections A, E and G of Rule 309. [Re: District Rule 309]
- B.6 **Organic Solvents (Rule 317).** The landfill shall comply with the emission standards listed in Section B of Rule 317. Compliance with this condition shall be based on the landfill's compliance with the Solvent Usage condition in this permit. [Re: District Rule 317]
- B.7 **Solvent Cleaning Operations (Rule 321).** The landfill shall comply with the operating requirement, equipment requirements and emission control requirements for all solvent cleaning subject to this Rule. Compliance shall be based on District inspection of operations and with the Solvent Usage condition in this permit. [Re: District Rule 321]
- B.8 **Metal Surface Coating Thinner and Reducer (Rule 322).** The use of photochemically reactive solvents as thinners or reducers in metal surface coatings is prohibited. Compliance

with this condition shall be based on the Solvent Usage condition in this permit and facility inspections. [Re: District Rule 322]

- B.9 **Architectural Coatings (Rule 323).** The landfill shall comply with the emission standards listed in Section D of Rule 323 as well as the Administrative requirements listed in Section F of Rule 323. Compliance with this condition shall be based on the Solvent Usage condition in this permit and facility inspections. [Re: District Rule 323]
- B.10 **Disposal and Evaporation of Solvents (Rule 324).** The landfill shall not dispose through atmospheric evaporation more than one and a half gallons of any photochemically reactive solvent per day. Compliance with this condition shall be based on the Solvent Usage condition in this permit and facility inspections. [Re: District Rule 324]
- B.11 **Adhesives and Sealants (Rule 353).** The permittee shall not use adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primers, unless the permittees comply with the following:
- A) Such materials used are purchased or supplied by the manufacturer or suppliers in containers of 16 fluid ounces or less; or alternately
  - B) When the permittees use such materials from containers larger than 16 fluid ounces and the materials are not exempt by Rule 353, Section B.1, the total reactive organic compound emissions from the use of such material shall not exceed 200 pounds per year unless the substances used and the operational methods comply with Sections D, E, F, G, and H of Rule 353. Compliance shall be demonstrated by recordkeeping in accordance with Section B.2 and/or Section O of Rule 353.  
[Re: District Rule 353]
- B.12 **Breakdowns (Rule 505).** The permittee shall promptly report breakdowns that result in violations of emission limitations or restrictions prescribed by District Rules or by this permit; such reporting shall be made in conformance with the requirements of Rule 505, Sections A, B1, and D.
- B.13 **CARB Registered Portable Equipment.** State registered portable equipment shall comply with State registration requirements. A copy of the State registration shall be readily available whenever the equipment is at the facility. [Re: District Rule 202]
- B.14 **Equipment Identification.** Identifying tag(s) or name plate(s) shall be displayed on the equipment to show manufacturer, model number, and serial number. The tag(s) or plate(s) shall be issued by the manufacturer and shall be affixed to the equipment in a permanent and conspicuous position.

## **9.C Requirements and Equipment Specific Conditions**

### **C.1 Landfill Operations**

- (a) Emission Limits: Mass emissions of fugitive NMOC and ROC from the landfill surface shall not exceed the limits shown in Table 5.2. If emissions exceed the Table 5.2 NMOC limit of 55.1 tons/year (50 Mg/year), the City shall comply with the provisions of 40 CFR Subpart WWW 60.752(b)(2).
- (b) Operational Limits: The following operational limits apply to the Municipal Solid Waste Landfill and Gas Collection System as specified:
  - a. Design Capacity – The total amount of municipal solid waste placed in the landfill shall not exceed a maximum of 6.1 million cubic meters. [Ref: Part 70 PTO 13563 Application]
- (c) Monitoring: The landfill is subject to the following NSPS and Part 70 periodic monitoring requirements (Ref: 40 CFR Subpart WWW 60.757, 40 CFR 70.6(a)(3)(i)(B)):
  - (i) Design Capacity and Waste Acceptance: The total amount of municipal solid waste in place at the end of the period and the amount of waste placed in the landfill during the period shall be recorded semi-annually (all in units of tons).
  - (ii) Tier 2 Landfill Gas Sampling Program. The landfill shall conduct a Tier 2 gas sampling program as specified in 40 CFR Subpart WWW § 60.754(a)(3) every five years beginning in 2014 to confirm ongoing compliance with the emission limits specified in 9.C.1(a). This sampling program shall be conducted in accordance with the Sampling Protocol for Calculation of Landfill Gas NMOC Concentration submitted by the City on June 10, 2010 and approved by the District on August 19, 2010. Any proposed changes to this Protocol must be submitted to the District for review and approval no later than 30 days before the scheduled sampling.
- (d) Recordkeeping: The landfill is subject to the following NSPS and Part 70 recordkeeping requirements: (Ref: 40 CFR Subpart WWW §60.758, 40 CFR 70.6(a)(3)(ii)):
  - (i) Design Capacity and Waste Accepted: For each semi-annual calendar period, records shall be maintained documenting the total waste placed in the landfill during the period in tons, and the total solid waste in place at the landfill in tons.
  - (ii) Tier 2 Landfill Gas Sampling: Records shall be maintained of the results of the most recent Tier 2 landfill gas sampling.
  - (iii) Calculated NMOC Emission Rate: At the end of each semi-annual calendar period, records shall be maintained documenting the calculated NMOC emission rate. The emission rate shall be calculated using the equation specified in 40 CFR 60.754, the total waste in place at the end of the period, and the results of the most recent Tier 2

landfill gas sampling.

(e) **Reporting:** A semi-annual and annual report detailing the operation and the monitoring activities shall be provided to the District per Condition 9.C.3 of this permit. [Ref: 40 CFR 70.6 and 40 CFR Subpart WWW Section 60.757]

C.2 **Solvent Usage.** The following equipment is included in this emissions unit category:

EQ No.	Name
8704-3-1	Solvent Usage

- (a) **Operational Limits:** Use of solvents for cleaning, degreasing, thinning and reducing shall conform to the requirements of District Rules 317 and 324. Compliance with these rules shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit and facility inspections. In addition, the permittees shall comply with the following:
- (i) **Containers:** Vessels or containers used for storing materials containing organic solvents shall be kept closed unless adding to or removing material from the vessel or container.
  - (ii) **Materials:** All materials that have been soaked with cleanup solvents shall be stored, when not in use, in closed containers that are equipped with tight seals.
  - (iii) **Solvent Leaks:** Solvent leaks shall be minimized to the maximum extent feasible or the solvent shall be removed to a sealed container and the equipment taken out of service until repaired. A solvent leak is defined as either the flow of three liquid drops per minute or a discernable continuous flow of solvent.
- (b) **Recordkeeping:** The permittee shall record in a log the following on a monthly basis for each solvent used which is subject to Rule 317 or 324: amount used; purpose for its use; the percentage of ROC by weight (as applied); the solvent density; whether the solvent is photochemically reactive; and, the resulting emissions of ROC to the atmosphere in units of pounds per month and the resulting emissions of photochemically reactive solvents to the atmosphere in units of pounds per month. Product sheets (MSDS or equivalent) detailing the constituents of all solvents shall be maintained in a readily accessible location at the landfill facility.
- (c) **Reporting:** A semi-annual and annual report detailing the operation activities shall be provided to the District per Condition 9.C.3 below. [Ref: 40 CFR 70.6 (a)(1)(3)(B)]

C.3 **Compliance Verification Reports.** Twice a year, the City shall submit a monitoring and compliance verification report (CVR) to the District. Each report shall be used to verify compliance with the prior two calendar quarters. The first report shall cover calendar quarters 1 and 2 (January through June) and shall be submitted no later than September 1. The second report shall cover calendar quarters 3 and 4 (July through December) and shall be submitted no later than March 1. Each report shall contain information necessary to verify compliance with the emission limits and other requirements of this permit. Each report shall include a

certification of compliance. These reports shall be in a format approved by the District, with one hard copy and one PDF copy. All logs and other basic source data not included in the report shall be available to the District upon request. The March 1 report shall also include an annual report for the prior four quarters. Pursuant to Rule 212, the annual report shall include a completed District Annual Emissions Inventory questionnaire, or the questionnaire may be submitted electronically via the District web site. The report shall include the following information [Ref: District Rules 1303.D.1, 1302.D.3, 1303.2.c]:

(a) Landfill Operations:

- (i) Total amount of municipal solid waste in place at the end of each reporting period, and amount of waste placed in the landfill during the reporting period, in tons.
- (ii) Tons per quarter of uncontrolled fugitive NMOC emissions from the landfill along with the appropriate supporting data. The NMOC emission calculations shall be performed per 40 CFR §60.754(a)3.iii. The NMOC calculations shall incorporate the most recent Tier 2 Landfill Gas Sampling Program results as described in Condition 9.C.1.c(ii). The second report shall include tons per year totals.

(b) General Reporting Requirements:

- (i) General solvent usage report. If no solvents subject to Rule 317 or 324 are used during the reporting period, that shall be stated in the report.

C.4 Documents Incorporated by Reference. The documents listed below, including any District-approved updates thereof, are incorporated herein and shall have the full force and effect of a permit condition for this operating permit. These documents shall be implemented for the life of the Project and shall be made available to District inspection staff upon request.

- (i) *Sampling Protocol for Calculation of Landfill Gas NMOC Concentration* (as approved on August 19, 2010)

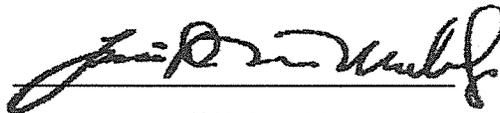
C.5 **Closure Report.** Permittee shall submit a closure report to the District within 30 days of cessation of waste acceptance. [Ref: 40 CFR §60.757(d)]

**9.D District-Only Conditions**

The following section lists permit conditions that are not enforceable by the USEPA or the public. However, these conditions are enforceable by the District and the State of California. These conditions are issued pursuant to District Rule 206 (Conditional Approval of Authority to Construct or Permit to Operate), which states that the Control Officer may issue an operating permit subject to specified conditions. Permit conditions have been determined as being necessary for this permit to ensure that operation of the facility complies with all applicable local and state air quality rules, regulations and laws. Failure to comply with any condition specified pursuant to the provisions of Rule 206 shall be a violation of that rule, this permit, as well as any applicable section of the California Health & Safety Code.

- D.1 **Grounds for Revocation.** Failure to abide by and faithfully comply with this permit shall constitute grounds for the APCO to petition for permit revocation pursuant to California Health & Safety Code Section 42307 *et seq.* [Re: PTO 13563]
- D.2 **Equipment Maintenance.** The equipment listed in this permit shall be properly maintained and kept in good condition at all times. The equipment manufacturer's maintenance manual, maintenance procedures and/or maintenance checklists (if any) shall be kept on site. [Re: PTO 13563]
- D.3 **Odorous Organic Sulfides.** The landfill shall not discharge into atmosphere H2S and organic sulfides that result in ground-level impact beyond the facility property boundary in excess of either 0.06 ppmv averaged over 3 minutes and 0.03 ppmv averaged over 1 hour. [Re: District Rule 310]

AIR POLLUTION CONTROL OFFICER



NOV 20 2012

Date

NOTES:

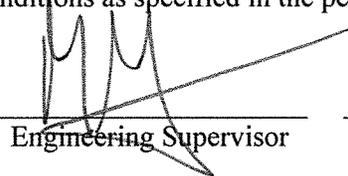
- (a) Permit Triennial Reevaluation Due Date: November 2015
- (b) Part 70 Operating Permit Expiration Date: November 2017

It is recommended that this PTO be issued with the conditions as specified in the permit.



AQ Engineer

11/19/12



Engineering Supervisor

11-20-12

## **10.0 Attachments**

- 10.1 Equipment List**
  - 10.2 List of Insignificant Emission Units**
  - 10.3 IDS Data Base Emission Table**
  - 10.4 Facility Map/Plot Plan**
  - 10.5 Permittee Comments and District Responses**
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## 10.1 Equipment List

PT-70 13563 / FID: 08774 City of Lompoc Landfill / SSID: 08772

### A PERMITTED EQUIPMENT

#### 1 Municipal Solid Waste Landfill

<i>Device ID #</i>	<i>114827</i>	<i>Device Name</i>	<b>Municipal Solid Waste Landfill</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>	115.4 acres, 6.1 million cubic meter design capacity		

### B EXEMPT EQUIPMENT

#### 1 Waste Oil Storage Tanks

<i>Device ID #</i>	<i>114828</i>	<i>Device Name</i>	<b>Waste Oil Storage Tanks</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	400.00 Gallons
<i>Manufacturer</i>		<i>Operator ID</i>	
<i>Model</i>		<i>Serial Number</i>	
<i>Part 70 Insig?</i>	Yes	<i>District Rule Exemption:</i>	202.V.3 Storage Of Lubricating Oils
<i>Location Note</i>			
<i>Device Description</i>			

## 2 Solvent Usage

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<i>Device ID #</i>	114829	<i>Device Name</i>	<b>Solvent Usage</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer Model</i>		<i>Operator ID</i>	
<i>Part 70 Insig?</i>	Yes	<i>Serial Number</i>	
<i>Location Note</i>		<i>District Rule Exemption:</i> 202.U.3 Equipment Used In Wipe Cleaning Operations (<55 Gal/Yr At T He Source)	
<i>Device Description</i>	Less than 55 gallons per year combined solvent and coating usage.		

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## 3 Surface Coating Operations

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<i>Device ID #</i>	114830	<i>Device Name</i>	<b>Surface Coating Operations</b>
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer Model</i>		<i>Operator ID</i>	
<i>Part 70 Insig?</i>	Yes	<i>Serial Number</i>	
<i>Location Note</i>		<i>District Rule Exemption:</i> 202.I.3 Surface Coating Equipment using < 55g/yr	
<i>Device Description</i>	Less than 55 gallons per year combined solvent and coating usage.		

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## 10.2 LIST OF INSIGNIFICANT EMISSION UNITS <sup>a</sup>

1. Solvent use (wipe cleaning only)
2. Waste oil storage tank (two, 400 gallons each)
3. Water storage tank (10,000 gallons)

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<sup>a</sup> Each unit has a PTE < 2 TPY of any regulated pollutant and < 5 TPY of any regulated HAP.

### 10.3 IDS Data Base Emission Tables

#### IDS Database Emission Tables

Table 1  
Permitted Potential to Emit (PPTE)

	NOx	ROC	CO	SOx	PM	PM <sub>10</sub>
lb/day	0.00	11.06	0.00	0.00	0.00	0.00
tons/year	0.00	2.02	0.00	0.00	0.00	0.00

Table 2  
Facility Potential to Emit (FPTE)

	NOx	ROC	CO	SOx	PM	PM <sub>10</sub>
lb/day	0.00	11.06	0.00	0.00	0.00	0.00
tons/year	0.00	2.02	0.00	0.00	0.00	0.00

Table 3  
Federal Pt-70 Facility Potential to Emit (PT70 FPTE)

	NOx	ROC	CO	SOx	PM	PM <sub>10</sub>
lb/day	0.00	0.00	0.00	0.00	0.00	0.00
tons/year	0.00	0.00	0.00	0.00	0.00	0.00

Table 4  
Facility Net Emission Increase (FNEI-90)

	NOx	ROC	CO	SOx	PM	PM <sub>10</sub>
lb/day	0.00	0.00	0.00	0.00	0.00	0.00
tons/year	0.00	0.00	0.00	0.00	0.00	0.00



**10.5 Permittee Comments and District Responses**

No.	Section	Subject	City Comment	District Response
1.	1.6.10	Responsible Official	Larry Bean is now the Utilities Director instead of the Public Works Director	His title has been updated
2.	2.1.2	Facility Description	The closure date is 2045, not 2047.	Change made
3.	2.1.3	Recycling activities	Add concrete and topsoil to the list of materials	Change made