

SIERRA ESTRELLA LANDFILL, INC. - MARICOPA

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1. Introduction

This permit pertains to a solid waste landfill facility, owned and operated by Sierra Estrella Landfill, Inc., a subsidiary of Waste Management Arizona Landfills, an Arizona Corporation. The facility opened in 1994, with an overall site area of about 300 acres. The facility, commonly known as the Sierra Estrella Landfill, is located on 22087 North Ralston Road, Maricopa, Arizona, upon a parcel also identified by Pinal County Assessor's Parcel #510-79-002C4. The source is in an area classified as non-attainment for PM₁₀ and PM_{2.5} and attainment for all other pollutants.

On July 8, 2019, the EPA approved a section 111(d) plan submitted by the department with respect to the promulgation of Federal NSPS and emission guidelines requirements for MSW landfills, 40 CFR Part 60, Subpart XXX and Cf respectively. The plan became effective on March 20, 2020.

This Renewal V20696.000 adds the requirements of Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills, 40 CFR Part 60, Subpart Cf and National Emission Standards for Hazardous Air Pollutants for existing and new municipal solid waste (MSW) landfills, Subpart AAAA.

Renewal V20673.000 added the West Pinal Fugitive Dust rule requirements, NSPS 40 CFR Part 60 Subpart IIII for engines, NESHAP ZZZZ 40 CFR Part 63 Subpart ZZZZ for engines and updates references.

Renewal V20655.000 made the following minor changes in the permit as submitted by the applicant:

- Fugitive emissions from the paved roads were revised based upon a lower expected waste acceptance for future years of operations.
- Fugitive emissions from the paved roads was revised based on the reduction in the number of vehicles per day to dispose 650 tons per day.
- Fugitive emissions from the unpaved roads were revised based upon a lower expected waste acceptance for future years of operations.

The principal business activity consists of providing a controlled and managed repository for solid wastes. Examples of such wastes include municipal solid waste, construction debris, demolition material, dead animals, auto shredder fluff, incinerator ash, non-infectious medical wastes, dried waste water treatment plant sludge and petroleum contaminated soils. Asbestos materials are independently managed and segregated in a controlled area.

The natural decomposition of the waste materials, and to some extent the evaporation of volatile compounds in the waste materials, constitute the primary sources of emissions. The complex nature of those emissions qualifies them for regulatory analysis from several different perspectives, including consideration as volatile organic compounds ("VOCs"), as landfill gas ("LFG"), which is measured by a surrogate, namely non-methane organic compounds or "NMOC" measured as hexane), and as one or more hazardous air pollutants ("HAPs").

Traffic delivering waste materials generates particulate emissions ("PM₁₀") or dust. In addition, the daily application of a cover layer of soil also produces PM₁₀ emissions, resulting from soil stockpiling, cover layer distribution, and wind erosion. Soil is typically used as a daily cover material; however, other alternatives as expressly approved under this permit may also be used. Diesel-driven equipment also emit oxides of nitrogen ("NO_x") and sulfur dioxide ("SO₂") and may operate at the facility.

The facility design includes a liner system, which collects any liquids, or leachate, that drains from the mass of waste materials. A collection system and pump allows the leachate to be extracted, collected, and eventually sprayed back onto lined cells in the facility, effectively amounting to a leachate drying system. Eventually, any volatile fraction will evaporate or decompose, and those compounds will escape as emissions.

This facility falls subject to a number of regulatory requirements; the four primary requirements include:

- 40 CFR Part 60, Subpart Cf regulates emissions of LFG. The Landfill NSPS also requires that once calculated LFG emissions exceed a certain threshold, a capture-and-control system must be designed and installed. The Landfill NSPS defines a method for calculating emissions as a function of the amount of waste deposited in the facility, and other variables. Upon exceeding the emission threshold of 34 megagrams of NMOC, the permittee is obliged to begin the design process leading to installation of a capture-and-control system.
- 40 CFR Part 63, Subpart AAAA establishes National Emission Standards for Hazardous Air pollutants for existing and new municipal solid waste (MSW) landfills. This subpart also requires such landfills to meet the startup, shutdown, malfunction (SSM) requirements of the general provisions of this part and requires additional reporting requirements.
- A National Emission Standard for Hazardous Air Pollutants ("the Asbestos NESHAP") requires that asbestos-containing waste materials be properly identified, documented and handled.
- The Stratospheric Ozone Protection Program established by Clean Air Act Title VI requires, with only limited exceptions, that refrigerants be properly removed from various appliances prior to disposal in a landfill facility. This facility does not allow final disposal of "white goods," including major consumer appliances and other similar equipment items, without proper certification of evacuation.

A complete list of equipment from which emissions are allowed by this permit is given in Section 11. of this permit.

2. Listing of Federally Enforceable Applicable Requirements

[Mandated by 40 CFR §70.5(c)(4)] (Code §§3-1-060.B.2.d, 3-1-081.A.2, 3-1-081.A.8.a)

- A. The listed specific provisions of the Pinal-Gila Counties Air Quality Control District (PGAQCD) Regulations, as adopted by the Pinal County Board of Supervisors on the dates listed, and approved by the Administrator as elements of the Arizona State Implementation Plan (SIP) by the Federal Register (FR) notice listed:

7-3-1.2 (3/31/75)	Emission Standards - Particulate Emissions - Fugitive Dust 43 FR 50531 (11/15/78)
7-3-1.3 (3/31/75)	Emission Standards - Particulates - Open Burning 43 FR 50531 (11/15/78)
7-3-1.7.E (3/31/75)	Fuel Burning Equipment - Particulate Emissions 43 FR 50531 (11/15/78)
7-3-1.1 (6/16/80)	Visible Emissions; General 47 FR 15579 (4/12/82)

- B. Those specific provisions of the Pinal County Air Quality Control District Code of Regulations (Code), as adopted by the Pinal County Board of Supervisors on dates listed, and approved by the Administrator as elements of the Arizona State Implementation Plan (SIP) by the Federal Register (FR) notice listed:

2-8-300 (5/18/05)	Visibility Limiting Standard 71 FR 15043 (3/27/06)
4-2-040 (6/29/93)	Fugitive Dust Standards 72 FR 41896 (08/01/07)

- 4-1-030 Nonattainment Area Fugitive Dust
(10/28/15) 82 FR 20267 (5/1/17)
- C. CAA §608 (11/15/90); 40 CFR Part 82, Subpart F - Recycling and Emissions Reduction (9/7/95); regulations pertaining to use and handling of ozone-depleting substances.
- D. 40 CFR §61.154 (1/16/91) National Emission Standard for Asbestos, Standard for active waste disposal sites.
- E. PCAQCD Permit A20500 §B.I.E.3 (4/22/94) - Daily cover requirement, as amended by Permit V20618.000 (6/30/03).
- F. The New Source Performance Standards (NSPS), 40 CFR Part 60 Subpart IIII, for Stationary Compression Ignition Internal Combustion Engines, §§40 CFR 60.4201, 60.4204(b), 60.4207(b), 60.4206, 60.4211(a)(c).
- G. The National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63, Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines (RICE) §§40 CFR 63.6603(a), 63.6605, 63.6625(e), 63.6625(h), 63.6625(i), 63.6640, 63.6655, 40 CFR Part 63 Subpart ZZZZ Table 2d.
- H. General Provisions, 40 CFR 63, Subpart A, 40 CFR 63.1-63.15 provisions as listed in Table 8 of 40 CFR 63, Subpart ZZZZ, except as described in 40 CFR 63.6645(a)(5).
- I. The New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart Cf – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills, §60.30f - §60.41f.
- J. National Emission Standards for Hazardous Air Pollutants, Subpart AAAA for Municipal Solid Waste Landfills, §63.1930 - §63.1965

3. Compliance Certification

- A. Compliance Plan
[Mandated by 40 CFR §70.5(c)(8)] (Code §§3-1-081.C, 3-1-083.A.7)

As the Permittee is currently in compliance, the compliance plan consists of continued adherence to the requirements of this permit and those requirements set forth in applicable regulations and statutes.

- B. Compliance Schedule
[Mandated by 40 CFR §§ 70.5(c)(8), 70.6(c)(3)] (Code §§3-1-060.B.1, 3-1-083.A.7.c)

As the Permittee is currently in compliance, no compliance schedule to attain compliance is required.

4. Authority to Construct

[Federally enforceable - Code §§3-1-010, 3-1-040 (as amended 10/12/95) approved as a SIP Element at 61 FR 15717 (4/9/96)]

Emissions from this facility, specifically the equipment described in "Equipment Schedule" section below, and the operating configuration more fully described in the application for permit, already fall subject to the independent Federally Enforceable limitations identified elsewhere in this permit. Therefore, based on the regulations in effect upon the date of issuance of this permit and on a finding that allowable emissions from the equipment described in the Equipment Schedule will neither cause nor contribute to a violation of any ambient air quality standard even without any additional limitations, and a further finding that this does not

constitute a "major source" within the meaning of Code §3-3-203, this permit constitutes authority to construct and operate such equipment.

5. Emission Limitations and Related Requirements

[Mandated by 40 CFR §70.6(a)(1)] (Code §3-1-081.A.2)

A. Allowable Emissions

[Federally enforceable - Code § 3-1-081.A.2. (as amended 10/12/95), as limited by §1-1-105 (10/12/95), approved as SIP Elements at 61 FR 15717 (4/9/96)]

Permittee is authorized to discharge or cause to discharge into the atmosphere those emissions of air contaminants as set forth below. Unless exempted under Code §3-1-040.C., or authorized by a separate permit, by this permit or by a revision or operational change allowed under Chapter 3, Article 2 of the Code, Permittee shall not commence construction of, operate or make any modification to this source in a manner which will cause emissions of any regulated air pollutant in excess of the de minimis amount.

B. New Source Performance Standard - Municipal Solid Waste Landfills *[Federally enforceable pursuant to 40 CFR Part 60, Subpart Cf]*

1. Emission Guidelines for Municipal Solid Waste Landfill Emissions [Section 60.33f]

- a. *Landfills.* For approval, a state plan must require each owner or operator of an MSW landfill having a design capacity greater than or equal to 2.5 million megagrams by mass and 2.5 million cubic meters by volume to collect and control MSW landfill emissions at each MSW landfill that meets the following conditions:
 - i. The landfill has accepted waste at any time since November 8, 1987, or has additional design capacity available for future waste deposition.
 - ii. The landfill commenced construction, reconstruction, or modification on or before July 17, 2014.
 - iii. The landfill has an NMOC emission rate greater than or equal to 34 megagrams per year or Tier 4 surface emissions monitoring shows a surface emission concentration of 500 parts per million methane or greater.
 - iv. The landfill in the closed landfill subcategory and has an NMOC emission rate greater than or equal to 50 megagrams per year or Tier 4 surface emissions monitoring shows a surface emission concentration of 500 parts per million methane or greater.
- b. *Collection system.* For approval, a state plan must include provisions for the installation of a gas collection and control system meeting the requirements in paragraphs (b)(1) through (3) and (c) of this section at each MSW landfill meeting the conditions in paragraph (a) of this section.
 - i. *Collection system.* Install and start up a collection and control system that captures the gas generated within the landfill within 30 months after:

1. The first annual report in which the NMOC emission rate equals or exceeds 34 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the NMOC emission rate is less than 34 megagrams per year, as specified in §60.38f(d)(4); or
 2. The first annual NMOC emission rate report for a landfill in the closed landfill subcategory in which the NMOC emission rate equals or exceeds 50 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the NMOC emission rate is less than 50 megagrams per year, as specified in §60.38f(d)(4); or
 3. The most recent NMOC emission rate report in which the NMOC emission rate equals or exceeds 34 megagrams per year based on Tier 2, if the Tier 4 surface emissions monitoring shows a surface methane emission concentration of 500 parts per million methane or greater as specified in §60.38f(d)(4)(iii).
- c. *Active.* An active collection system must:
- i. Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control system equipment.
 - ii. Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of 5 years or more if active; or 2 years or more if closed or at final grade.
 - iii. Collect gas at a sufficient extraction rate.
 - iv. Be designed to minimize off-site migration of subsurface gas.
- d. *Passive.* A passive collection system must:
- i. Comply with the provisions specified in paragraphs c.i., ii., and iv. of this section.
 - ii. Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners must be installed as required under §258.40 of this chapter.
- e. *Control system.* For approval, a state plan must include provisions for the control of the gas collected from within the landfill through the use of control devices meeting the following requirements, except as provided in §60.24.
- i. A non-enclosed flare designed and operated in accordance with the parameters established in §60.18 except as noted in §60.37f(d); or
 - ii. A control system designed and operated to reduce NMOC by 98 weight percent; or when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC

concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen or less. The reduction efficiency or concentration in parts per million by volume must be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in §60.35f(d). The performance test is not required for boilers and process heaters with design heat input capacities equal to or greater than 44 megawatts that burn landfill gas for compliance with this subpart.

1. If a boiler or process heater is used as the control device, the landfill gas stream must be introduced into the flame zone.
 2. The control device must be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in §60.37f.
 3. For the closed landfill subcategory, the initial or most recent performance test conducted to comply with subpart WWW of this part; 40 CFR part 62, subpart GGG; or a state plan implementing subpart Cc of this part on or before July 17, 2014 is sufficient for compliance with this subpart.
- iii. Route the collected gas to a treatment system that processes the collected gas for subsequent sale or beneficial use such as fuel for combustion, production of vehicle fuel, production of high-Btu gas for pipeline injection, or use as a raw material in a chemical manufacturing process. Venting of treated landfill gas to the ambient air is not allowed. If the treated landfill gas cannot be routed for subsequent sale or beneficial use, then the treated landfill gas must be controlled according to either paragraph e i., or ii of this section.
- iv. All emissions from any atmospheric vent from the gas treatment system are subject to the requirements of paragraph b or e of this section. For purposes of this subpart, atmospheric vents located on the condensate storage tank are not part of the treatment system and are exempt from the requirements of paragraph b or e of this section.
- f. *Emissions.* The permittee shall either install a collection and control system, as provided in paragraphs b,c,d, and e of this section, or calculate the NMOC emission rate annually using the procedures specified in Condition 6.A.1.a, except as provided in Condition 7.3.iii.
- i. If the calculated NMOC emission rate is less than 34 megagrams per year, the owner or operator must:
 1. Submit an annual NMOC emission rate report according to §60.38f(c), except as provided in §60.38f(c)(3); and
 2. Recalculate the NMOC emission rate annually using the procedures specified in §60.35f(a) until such time as the calculated NMOC emission rate is equal to or greater than 34 megagrams per year, or the landfill is closed.

- a. If the calculated NMOC emission rate, upon initial calculation or annual recalculation required in paragraph f.i.2 of this section, is equal to or greater than 34 megagrams per year, the owner or operator must either: Comply with paragraphs b and e of this section; calculate NMOC emissions using the next higher tier in §60.35f; or conduct a surface emission monitoring demonstration using the procedures specified in §60.35f(a)(6).
 - b. If the landfill is permanently closed, a closure report must be submitted to the Administrator as provided in §60.38f(f), except for exemption allowed under §60.31f(e)(4).
 - c. For the closed landfill subcategory, if the most recently calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator must either: Submit a gas collection and control system design plan as specified in §60.38f(d), except for exemptions allowed under §60.31f(e)(3), and install a collection and control system as provided in paragraphs b and e of this section; calculate NMOC emissions using the next higher tier in §60.35f; or conduct a surface emission monitoring demonstration using the procedures specified in §60.35f(a)(6).
- ii. If the calculated NMOC emission rate is equal to or greater than 34 megagrams per year using Tier 1, 2, or 3 procedures, the owner or operator must either: submit a collection and control system design plan prepared by a professional engineer to the Administrator within 1 year as specified in §60.38f(d), except for exemptions allowed under §60.31f(e)(3); calculate NMOC emissions using a higher tier in §60.35f; or conduct a surface emission monitoring demonstration using the procedures specified in §60.35f(a)(6).
 - iii. For the closed landfill subcategory, if the calculated NMOC emission rate is equal to or greater than 50 megagrams per year using Tier 1, 2, or 3 procedures, the owner or operator must either: Submit a collection and control system design plan as specified in §60.38f(d), except for exemptions allowed under §60.31f(e)(3); calculate NMOC emissions using a higher tier in §60.35f; or conduct a surface emission monitoring demonstration using the procedures specified in §60.35f(a)(6).
- g. *Removal criteria.* The collection and control system may be capped, removed, or decommissioned if the following criteria are met:
 - i. The landfill is a closed landfill (as defined in §60.41f). A closure report must be submitted to the Administrator as provided in §60.38f(f).
 - ii. The collection and control system has been in operation a minimum of 15 years or the landfill owner or operator demonstrates that the GCCS will be unable to operate for 15 years due to declining gas flow.

- iii. Following the procedures specified in §60.35f(b), the calculated NMOC emission rate at the landfill is less than 34 megagrams per year on three successive test dates. The test dates must be no less than 90 days apart, and no more than 180 days apart.
- iv. For the closed landfill subcategory (as defined in §60.41), following the procedures specified in §60.35f(b), the calculated NMOC emission rate at the landfill is less than 50 megagrams per year on three successive test dates. The test dates must be no less than 90 days apart, and no more than 180 days apart.

2. Operational Standards for Collection and Control Systems

Each owner or operator of an MSW landfill with a gas collection and control system used to comply with the provisions of Section B.1.b must:

- a. Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:
 - i. Five (5) years or more if active; or
 - ii. Two (2) years or more if closed or at final grade.
- b. Operate the collection system with negative pressure at each wellhead except under the following conditions:
 - i. A fire or increased well temperature. The owner or operator must record instances when positive pressure occurs in efforts to avoid a fire. These records must be submitted with the annual reports as provided in §60.38f(h)(1).
 - ii. Use of a geomembrane or synthetic cover. The owner or operator must develop acceptable pressure limits in the design plan.
 - iii. A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes must be approved by the Administrator as specified in §60.38f(d).
- c. Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 degrees Celsius (131 degrees Fahrenheit). The owner or operator may establish a higher operating temperature value at a particular well. A higher operating value demonstration must be submitted to the Administrator for approval and must include supporting data demonstrating that the elevated parameter neither causes fires nor significantly inhibits anaerobic decomposition by killing methanogens. The demonstration must satisfy both criteria in order to be approved (*i.e.*, neither causing fires nor killing methanogens is acceptable).
- d. Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator must conduct surface testing using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in §60.36(d). The owner or operator must

conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at no more than 30-meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover and all cover penetrations. Thus, the owner or operator must monitor any openings that are within an area of the landfill where waste has been placed and a gas collection system is required. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan must be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30-meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

- e. Operate the system such that all collected gases are vented to a control system designed and operated in compliance with §60.33f(c). In the event the collection or control system is not operating, the gas mover system must be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere must be closed within 1 hour of the collection or control system not operating.
- f. Operate the control system at all times when the collected gas is routed to the system.
- g. If monitoring demonstrates that the operational requirements in paragraph b, c, or d of this section are not met, corrective action must be taken as specified in §60.36f(a)(3) and (5) or (c). If corrective actions are taken as specified in §60.36f, the monitored exceedance is not a violation of the operational requirements in this section.

C. **NESHAP - Municipal Solid Waste Landfills [*Federally Enforceable, pursuant to 40 CFR Part 63, Subpart AAAA*]**

1. **Standards for Air Emissions from Municipal Landfills [Section §63.1955]**

Each owner or operator of a MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meter and NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall:

- a. Comply with the requirements of 40 CFR Part 60, Subpart Cf.
- b. Comply with the applicable collection and control system requirements in §§63.1960 through 63.1985 and with the general provisions of the part specified in table 1 of the subpart.
- c. Follow the procedures in 40 CFR 60.752 (b).(2) for an approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions.

D. **Asbestos NESHAP Emission Standards; Standard for Active Waste Disposal Sites [*Currently federally enforceable; 40 CFR Part 61, Subpart M*] (Code §§7-1-030, 7-1-060)**

1. **Signage Requirement**

When actively operating, the Permittee shall post and maintain a prominent sign at or prior to the facility gatekeeper, indicating that "LOADS WITH ASBESTOS-CONTAINING MATERIALS MUST BE DECLARED TO THE GATEKEEPER."

2. Records; Regulated Asbestos-containing Waste Area Definition

Permittee shall maintain, until facility closure, records of the location, depth, area and quantity (in volume) of asbestos-containing waste material, as well as a map or diagram showing the disposal area.

3. Records; Regulated asbestos-containing Waste Deposition Activity

Receipt, handling and disposal of asbestos containing waste received from sources covered by 40 CFR §61.159 (asbestos mills), 40 CFR §61.150 (demolition, renovation, fabricating and manufacturing), or 40 CFR §61.155 (asbestos conversion operations) must meet the following standards:

a. Waste Shipment Records Required

Asbestos containing waste may only be accepted when the transporter presents a complete waste shipment record, identifying:

- i. the name, address and telephone number of the waste generator;
- ii. the name, address and telephone number of the transporter; and
- iii. the quantity of asbestos-containing waste material, expressed in cubic yards or cubic meters.

b. Waste Shipment Receiving Requirements

At the time of accepting asbestos containing waste for disposal, the Permittee shall:

- i. Record the date of receipt of the material.
- ii. Record the presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers.
- iii. Inspect the materials, determine whether or not the quantity of asbestos containing waste material differs from the quantity indicated on the waste shipment record, and record any discrepancies. *Report discrepancies as outlined in §7. below.*
- iv. Inspect the materials to determine the presence, and quantity, of improperly enclosed or uncovered asbestos-containing waste, or any asbestos-containing waste material not sealed in leak-tight containers. *Report discrepancies as outlined in §7. below.*

c. Generator Return Notification Requirement

As soon as possible, and within 30 days after receipt of the asbestos containing waste, the Permittee shall send a copy of the signed waste shipment record to the waste generator.

d. Daily Cover/Suppressant Application Requirement

At the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, all asbestos containing waste materials that have

been deposited at the site during the operating day or previous 24-hour period shall:

- i. be covered with at least 6 inches of compacted non-asbestos containing material, or
- ii. be covered with a resinous or petroleum based dust suppressant agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Used, spent, or other waste oil may not be used as a dust suppression agent.

4. Asbestos Cell Re-opening Notification Requirement

At least 45 days before excavating or otherwise disturbing any asbestos-containing waste material that has been deposited and covered at the site, Permittee shall notify the Control Officer in writing. The notice shall include:

- a. The scheduled starting and completion dates
- b. The reason for disturbing the waste
- c. The procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material.
- d. The location of any temporary storage site and the final disposal site.

If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Control Officer at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification.

E. Stratospheric Ozone and Climate Protection Emission Limitations

[Currently federally enforceable; 40 CFR Part 82 Subpart F] (Code §§1-3-140.15, 1-3-140.58.k)

1. General Prohibition; Public Notice Required

[Currently federally enforceable; 40 CFR §82.156.f.3]

- a. Permittee shall generally prohibit the disposal of appliances, refrigerators, air conditioners, freezers, chillers, coolers, or other equipment that either contain or once contained refrigerants regulated under Subpart F.
- b. At or near the gatekeeper's facility, when the facility is active, the Permittee shall provide a clearly visible warning sign, requiring customers to alert the gatekeeper to the presence of such equipment in a load of waste materials.
- c. Permittee may allow customers to leave such items at the permitted facility, provided the items are placed in a segregated area, and at least once every twelve months, Permittee has all of those items removed from the site by a qualified party. Within the meaning of this paragraph, a "qualified party" is one who has submitted a certification to the Administrator of the EPA under 40 CFR §§82.154.e and 82.162, affirming that such person is complying with the various requirements pertaining to refrigerant recovery and recycling.

d. Permittee shall obtain from the "qualified party" described in the preceding paragraph a written verification of submittal to the Administrator of the necessary certification.

2. Signed Written Statement Required for Disposal of Small Appliances, Motor Vehicle Air Conditioners, or Motor-vehicle-air-conditioner-like Appliances.
[Currently federally enforceable; 40 CFR §82.156.f.2]

If Permittee elects to allow disposal of small appliances, motor vehicle air conditioners ("MVAC"), or MVAC-like appliances, Permittee shall first obtain a signed written statement verifying that all refrigerant that had not leaked previously has been recovered evacuated from the appliance(s) previously, in accord with either 40 CFR §§82.156.g or 82.156.h. The written statement must include the name and address of the person who recovered the refrigerant and the date the refrigerant was recovered or a contract that the refrigerant was to be removed prior to delivery for disposal.

3. Copy of Written Certification Required for Disposal of Other Appliances Not Covered Above.
[Currently federally enforceable; 40 CFR §82.154.e]

If Permittee elects to allow disposal of appliances or devices that contain(ed) and use(d) class I or class II substances as refrigerants and is (or was) used for household or commercial purposes (other than small appliances, MVACs and MVAC-like appliances allowed under the preceding subsection), including air conditioners, refrigerators, chillers or freezers, unless a that person first provides the Permittee with a signed written statement, affirming that a certification has previously been submitted to the Administrator, attesting to compliance with the refrigerant recycling/recovery requirements of 40 CFR §82 Subpart F.

4. Due Diligence Required

Permittee shall exercise reasonable efforts to observe and screen load contents to assure compliance with the stratospheric ozone related emission limitations and prohibitions set forth above.

F. Particulate Emissions Limitations

1. SIP Limitation
[Federally enforceable - PGCAQCD Reg. 7-3-1.1 (amended 6/16/80) approved as a SIP Element at 47 FR 15580 (4/12/82)]

The opacity of any plume or effluent shall not be greater than 40 percent as determined by Reference Method 9 in the Arizona Testing Manual.

2. Visible Limiting Standard
[Federally enforceable pursuant to Code §2-8-300 (5/18/05) approved as a SIP element at 71 FR 15043 (3/27/06)]

The opacity of any plume or effluent from any point source not subject to a New Source Performance Standard adopted under Chapter 6 of the Code, and not subject to an opacity standard in Chapter 5 of the Code, shall not be greater than 20% as determined in Method 9 in 40 CFR 60, Appendix A. There are currently no affected facilities at this source.

G. Particulate Matter Reasonable Precautions

[Federally enforceable pursuant to Code §4-2-040 (6/29/93) approved as a SIP element at 72 FR 41896 (8/1/07) and PGAQD Reg. 7-3-1.2 (7/1/75) approved as a SIP element at 43 FR 53034(11/15/78)]

1. Permittee shall not cause, suffer, allow, or permit a building or its appurtenances, subdivision site, driveway, parking area, vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, or fill dirt to be deposited, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
2. Permittee shall not cause, suffer, allow, or permit a vacant lot, or an urban or suburban open area, to be driven over or used by motor vehicles, such as but not limited to all-terrain vehicles, trucks, cars, cycles, bikes, or buggies, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
3. Permittee shall not disturb or remove soil or natural cover from any area without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
4. Permittee shall not crush, screen, handle or convey materials or cause, suffer, allow or permit material to be stacked, piled or otherwise stored without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
5. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such a manner, or with the use of spray bars and wetting agents, as to prevent excessive amounts of particulate matter from becoming airborne. Other reasonable precautions shall be taken, as necessary, to effectively prevent fugitive dust from becoming airborne.
6. Permittee shall not cause, suffer, allow or permit transportation of materials likely to give rise to fugitive dust without taking reasonable precautions to prevent fugitive dust from becoming airborne. Earth and other material that is tracked out or transported by trucking and earth moving equipment on paved streets shall be removed by the, party, or person responsible for such deposits.

H. Surface Stabilization

[Federally enforceable pursuant to Code §4-1-030 (10/28/15) approved as a SIP element at 82 FR 20267 (5/1/17)]

1. Permittee shall not cause or allow visible fugitive dust emissions from open areas / vacant lots (areas not currently utilized for an activity) to exceed 20% opacity based on EPA Method 9 or the continuous plume or intermittent plume methods listed in PCAQCD Code §4-9-340.
2. Permittee shall erect barriers or no trespassing signs upon evidence of trespass on open areas / vacant lots.
3. Permittee shall stabilize any open area / vacant lot greater than 1.0 acre that has 0.5 acre or more of disturbed surface and sign up for the Pinal County Dust Control forecast within 30 days of discovery. The open area / vacant lot shall be stabilized the day leading up to and the day that is forecast to be high risk for dust emissions.
4. Permittee shall not remove vegetation from open areas / vacant lots without applying dust suppressants before and during the weed abatement. Trackout onto paved surfaces must be prevented or eliminated and dust suppressants must be applied following weed abatement to stabilize the entire surface.

5. Stabilization of open areas / vacant lots is determined by the drop ball, threshold friction velocity, visible crust, flat vegetation or standing vegetation methods listed in PCAQCD Code 4-9-320.
6. Permittee shall not cause or allow visible fugitive dust emissions from unpaved lots (areas being utilized for an activity) greater than 5000 square feet to exceed 20% opacity based on EPA Method 9 or the continuous plume or intermittent plume methods listed in PCAQCD Code §4-9-340.
7. Permittee shall not allow silt loading equal to or greater than 0.33 oz/ft² (or if silt loading is equal to or greater than 0.33 oz/ft², shall not allow the silt content to exceed 8%) on unpaved lots greater than 5000 square feet.
8. Permittee shall stabilize unpaved lots greater than 5000 square feet by paving, applying a dust suppressant or graveling.
9. Permittee shall clean up trackout on a paved public roadway that exceeds 50 feet within 24 hours of discovery and limit opacity to 20% or less while using a rotary brush, ~~or~~ broom or other methods to remove trackout such as annually sweeping and picking up.
10. Permittee shall make a record of the control measures applied.

I. NSPS (Subpart IIII) Standards – Stationary Compression Ignition Internal Combustion Engines
[Federally enforceable; 40 CFR 60.4201, 60.4204(b), 60.4206, 60.4211(a)(c)]

Owners and operators of 2007 model year and later stationary compression ignition engines must purchase an engine that meets the emission standards listed in 40 CFR 60.4201 for the same model year and maximum engine power and operate and maintain the engine according to the manufacturer's instructions for the entire life of the engine.

J. NESHAP (Subpart ZZZZ) Standards - Stationary Reciprocating Internal Combustion Engines (RICE) NESHAP
[Federally enforceable; 40 CFR 63.6603.a, 63.6605, 63.6625.e, 63.6625.h, 63.6625i, 63.6640, 40 CFR Part 63 Subpart ZZZZ Table 2d]

Owners and operators of non-emergency stationary RICE that commenced construction before June 12, 2006 shall comply with the following:

1. Change the oil and filter every 1000 hours (diesel engines) or 1440 hours (gasoline engines) of operation or annually, whichever comes first.
 or
 Conduct an oil analysis every 1000 hours (diesel engines) or 1440 hours (gasoline engines) of operation or annually, whichever comes first. If the analysis demonstrates that any of the following parameters have been exceeded the oil must be changed within 2 business days of receiving the results or 2 business days before commencing operation of the engine, whichever is later. The oil must be changed if:
 The Total Base Number is less than 30% of the Total Base Number of oil when new or;
 the viscosity of the oil has changed by more than 20% from the viscosity of the oil when new or; the percent water content (by volume) is greater than 0.5%.
2. Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary .
3. Inspect the hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and

4. Maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter
6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
7. Operate the engine in a manner consistent with safety and good air pollution control practices for minimizing emissions

K. Fuel Use Limitations
(Code §§3-1-081)

1. Local Fuel Limitations
(Code §5-23-1010.F)

The Permittee is allowed to burn gasoline, natural gas, propane, or diesel fuel which contains less than 0.9 percent sulfur by weight.

2. Federal Fuel limitations
[Federally enforceable; 40 CFR 60.4207.b]

For 2007 and later engines Permittee shall use a diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel:

- a. 15 ppm maximum sulfur for diesel fuel;
- b. Cetane index or aromatic content, as follows:
 - i. A minimum cetane index of 40, or;
 - ii. A maximum aromatic content of 35 volume percent.

3. Other Fuels

The Permittee shall not use used oil, used oil fuel, hazardous waste, and hazardous waste fuel as defined in Codes §§3-1-081.G, 5-23-1010.F without first obtaining a separate permit or an appropriate permit revision.

L. General Maintenance Obligation.
[Federally enforceable pursuant to Code §6-1-030.1 and 40 CFR §60.11(d)]

At all times, including periods of start-up, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the permitted facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

M. Additional Applicable Limitations

1. Open Burning Prohibition
[Federally enforceable - PGCAQCD Reg. 7-3-1.3 (3/31/75) approved as a SIP Element at 43 FR 50531 (11/15/78)]

Unless authorized by a separate permit, open burning shall be prohibited.

2. Asbestos NESHAP Compliance
[Currently federally enforceable; 40 CFR Part 61, Subpart M] (Code §§7-1-030, 7-1-060)

Permittee shall comply with Code §§7-1-030.A. and 7-1-060 and 40 CFR Part 61, Subpart M, when conducting any renovation or demolition activities at the facility.

3. Stratospheric Ozone and Climate Protection
[Currently federally enforceable; 40 CFR Part 82 Subpart F]

When servicing any on-site heating or cooling equipment that uses a closed-cycle refrigeration system, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

4. Daily Cover Requirement.
[Apparently federally enforceable under PCAQCD Permit A20500 §B.I.E.3 (4/22/94), and authority derived from EPA SIP-approval of predecessor PGAQCD NSR-program; see 43 FR 50531 (11/15/78)]

Permittee shall cover disposed solid waste with at least six inches of earthen material or approved alternate cover as designated below, at the end of each operating day, or at more frequent intervals if necessary. Approved alternate cover materials include:

- a. Auto shredder fluff;
- b. Wood chips;
- c. Tire chips;
- d. foam.

6. Compliance Demonstration

[Mandated by 40 CFR §70.6(c)] (Code §§3-1-060.b.2.d, 3-1-081.A.2, 3-1-083)

A. Testing

1. Test Methods and Procedures **[Federally enforceable pursuant to 40 CFR Part 60, Subpart Cf, Section §60.35f]**

- a. **NMOC Emission Rate.** The landfill owner or operator must calculate the NMOC emission rate using either Equation 1 or Equation 2 provided in the following sections. Both Equation 1 and Equation 2 may be used if the actual year-to-year solid waste acceptance rate is known, for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, for part of the life of the landfill. The values to be used in both Equation 1 and Equation 2 are 0.05 per year for k , 170 cubic meters per megagram for L_0 , and 4,000 parts per million by volume as hexane for the C_{NMOC} . For landfills located in geographical areas with a 30-year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the k value to be used is 0.02 per year.

Equation 1 must be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^n 2 k L_0 M_i (e^{-kt_i}) (C_{NMOC}) (3.6 \times 10^{-9}) \quad (\text{Eq. 1})$$

Where:

M_{NMOC} = Total NMOC emission rate from the landfill, megagrams per year.

k = Methane generation rate constant, year⁻¹.

L_o = Methane generation potential, cubic meters per megagram solid waste.

M_i = Mass of solid waste in the i^{th} section, megagrams.

t_i = Age of the i^{th} section, years.

C_{NMOC} = Concentration of NMOC, parts per million by volume as hexane.

3.6×10^{-9} = Conversion factor.

- b. The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i and R if documentation of the nature and amount of such wastes is maintained.

Equation 2 must be used if the actual year-to-year solid waste acceptance rate is unknown.

$$M_{\text{NMOC}} = 2L_oR (e^{-kC} - e^{-kT}) C_{\text{NMOC}} (3.6 \times 10^{-9}) \quad (\text{Eq. 2})$$

Where:

M_{NMOC} = Mass emission rate of NMOC, megagrams per year.

L_o = Methane generation potential, cubic meters per megagram solid waste.

R = Average annual acceptance rate, megagrams per year.

k = Methane generation rate constant, year⁻¹.

t = Age of landfill, years.

C_{NMOC} = Concentration of NMOC, parts per million by volume as hexane.

c = Time since closure, years; for an active landfill $c = 0$ and $e^{-kc} = 1$.

3.6×10^{-9} = Conversion factor.

- c. *Tier 1.* The owner or operator must compare the calculated NMOC mass emission rate to the standard of 34 megagrams per year.
- i. If the NMOC emission rate calculated in paragraph 6.A.1.a of this section is less than 34 megagrams per year, then the owner or operator must submit an NMOC emission rate report according to §60.38f(c), and must recalculate the NMOC mass emission rate annually as required under §60.33f(e).
 - ii. If the NMOC emission rate calculated in paragraph 6.A.1.a of this section is equal to or greater than 34 megagrams per year, then the landfill owner or operator must either:

1. Submit a gas collection and control system design plan within 1 year as specified in §60.38f(d) and install and operate a gas collection and control system within 30 months according to §60.33f.b and e;
 2. Determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the Tier 2 procedures provided in 6.A.1.d of this section; or
 3. Determine a site-specific methane generation rate constant and recalculate the NMOC emission rate using the Tier 3 procedures provided in 6.A.1.e of this section.
- d. *Tier 2.* The landfill owner or operator must determine the site-specific NMOC concentration using the following sampling procedure. The landfill owner or operator must install at least two sample probes per hectare, evenly distributed over the landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The probes should be evenly distributed across the sample area. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator must collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25 or 25C of appendix A of this part. Taking composite samples from different probes into a single cylinder is allowed; however, equal sample volumes must be taken from each probe. For each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal. Composite sample volumes should not be less than one liter unless evidence can be provided to substantiate the accuracy of smaller volumes. Terminate compositing before the cylinder approaches ambient pressure where measurement accuracy diminishes. If more than the required number of samples is taken, all samples must be used in the analysis. The landfill owner or operator must divide the NMOC concentration from Method 25 or 25C by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane. If the landfill has an active or passive gas removal system in place, Method 25 or 25C samples may be collected from these systems instead of surface probes provided the removal system can be shown to provide sampling as representative as the two sampling probe per hectare requirement. For active collection systems, samples may be collected from the common header pipe. The sample location on the common header pipe must be before any gas moving, condensate removal, or treatment system equipment. For active collection systems, a minimum of three samples must be collected from the header pipe.
- i. Within 60 days after the date of determining the NMOC concentration and corresponding NMOC emission rate, the owner or operator must submit the results according to §60.38f(j)(2).
 - ii. The landfill owner or operator must recalculate the NMOC mass emission rate using Equation 1 or Equation 2 provided in this section using the average site-specific NMOC concentration from the collected samples instead of the default value provided in paragraph 6.A.1.a. of this section.
 - iii. If the resulting NMOC mass emission rate is less than 34 megagrams per year, then the owner or operator must submit a periodic estimate of

NMOC emissions in an NMOC emission rate report according to §60.38f(c), and must recalculate the NMOC mass emission rate annually as required under §60.33f(e). The site-specific NMOC concentration must be retested every 5 years using the methods specified in this section.

- iv. If the NMOC mass emission rate as calculated using the Tier 2 site-specific NMOC concentration is equal to or greater than 34 megagrams per year, the owner or operator must either:
 - 1. Submit a gas collection and control system design plan within 1 year as specified in §60.38f(d) and install and operate a gas collection and control system within 30 months according to §60.33f b and e;
 - 2. Determine a site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the Tier 3 procedures specified in paragraph 6.A.1.d.e of this section; or
 - 3. Conduct a surface emission monitoring demonstration using the Tier 4 procedures specified in paragraph 6.A.1.g of this section.
- e. *Tier 3.* The site-specific methane generation rate constant must be determined using the procedures provided in Method 2E of appendix A of this part. The landfill owner or operator must estimate the NMOC mass emission rate using Equation 1 or Equation 2 in this section and using a site-specific methane generation rate constant, and the site-specific NMOC concentration as determined in paragraph 6.A.1.d of this section instead of the default values provided in paragraph 6.A.1.a of this section. The landfill owner or operator must compare the resulting NMOC mass emission rate to the standard of 34 megagrams per year.
 - i. If the NMOC mass emission rate as calculated using the Tier 2 site-specific NMOC concentration and Tier 3 site-specific methane generation rate is equal to or greater than 34 megagrams per year, the owner or operator must either:
 - 1. Submit a gas collection and control system design plan within 1 year as specified in §60.38f(d) and install and operate a gas collection and control system within 30 months according to §60.33f(b) and (c); or
 - 2. Conduct a surface emission monitoring demonstration using the Tier 4 procedures specified in 6.A.1.g of this section.
 - ii. If the NMOC mass emission rate is less than 34 megagrams per year, then the owner or operator must recalculate the NMOC mass emission rate annually using Equation 1 or Equation 2 of this section and using the site-specific Tier 2 NMOC concentration and Tier 3 methane generation rate constant and submit a periodic NMOC emission rate report as provided in §60.38f(c). The calculation of the methane generation rate constant is performed only once, and the value obtained

from this test must be used in all subsequent annual NMOC emission rate calculations.

- f. *Other methods.* The owner or operator may use other methods to determine the NMOC concentration or a site-specific methane generation rate constant as an alternative to the methods required in 6.A.1.d and 6.A.1.e of this section if the method has been approved by the Administrator.
- g. *Tier 4.* The landfill owner or operator must demonstrate that surface methane emissions are below 500 parts per million. Surface emission monitoring must be conducted on a quarterly basis using the following procedures. Tier 4 is allowed only if the landfill owner or operator can demonstrate that NMOC emissions are greater than or equal to 34 Mg/yr but less than 50 Mg/yr using Tier 1 or Tier 2. If both Tier 1 and Tier 2 indicate NMOC emissions are 50 Mg/yr or greater, then Tier 4 cannot be used. In addition, the landfill must meet the criteria in paragraph 60.35f.(a)(6).(viii) of Subpart Cf.

B. Monitoring and Testing
[Mandated by 40 CFR §70.6(a)(3)] (Code §3-1-083)

1. Fuel Use Monitoring
 (Code §5-23-1010.F)

Permittee shall demonstrate compliance with the fuel-sulfur limitation by maintaining fuel documentation which demonstrates diesel fuel delivered was "low sulfur" diesel fuel.

2. Leachate Recycling Monitoring and Testing
 (Code §§1-3-140.10, 3-1-103, 5-24-1030.D)

To allow verification of the projected data upon which this permit is based, Permittee shall determine and record the volume of leachate withdrawn from the collection system.

C. NESHAP Compliance Requirements **[Federally enforceable pursuant to 40 CFR Part 63, Subpart AAAA, Section §63.1960]**

Compliance is determined in the same way it is determined for 40 CFR Part 60, subpart Cf, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR §60.37f of subpart Cf, are used to demonstrate compliance with the operating conditions for control systems. this subpart and have deviated from the requirements of this subpart. Once an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with the operational standard in §63.1958.(e).(1), the provisions of this subpart apply at all times, including periods of SSM. During periods of SSM, permittee shall comply with the work practice requirements specified in §63.1958.(e).

D. Recordkeeping **[Mandated by 40 CFR §70.6(a)(3)] (Code §3-1-083.A.2)**

1. General NSPS-related Recordkeeping Requirements **[Federally enforceable pursuant to 40 CFR Part 60, Subpart Cf Section §60.39f]**

- i. Except as provided in §60.38f(d)(2), each owner or operator of an MSW landfill subject to the provisions of §60.33f(e) must keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report that triggered §60.33f(e), the current amount of solid waste in-place, and the year-by-year

waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

- ii. Except as provided in §60.38f(d)(2), each owner or operator of a controlled landfill must keep up-to-date, readily accessible records for the life of the control system equipment of the data, as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring must be maintained for a minimum of 5 years. Records of the control device vendor specifications must be maintained until removal.

E. Recordkeeping

[Mandated by 40 CFR §70.6(a)(3)] (Code §3-1-083.A.2)

1. General NSPS-related Recordkeeping Requirements

a. Monitoring-related Records

[Federally enforceable pursuant to Code §6-1-030.1 and 40 CFR Part 60, Subpart A, namely 40 CFR §60.7(f)]

Permittee shall maintain, either at the source or a file of all measurements, including monitoring-system-, monitoring-device-, and performance-testing measurements; all monitoring system performance evaluations; all monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required pursuant to any federally enforceable provision of this permit, recorded in a permanent form suitable for inspection.

b. Excess Emission Records

[Federally enforceable pursuant to Code §6-1-030.1 and 40 CFR §60.7(b)]

Permittee shall maintain records of the occurrence and duration of any start-up, shutdown, malfunction or period of excess emissions in the operation of the permitted facility or any air pollution control equipment.

2. Dust Suppression Activity Records

[Federally enforceable - PGCAQCD Reg. 7-3-1.2 (3/31/75) approved as a SIP Element at 43 FR 50531 (11/15/78); Code §4-2-040., as limited by §1-1-105 (10/12/95), approved as SIP Elements at 61 FR 15717 (4/9/96)]

To provide a reasonable demonstration of effort with regard to applying water for purposes of dust suppression, Permittee shall maintain a daily log for each day the facility is active, and shall enter either:

- a. the quantity of water applied; or
- c. the reason why water was not applied (*e.g.* "it rained all day.", "traffic was below the threshold that triggers a watering requirement," or "the haul roads were visibly damp.")

3. General NESHAP-related Recordkeeping Requirements ***[40 CFR Part 63, Subpart AAAA, §63.19830]***

- a. Permittee shall keep records and reports as specified in the general provisions of 40 CFR Part 63 as shown in Table 1 to this subpart.

4. Stratospheric Ozone and Climate Protection

[Currently federally enforceable; 40 CFR Part 82 Subpart F]

If Permittee elects to allow disposal of devices that once used refrigerants for cyclical heating or cooling, Permittee shall retain records adequate to show continuing compliance, including as necessary:

- a. Copies of the signed written statements, affirming regarding refrigerant removal from small appliances, motor vehicle air conditioners, or motor-vehicle-air-conditioner-like appliances, shall be kept on-site; and
 - b. Copies of the signed written statements from those disposing of appliances not covered under the preceding sub-paragraph, verifying customer-compliance with the certification requirements under 40 CFR §82.154.e; or
 - c. Copies of verifications from "qualified parties" into whose hands Permittee is disposing of such items, as outlined above.
4. Daily Cover Requirement.
(Code §-1-083)
- a. Permittee shall maintain records showing, on a calendar-month-basis, the quantity of auto shredder fluff either used as daily cover at the facility.

5. Non-Emergency Generator Records
[Federally enforceable; 40 CFR 63.6655]

Permittee shall:

- a. Record the number of hours the engines operated.
- b. Keep records of maintenance conducted consistent with the manufacturer's instructions and requirements of this permit.
- c. Keep records of malfunctions, actions taken to minimize emissions and corrective actions.

7. Reporting Obligations

A. NSPS Reporting Guidelines ***Federally enforceable pursuant to 40 CFR Part 60, Subpart Cf Section §60.38f]***

1. *Design capacity report.* For existing MSW landfills subject to this subpart, the initial design capacity report must be submitted no later than 90 days after the effective date of EPA approval of the state's plan under section 111(d) of the Clean Air Act. The initial design capacity report must contain the following information:
 - i. A map or plot of the landfill, providing the size and location of the landfill, and identifying all areas where solid waste may be landfilled according to the permit issued by the state, local, or tribal agency responsible for regulating the landfill.
 - ii. The maximum design capacity of the landfill. Where the maximum design capacity is specified in the permit issued by the state, local, or tribal agency responsible for regulating the landfill, a copy of the

permit specifying the maximum design capacity may be submitted as part of the report. If the maximum design capacity of the landfill is not specified in the permit, the maximum design capacity must be calculated using good engineering practices. The calculations must be provided, along with the relevant parameters as part of the report. The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. If the owner or operator chooses to convert the design capacity from volume to mass or from mass to volume to demonstrate its design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, the calculation must include a site-specific density, which must be recalculated annually. Any density conversions must be documented and submitted with the design capacity report. The state, local, or tribal agency or the Administrator may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.

2. *Amended design capacity report.* An amended design capacity report must be submitted providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to meet or exceed 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in §60.39f(f).
3. *NMOC emission rate report.* For existing MSW landfills covered by this subpart with a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the NMOC emission rate report must be submitted to the EPA via the CEDRI, no later than 90 days after the effective date of EPA approval of the state's plan under section 111(d) of the Clean Air Act. The NMOC emission rate report must be submitted to the Administrator annually via CEDRI, except as provided for in paragraph 7.A.3.iii of this section. The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.
 - i. The NMOC emission rate report must contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in §60.35f(a) or (b), as applicable.
 - ii. The NMOC emission rate report must include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.
 - iii. If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 34 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit the report to the EPA via CEDRI, an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate must include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based must be provided to the Administrator. This estimate must be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate must be submitted to the Administrator. The revised estimate must cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

- iv. Each owner or operator subject to the requirements of this subpart is exempted from the requirements to submit an NMOC emission rate report, after installing a collection and control system that complies with Sections §5.B.1.b and 5.B.1.e of this permit, during such time as the collection and control system is in operation and in compliance with §§60.34f and 60.36f.
4. *Collection and control system design plan.* The state plan must include a process for state review and approval of the site-specific design plan for each gas collection and control system. The collection and control system design plan must be prepared and approved by a professional engineer and must meet the following requirements:
- i. The collection and control system as described in the design plan must meet the design requirements in Sections §5.B.1.b and 5.B.1.e of this permit.
 - ii. The collection and control system design plan must include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping, or reporting provisions of §§60.34f through 60.39f proposed by the owner or operator.
 - iii. The collection and control system design plan must either conform to specifications for active collection systems in §60.40f or include a demonstration to the Administrator's satisfaction of the sufficiency of the alternative provisions to §60.40f.
 - iv. Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters must submit a copy of the collection and control system design plan cover page that contains the engineer's seal to the Administrator within 1 year of the first NMOC emission rate report in which the NMOC emission rate equals or exceeds 34 megagrams per year,
 - 1. If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in §60.35f(a)(3) and the resulting rate is less than 34 megagrams per year, annual periodic reporting must be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated NMOC emission rate is equal to or greater than 34 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated NMOC emission rate based on NMOC sampling and analysis, must be submitted to the EPA via CEDRI, within 180 days of the first calculated exceedance of 34 megagrams per year.
 - 2. If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant k, as provided in Tier 3 in §60.35f(a)(4), and the resulting NMOC emission rate is less than 34 megagrams per year, annual periodic reporting must be resumed. The resulting site-specific methane generation rate constant k must be used in the NMOC emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of §60.35f(a)(4) and the resulting site-specific methane generation rate constant k must be submitted, following the procedure specified in paragraph (j)(2) of this section, to the Administrator within 1 year of the first calculated NMOC emission rate equaling or exceeding 34 megagrams per year.

3. If the owner or operator elects to demonstrate that site-specific surface methane emissions are below 500 parts per million methane, based on the provisions of §60.35f(a)(6), then the owner or operator must submit annually a Tier 4 surface emissions report until a surface emissions readings of 500 parts per million methane or greater is found. If the Tier 4 surface emissions report shows no surface emissions readings of 500 parts per million methane or greater for four consecutive quarters at a closed landfill, then the landfill owner or operator may reduce Tier 4 monitoring from a quarterly to an annual frequency. The Administrator may request such additional information as may be necessary to verify the reported instantaneous surface emission readings. The Tier 4 surface emissions report must clearly identify the location, date and time (to the nearest second), average wind speeds including wind gusts, and reading (in parts per million) of any value 500 parts per million methane or greater, other than non-repeatable, momentary readings. For location, you must determine the latitude and longitude coordinates using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places. The Tier 4 surface emission report should also include the results of the most recent Tier 1 and Tier 2 results in order to verify that the landfill does not exceed 50 Mg/yr of NMOC.
 - a. The initial Tier 4 surface emissions report must be submitted annually, starting within 30 days of completing the fourth quarter of Tier 4 surface emissions monitoring that demonstrates that site-specific surface methane emissions are below 500 parts per million methane.
 - b. The Tier 4 surface emissions rate report must be submitted within 1 year of the first measured surface exceedance of 500 parts per million methane.
4. If the landfill is in the closed landfill subcategory, the owner or operator must submit a collection and control system design plan to the Administrator within 1 year of the first NMOC emission rate report in which the NMOC emission rate equals or exceeds 50 megagrams per year, except as follows:
 - a. If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in §60.35f(a)(3) and the resulting rate is less than 50 megagrams per year, annual periodic reporting must be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated NMOC emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated NMOC emission rate based on NMOC sampling and analysis, must be submitted within 180 days of the first calculated exceedance of 50 megagrams per year.
 - b. If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant k , as provided in Tier 3 in §60.35f(a)(4), and the resulting NMOC emission rate is less than 50 megagrams per year, annual periodic reporting must be resumed. The resulting site-specific methane generation rate constant k must be used in the NMOC emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of §60.35f(a)(4) and the resulting site-specific methane generation rate

constant k must be submitted to the Administrator within 1 year of the first calculated NMOC emission rate equaling or exceeding 50 megagrams per year.

- c. The landfill owner or operator elects to demonstrate surface emissions are low, consistent with the provisions in paragraph (d)(4)(iii) of this section.
 - d. The landfill has already submitted a gas collection and control system design plan consistent with the provisions of subpart WWW of this part; 40 CFR part 62, subpart GGG; or a state plan implementing subpart Cc of this part.
5. The landfill owner or operator must notify the Administrator that the design plan is completed and submit a copy of the plan's signature page. The Administrator has 90 days to decide whether the design plan should be submitted for review. If the Administrator chooses to review the plan, the approval process continues as described in Reporting Guidelines in Subpart Cf. However, if the Administrator indicates that submission is not required or does not respond within 90 days, the landfill owner or operator can continue to implement the plan with the recognition that the owner or operator is proceeding at their own risk. In the event that the design plan is required to be modified to obtain approval, the owner or operator must take any steps necessary to conform any prior actions to the approved design plan and any failure to do so could result in an enforcement action.
 6. Upon receipt of an initial or revised design plan, the Administrator must review the information submitted and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems. If the Administrator does not approve or disapprove the design plan, or does not request that additional information be submitted within 90 days of receipt, then the owner or operator may continue with implementation of the design plan, recognizing they would be proceeding at their own risk.
 7. If the owner or operator chooses to demonstrate compliance with the emission control requirements of this subpart using a treatment system as defined in this subpart, then the owner or operator must prepare a site-specific treatment system monitoring plan as specified in §60.39f(b)(5).

B. Regular Compliance Reporting
[Mandated by 40 CFR §§70.6(a)(3)] (Code §3-1-083.A.3.a)

Permittee shall submit a semi-annual report to the Control, and also to the Administrator of the US EPA, containing a summary of the information required to be recorded pursuant to this permit. The summary shall clearly show that Permittee has complied with the operational and emissions limitations under this permit. All instances of deviations from permit requirements shall be clearly identified in such reports. For brevity, such deviation reports may incorporate by reference any - written supplemental upset reports filed by Permittee during the reporting period. The report shall be submitted to the District within 30 days after the end of each calendar half. Appendix A of this permit is a form which may be used for the report.

C. Regular Compliance/Compliance Progress Certification
[Mandated by 40 CFR §70.6(c)(5)] (Code §3-1-083.A.4)

Permittee shall annually submit a certification of compliance with the provisions of this permit. The certification shall be separately submitted to both the District and to the Enforcement Office (AIR 5), EPA Region IX, 75 Hawthorne Street, San Francisco, CA 94105-3901. The certification shall:

1. Be signed by a responsible official, as defined in Code §3-1-030.18;
2. Identify each term or condition of the permit that is the basis of the certification;
3. State the compliance status with respect to each such term or condition;
4. State whether compliance with respect to each such term or condition has been continuous or intermittent;
5. Identify the method(s) used for determining the compliance status of the source, currently and over the reporting period; and
6. Be postmarked within thirty (30) days of the start of each calendar year.

D. Annual Emissions Inventory
 [Code §§3-1-103, 3-7-590.C.1.]

Permittee shall complete and submit to the District an annual emissions inventory, disclosing actual emissions for the preceding calendar year. The submittal shall be made on a form provided by the District. The inventory is due by the latter of March 31, or ninety (90) days after the form is furnished by the District.

E. Reporting Operational Changes

1. Asbestos NESHAP Emission Standards; Standard for Active Waste Disposal Sites; Closure Notification
[Currently federally enforceable; 40 CFR Part 61, Subpart M] (Code §§7-1-030, 7-1-060)
 - a. Closure Notification Requirement
 Upon facility closure, Permittee shall:
 - i. Submit to the Control Officer a copy of the asbestos waste disposal locations and quantities.
 - ii. Comply with all of the requirements of 40 CFR §61.151, including those pertaining to post-closure obligations.

F. NSPS Reporting
[Federally enforceable pursuant to Code §6-1-030.1 and 40 CFR §60.7(a)(4)]

1. Generally.

Permittee shall provide to the District and to the Regional EPA Office (Regional Administrator c/o Air Division Permits Office, EPA Region IX, 75 Hawthorne Street, San Francisco, CA 94105-3901) notification of any physical or operational change which

may increase the emission rate of any air pollutant to which a standard applies, unless the change is specifically exempted under 40 CFR § 60.14(e) or 40 CFR Part 60, Subpart ~~CF~~. ~~WWW~~. The notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change.

2. Landfill NSPS Annual Emission Estimate Reports

See §5.B. above.

G. Deviation Reporting Requirement

[Mandated by 40 CFR §§70.6(a)(3)(iii)(B), 70.6(g)] (Code §3-1-083.A.3.b.)

Permittee shall report any deviation from the requirements of this permit along with the probable cause for such deviation, and any corrective actions or preventative measures taken to the District within ten days of the earlier of date the Permittee learned, or should have learned, of the deviation unless earlier notification is required by the provisions of this permit.

H. Asbestos NESHAP Reporting Requirements

[Currently federally enforceable; 40 CFR Part 61, Subpart M] (Code §§7-1-030, 7-1-060)

1. Receipt, handling and disposal of asbestos containing waste received from sources covered by 40 CFR §61.159 (asbestos mills), 40 CFR §61.150 (demolition, renovation, fabricating and manufacturing), or 40 CFR §61.155 (asbestos conversion operations) must meet the following standards:
 - a. If Permittee discovers improperly enclosed or uncovered asbestos-containing waste materials, or any asbestos-containing waste material not sealed in leak-tight containers, Permittee shall by the following working day report in writing to the Control Officer, as well as to any additional local, State, or EPA Regional Office responsible for administering the asbestos NESHAP program for the waste generator, reporting the incident and submitting a copy of the waste shipment record.
 - b. If Permittee discovers a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, Permittee shall attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, Permittee shall immediately report in writing to the Control Officer, as well as to any additional local, State, or EPA Regional Office responsible for administering the asbestos NESHAP program for the waste generator, describing the discrepancy, the attempts to reconcile the discrepancy, and submit an accompanying copy of the waste shipment record.

8. **Fee Payment**

[Mandated by 40 CFR §§70.6(a)(7), 70.9] (Code §3-1-081.A.9)

As an essential term of this permit, an annual permit fee shall be assessed by the District and paid by Permittee in accord with the provisions of Code Chapter 3, Article 7 generally, and Code §3-1-081.A.9 specifically. The annual permit fee shall be due on or before the anniversary date of the issuance of an individual permit, or formal grant of approval to operate under a general permit. the District will notify the Permittee of the amount to be due, as well as the specific date on which the fee is due.

9. **General Conditions**

A. Term
[Mandated by 40 CFR §70.6(a)(2)] (Code §3-1-089)

This permit shall have a term of five (5) years, measured from the date of issuance.

B. Basic Obligation
[Mandated by 40 CFR §§70.4(b)(15), 70.6(a)(6(i), 70.6(a)(6)(ii), 70.7.b] (Code §3-1-081.)

1. The owner or operator ("Permittee") of the facilities shall operate them in compliance with all conditions of this permit, the Pinal County Air Quality Control District ("the District") Code of Regulations ("Code"), and consistent with all State and Federal laws, statutes, and codes relating to air quality that apply to these facilities. Any permit noncompliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application and may additionally constitute a violation of the Clean Air Act (1990).
2. All equipment, facilities, and systems used to achieve compliance with the terms and conditions of this permit shall at all times be maintained and operated in good working order.
3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

C. Duty to Supplement Application
[Mandated by 40 CFR §§70.5(b), 70.6(a)(6)(v)] (Code §3-1-081.A.8.e.)

Permittee shall furnish to the District within a reasonable time, which shall not exceed thirty days unless the Control Officer fixes some other time period for response, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking, reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required under this permit. For information claimed to be confidential, Permittee shall submit along with the requested information or records a showing as required under Code §3-1-120, and shall separately submit a full duplicate copy to the EPA Regional Office (Regional Administrator c/o Air Division Permits Office, EPA Region IX, 75 Hawthorne Street, San Francisco, CA 94105-3901).

D. Right to Enter
[Mandated by 40 CFR §70.6(c)(2)] (Code §§ 3-1-083.A.6, 3-1-132)

Authorized representatives of the District shall, upon presentation of proper credentials and while observing reasonable standard safety requirements as set forth by the owner or operator of the source, be allowed for purposes of ascertaining compliance with this permit and with other applicable requirements:

1. to enter upon the premises where the source is located, where emissions-related activity is conducted, or in which any records are required to be kept under the terms and conditions of this permit;
2. to inspect any equipment, operation, or method required in this permit; and
3. to sample or monitor emissions from the source, or other substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements;
4. to have access to and copy, at reasonable times, any records that are required to be kept under the conditions of this permit; and

5. to record any inspection by use of written, electronic, magnetic and photographic media.

E. Transfer of Ownership
[Mandated by 40 CFR §70.7(d)(4)] (Code §3-1-090)

This permit may be transferred under an administrative permit amendment from one person to another by notifying the District at least 30 days in advance of the transfer. The notice shall contain all the information and items required by Code § 3-1-090. The transfer may take place if not denied by the District within 10 days of the receipt of the transfer notification.

F. Posting of Permit
(Code §3-1-100)

Permittee shall firmly affix the permit, an approved facsimile of the permit, or other approved identification bearing the permit number, upon such building, structure, facility or installation for which the permit was issued. In the event that such building, structure, facility or installation is so constructed or operated that the permit cannot be so placed, the permit shall be mounted so as to be clearly visible in an accessible place within a reasonable distance of the equipment or maintained readily available at all times on the operating premises.

G. Permit Revocation for Cause
[Mandated by 40 CFR §70.6(a)(6)(iii)] (Code §3-1-140)

The Director of the District ("Director") may issue a notice of intent to revoke this permit for cause pursuant to Code §3-1-140, which cause shall include occurrence of any of the following:

1. The Director has reasonable cause to believe that the permit was obtained by fraud or material misrepresentation;
2. Permittee failed to disclose a material fact required by the permit application form or a regulation applicable to the permit;
3. The terms and conditions of the permit have been or are being violated.

H. Certification of Truth, Accuracy, and Completeness
[Mandated by 40 CFR §§70.5(a)(2), 70.6(a)(3)(iii)(B)] [Federally enforceable - Code §§3-1-083.A.5, 3-1-175 (as amended 10/12/95) approved as SIP Elements at 61 FR 15717 (4/9/96)]

Any application form, report, or compliance certification submitted pursuant to the Code shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under Chapter 3 of the Code shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

I. Renewal of Permit
[Mandated by 40 CFR §§70.5(a)(1)(iii), 70.7(c)] (Code §3-1-050.C.2)

Expiration of this permit will terminate the facility's right to operate unless either a timely application for renewal has been submitted in accordance with §§3-1-050, 3-1-055 and 3-1-060, or a substitute application for a general permit under §3-5-490. For Class I permit renewals, a timely application is one that is submitted at least 6 months, but not greater than 18 months prior to the date of the permit expiration. For Class II or Class III permit renewals, a timely application is one that is submitted at least 3 months, but not greater than 12 months prior to the date of permit expiration.

J. Severability
[Mandated by 40 CFR §70.6(a)(5)] (Code §3-1-081.A.7)

Pursuant to Code § 3-1-081.A.7., the provisions of this permit are severable, and if any provision of this permit is held invalid the remainder of this permit shall not be affected thereby.

K. Permit Shield
[Mandated by 40 CFR §70.6(f)] (Code § 3-1-102.)

Subject to the following schedule of exclusions¹, compliance with the terms of this permit shall be deemed compliance with any applicable requirement identified in this permit. The permit-shield exclusions include:

1. Pinal-Gila Counties Air Quality Control District ("PGCAQCD") Rule §7-1-2.6 RECORDKEEPING AND REPORTING (3/31/75);
2. PGCAQCD Rule §7-2-1.8 ANTI-DEGRADATION;
3. PGCAQCD Rule §7-3-1.3 OPEN BURNING;
4. Any part of 40 CFR Part 60, Subpart WWW not expressly listed as an Applicable Requirement in §2 of this permit².

L. Permit Revisions
[Mandated by 40 CFR §70.7(d), 70.7(e)] (Code Chapter 3, Article 2, specifically Code §3-1-081.A.8.c)

1. This permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
2. Permit amendments, permit revisions, and changes made without a permit revision shall conform to the requirements in Article 2, Chapter 3, of the Code.

M. Permit Re-opening
[Mandated by 40 CFR §§70.6(a)(6)(iii), 70.7(f), 70.7(g)] (Code §3-1-087.)

1. This permit shall be reopened if either:
 - a. Additional applicable requirements under the Clean Air Act (1990) become applicable to this source, and on that date, this permit has a remaining term of three or more years. Provided, that no such reopening under this subparagraph is required if the effective date of the newly applicable requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to Code §3-1-089.C.
 - b. The Control Officer determines that it contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of it;

¹ See the Technical Support Document for an explanation of the exclusions.

² Note that this permit includes both incorporation-by-reference of the substance of the Landfill NSPS, and also includes a number of paraphrased translations of the Landfill NSPS requirements. In so doing, this permit intends those paraphrased provisions to constitute limited guidance as to achieve *prima facie* compliance with the NSPS, but to still invoke the literal language of the standard itself as the legal standard with which the Permittee must comply in order to actually invoke a "shield."

- c. The Control Officer determines that it needs to be revised or revoked to assure compliance with the applicable requirements; or
 - d. The EPA Administrator finds that cause exists to terminate, modify, or revoke and reissue this permit.
 - 2. If this permit must be reopened for cause, the District will notify the permittee in accord with Code §3-1-087.A.3.
- N. Record Retention
[Mandated by 40 CFR §70.6(a)(3)(ii)(B)] (Code §3-1-083.A.2.b)

 Permittee shall retain for a period of five (5) years all documents required under this permit, including reports, monitoring data, support information, calibration and maintenance records, and all original recordings or physical records of required continuous monitoring instrumentation.
- O. Scope of License Conferred
[Mandated by 40 CFR §70.6(a)(6)(iv)] (Code §3-1-081.A.8.d)

 This permit does not convey any property rights of any sort, or any exclusive privilege.
- P. Excess Emission Reports; Emergency Provision
[Mandated by 40 CFR §70.6(g)] (Code §3-1-081.E, Code §8-1-030)
 - 1. To the extent Permittee may wish to offer a showing in mitigation of any potential penalty, underlying upset events resulting in excess emissions shall reported as follows:
 - a. The permittee shall report to the Control Officer any emissions in excess of the limits established by this permit. Such report shall be in two parts:
 - i. Notifications by telephone or facsimile within 24 hours or the next business day, whichever is later, of the time when the owner or operator first learned of the occurrence of excess emissions, including all available information required under subparagraph b. below.
 - ii. Detailed written notification within 3 working days of the initial occurrence containing the information required under subparagraph b. below.
 - b. The excess emissions report shall contain the following information:
 - i. The identity of each stack or other emission point where the excess emissions occurred.
 - ii. The magnitude of the excess emissions expressed in the units of the applicable limitation.
 - iii. The time and duration or expected duration of the excess emissions.
 - iv. The identity of the equipment from which the excess emissions occurred.
 - v. The nature and cause of such emissions.

- vi. If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.
 - vii. The steps that were or are being taken to limit the excess emissions. To the extent this permit defines procedures governing operations during periods of start-up or malfunction, the report shall contain a list of steps taken to comply with this permit.
 - viii. To the extent excess emissions are continuous or recurring, the initial notification shall include an estimate of the time the excess emissions will continue. Continued excess emissions beyond the estimated date will require an additional notification.
2. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 3. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of the following subparagraph are met.
 4. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The permittee submitted notice of the emergency to the Control Officer by certified mail or hand delivery within 2 working days of the time when emissions limitations were exceeded due to emergency. The notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

10. Additional provisions applicable to Title V Sources
(Code §3-1-081.B.2)

Subject to the following specific exclusions, all terms and conditions of this permit are enforceable by the Administrator and citizens under the Clean Air Act. The exclusions include:

- A. Section 1. Introduction
- B. Section 9.F Posting of Permit
- C. Section 12 Emission Inventory Table

11. Equipment Schedule
[Mandated by 40 CFR §70.5(c)(3)(iii)] (Code §3-1-040.A)

Equipment for which emissions are allowed by this permit are as follows:

- A. One landfill facility, consisting of 300 acres, more or less, including dedicated asbestos monofill cells.
- B. Two (2) trailer tippers, each powered by a 115 hp diesel engine.
- C. One (1) light plant/generator, powered by a <30 hp diesel engine, which may power the leachate sump pump/distribution system.
- D. One (1) water pump, with a <20 hp gasoline engine.
- E. A leachate storage and distribution system, including a storage tank and mobile application/distribution system.
- F. One (1) portable water pump, powered by a 140 hp diesel engine.
- G. Two (2) small portable gasoline water pumps, approximately <20 hp
- H. One (1) small portable power generator, <10 hp
- I. Other sources and activities listed in Pinal County's insignificant list under PCAQCD Code of Regulations §1-3-140.75a or are portable sources.

Appendix A: **Semi-annual Report**
Permit V20696.000

Abstract - This constitutes a semi-annual report, documenting emissions and emission-related activity during the subject reporting period.

Facility - Sierra Estrella Landfill, Inc., an Arizona Corporation
22087 North Ralston Road, Maricopa, AZ

Reporting Period - January to June ____ Or July to December ____ Year ____

Parametric Emissions Report

Waste deposited _____ (This period)
Quantity Units

Engines Report

Total operational hours of the two tippers 115 hp diesel engines - _____ hours

Operational hours of the light plant generator - _____ hours

Operational hours of the portable water pump engine - _____ hours

Total operational hours of the two portable gasoline water pumps - _____ hours

Operational hours of the power generator - _____ hours

Record Generation Verification

- | | Yes | No |
|---|--------------------------|--------------------------|
| Was the most recent NMOC emission rate report under 34 Mg/yr as referenced in §5.B? | <input type="checkbox"/> | <input type="checkbox"/> |
| Were records of asbestos cell size and location maintained as required by §5.D. 2? | <input type="checkbox"/> | <input type="checkbox"/> |
| Were asbestos waste shipment records maintained as required by §5.D.3? | <input type="checkbox"/> | <input type="checkbox"/> |
| Did this facility prohibit disposal of refrigerant-containing mechanical equipment as described in §5.E.1? | <input type="checkbox"/> | <input type="checkbox"/> |
| If collected equipment is disposed off-site, is written verification of contractor certification retained as required in §5.E.1.d? | <input type="checkbox"/> | <input type="checkbox"/> |
| If on-site disposal was allowed, were written statements collected regarding refrigerant removal from small and large appliances and MVACs as required in §5.E.2? | <input type="checkbox"/> | <input type="checkbox"/> |
| Were open areas and vacant lot stabilized as required by §5.H? | <input type="checkbox"/> | <input type="checkbox"/> |
| Were the generators maintained as required by §5.I or §5.J? | <input type="checkbox"/> | <input type="checkbox"/> |
| Did the sulfur content of diesel fuel used meet the requirements in §5.K? | <input type="checkbox"/> | <input type="checkbox"/> |
| Did the tipping rate exceed 750 tons per day? | <input type="checkbox"/> | <input type="checkbox"/> |
| If yes was the soil moisture testing completed as required in §6.B.2? | <input type="checkbox"/> | <input type="checkbox"/> |
| Was the amount of leachate collected recorded as required by §6.B.3? | <input type="checkbox"/> | <input type="checkbox"/> |

Were onsite records of the maximum design capacity, the amount of waste in place and the waste acceptance rate as required by §6.E.3?

Were daily cover logs maintained as required in §6.E.5.a?

Were monthly records of auto shredder fluff used for daily cover maintained as required in §6.E.5.b?

Were generator hours of operation recorded as required by §6.E.6?

Were deviations reported as described in §7.G?

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, that the statements and information in this report are true, accurate and complete.

Signed _____

Printed Name _____

Title _____

Date _____

Contact Phone Number _____

Email to: compliancereports@pinal.gov

Mail to: Pinal County Air Quality Control District
P.O. Box 987
Florence, AZ 85132, or