Issued: December XX, 2023 Expires: December XX, 2028

IMPERIAL COUNTY AIR POLLUTION CONTROL DISTRICT

TITLE V OPERATING PERMIT

Issued in Accordance with the Provisions of 40 CFR Part 70 and Rule 900 of the Imperial County Air Pollution Control District

Facility Name:	Imperial Landfill, Inc.
Parent Company:	Republic Services
SIC Code:	4953 (Class III Solid Waste)
Source Type:	Municipal Solid Waste Landfill
Mailing Address:	104 E Robinson Road Imperial, CA 92251
Facility Location:	104 East Robinson Rd. Imperial, CA 92251
Responsible Official:	Peter Sterenberg General Manager (928) 388 6336
Plant Site Contact:	Steven Hall Operations Supervisor (760) 353-1100
Issued by:	
Belen Leon Lopez Air Pollution Control Officer	Date

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Equipment/Source List

I. Allied MSW Landfill, 31 Acres, 1 million tons Capacity (Closed/Inactive)

Description:

Landfill No. 1, constructed prior to May 30, 1991. Placed on a closed and inactive status since 2003.

Type:

Class III Disposal Site, Solid Waste Disposal Landfill. The waste in place is clean fill, household solid waste, green waste, wood waste, and construction wastes.

MSW Capacity:

Approximately 1,670,000 tons waste in place, closed and capped.

Landfill Gas Control Equipment:

A. Landfill Gas Extraction system

Currently 23 vertical landfill gas extraction wells and landfill gas distribution lines. Extraction wells may be added or subtracted in the future to maintain compliance.

B. Landfill Gas Flare Destruction Station

John Zink, 600 scfm gas flow capacity @ 16.4 MMBtu/hr.

II. Allied MSW Landfill, 42 Acres, 2.56 million tons Capacity (Closed/Inactive)

Description:

Landfill No. 2, 42 Acres in size and on an inactive status. This landfill was constructed after May 30, 1991.

Type:

Class III Disposal Site, Solid Waste Disposal Landfill. The waste in place is non-hazardous municipal solid waste, such as clean fill, household solid waste, green waste,

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wood waste, and construction wastes.

MSW Capacity:

Approximately 2.8 million tons capacity. The Landfill No. 2 reached design capacity in 2012.

Landfill Gas Control Equipment:

The Landfill No. 2 gas collection system includes approximately 23 vertical landfill gas extraction wells, gas collection piping, a flare station, a condensate sump with pneumatic pump, and a condensate storage tank. Extraction wells may be added or subtracted to maintain compliance.

III. Allied MSW Landfill, 89 Acres (Active)

Description:

Landfill 89 Acres in size after last expansion, and on an active status. The construction of this landfill was completed in 2012, with the landfill sector accepting waste until at least 2034.

Type:

Class III Disposal Site, Solid Waste Disposal Landfill. The waste in place is non-hazardous municipal solid waste, such as clean fill, household solid waste, green waste, wood waste, and construction wastes.

MSW Capacity:

Approximately 8.25 million tons capacity.

Landfill Gas Control Equipment:

The 89 Acres Landfill gas collection system required an expansion of the collection system, including the installation of additional vertical wells, gas collection piping, condensate traps, and perimeter landfill gas probes.

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IV. Landfill Gas Enclosed Flare Station

Description:

Landfill Gas Flare Abatement System, consisting of an enclosed ground flare.

Type:

The flare has a 600 SCFM blower fan, including a Condensate Organic Vapor Granulated Carbon Control Unit. System includes gas flow, pressure, and temperature gauges and recorders.

Capacity:

John Zink Company Flare, with a 16.4 MMBtu/hr capacity. The unit has an exhaust stack that is 5 ft. in diameter and 40 feet tall, with 5 burners.

IV. Air Compressor

Description:

Ingersoll Rand P185 Air Compressor

Type:

Air Compressor, powered by a John Deere, Model 4024TF281/PE4024 R042707 Diesel Engine.

Capacity:

Rating of 49 hp. The engine has a Tier 4 rating.

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Title V Operating Permit Conditions

I. General Permit Conditions

- 1. The permittee shall obtain an Authority to Construct permit prior to the modification or replacement of any equipment for which a Permit to Operate has been granted and prior to the installation and operation of any equipment for which an Authority to Construct is required. ICAPCD Rule 201, Permits Required, revised 10/10/06.
- 2. No air contaminant shall be released into the atmosphere in such quantities to cause a public nuisance. ICAPCD Rule 407, Nuisances, revised 09/14/99; ICAPCD Rule 207, New Source Review, revised 09/11/2018; PTO 2625B-5 Conditions, I.7 {District Only}.
- 3. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82. **40 CFR Part 82, Protection of Stratospheric Ozone.**
- 4. The Permittee shall comply with all applicable AB 32 Landfill Methane Rule (LMR) requirements. ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition I.3.
- The requirements of 40 CFR 63, Subpart AAAA apply at all times, including during periods of Start-up, Shut-down and Malfunction (SSM), and the SSM requirements of the General Provisions of 40 CFR 63 do not apply.
 CFR 63.1930(b); ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition I.4.
- 6. In the event of a change in control or ownership of facilities to be constructed or modified, the approval for this Permit shall be binding on subsequent owners and operators. The Applicant shall notify subsequent owners and operators of the existence of this Permit and these Conditions by letter, a copy of which shall be forwarded to the Air Pollution Control District (APCD). The new owner(s) shall apply to the APCD for "change in ownership" within 30 days of the transfer of ownership. ICAPCD Rule 900.F.2.e, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition IV.1.
- 7. The permittee shall submit to the APCD a standard APCD application no earlier

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than 18 months and no later than 6 months before the expiration date of the current Title V Operating Permit. Permits to Operate for all emissions units at a stationary source shall undergo simultaneous renewal. ICAPCD Rule 900.D.3.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11.

- 8. The Permittee shall maintain a California Air Resources Board (CARB) certified opacity observer. The CARB-certified opacity observer shall conduct visible emission evaluations Quarterly stationary point sources and as required under fugitive dust control program under the monitoring section of this Permit. Visible emissions evaluations shall be recorded and maintained on site. ICAPCD Rule 900.F.2.e, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition I.8.
- 9. The APCD may temporarily suspend and, after a full review, cancel this Permit and construction would cease, if an activity conducted by the Permittee commits a direct air emission violation of local, state or federal air statutes. The Permit shall be reinstated upon resolution of the violation(s) to the satisfaction of the APCD. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition I.5.
- 10. The APCD shall be notified in advance and in writing of: (a) The anticipated date of the first waste acceptance for the expanded (89 Acres) landfills, and (b) The date of landfill gas collection system(s) construction. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition II.1.

II. Compliance with Permit Conditions

- 1. The permittee shall comply with all permit conditions;
- 2. This permit does not convey property rights or exclusive privilege of any sort;
- 3. Noncompliance with any permit conditions is grounds for permit termination, revocation and reissuance, modification, enforcement action, or denial of permit

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renewal;

- 4. The permittee shall not use the need to hold or reduce a permitted activity in order to maintain compliance as a defense for noncompliance with any permit conditions;
- 5. A pending permit action or notification of anticipated noncompliance does not stay any permit conditions;
- 6. Within a reasonable time period, the permittee shall furnish any information requested by the Air Pollution Control Officer (APCO) of APCD, in writing, for the purpose of determining: 1) compliance with the permit, 2) whether or not cause exists to modify, revoke and reissue, or terminate a permit or for an enforcement action. ICAPCD Rule 900.F.2.k, Procedures for Issuing Permit to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018; PTO 2625B-5 Conditions, I.1 and I.2.

III. Emission Limits

- A. Gas Controls System
- 1. NMOC emissions equal to or exceeding 25 lbs/day shall be controlled using BACT (Best Available Control Technology). ICAPCD Rule 207, New Source Review, revised 09/11/2018; PTO 2625B-5 Conditions, VI.1.
- 2. The enclosed combustor stack gas emissions shall not exceed the following:

NOx = < 0.065 lbs/MMBTU

CO = < 0.20 lbs/MMBTU

VOC = < 0.52 lb/hr

SOx = < 6.62 lb/day

PM10 =< 0.1927 lb/hr

A minimum of 99.2% destruction removal efficiency (DRE) of NMOC shall be achieved by the BACT system

ICAPCD Rule 207, New Source Review, revised 09/11/2018; PTO 2625B-5 Conditions, VI.2 and VI.3.

3. The enclosed flare must achieve either a reduction of NMOC by 98 weight- percent or reduce the outlet NMOC concentration to less than 20 ppmv, dry basis as hexane at 3-percent oxygen.

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40 CFR 63.1959(b)(2)(iii)

4. The MSW landfill owner or operator must route the collected gas to an enclosed flare that achieves a methane destruction efficiency of at least 99 percent by weight.

17 CCR 95464(b)(2), federal authority 40 CFR Part 62.1100(b)(7)

- 5. The permittee shall not release or discharge into the atmosphere from any single source of emission, any air contaminant, other than uncombined water vapor, as dark or darker as designated as No. 1 on the Ringlemann Chart (20% opacity) for a period or periods aggregating more than three (3) minutes in any hour.
 ICAPCD Rule 401.A.1, Opacity of Emissions, adopted 11/19/85; ICAPCD Rule 207, New Source Review, revised 09/11/2018; PTO 2625B-5 Conditions, I.6.
- 6. The Permittee shall not discharge into the atmosphere from any single emission unit combustion contaminants exceeding in concentrations at the point of discharge 0.2 grains per dry cubic foot of gas, calculated to 12 percent of carbon dioxide (CO2) at standard conditions averaged over 25 consecutive minutes. ICAPCD Rule 403.3 and 403.5, General Limitations on the Discharge of Air Contaminants, revised 05/18/04.
- 7. No Person shall discharge into the atmosphere from any single source of emissions, sulfur compounds, calculated as sulfur dioxide (SO₂) in excess of 0.2 percent by volume, measured at the point of discharge. ICAPCD Rule 405, Sulfur Compounds Emission Standards, Limitations and Prohibitions, revised 05/18/04.

IV. Operational Standards For Collection And Control System

40 CFR 63, Subpart AAAA Requirements

1. At all times, the owner or operator must operate and maintain the MSW landfill, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if the requirements of 40 CFR 63, Subpart AAAA have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the APCD which may include, but is not limited to, monitoring results, review of operation and maintenance

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procedures, review of operation and maintenance records, and inspection of the source.

40 CFR 63.1955(c)

- 2. Removal Standards. The collection and control system may be capped, removed, or decommissioned if the following criteria are met:
 - a. The landfill is a closed landfill (as defined in 40 CFR 63.1990). A closure report must be submitted to the APCD as provided in section IX.7 of this permit (40 CFR 63.1981(f));
 - b. The gas collection and control system has been in operation a minimum of 15 years or the landfill owner or operator demonstrates that the gas collection and control system will be unable to operate for 15 years due to declining gas flow; and
 - c. Following the procedures specified in Section IV.6.c of this permit (40 CFR 63.1959(c)), the calculated NMOC emission rate at the landfill is less than 50 Mg/yr on three successive test dates. The test dates must be no less than 90 days apart, and no more than 180 days apart.

40 CFR 63.1957(b)

Active Gas Collection System

- 3. The owner or operator of an MSW landfill with a gas collection and control system must operate the system according to the following:
 - 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:
 - 1. 5 years or more if active; or
 - 2. 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:
 - 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 semi-annual reports as provided in Section IX.1. of this permit (40 CFR 63.1981(h));
 - 2. Use of a geomembrane or synthetic cover. The owner or operator

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must develop acceptable pressure limits in the design plan;

- 3. 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 APCD as specified in 40 CFR 63.1981(d)(2);
- c. Operate each interior wellhead in the collection system as specified in 40 CFR 60.753(c), until the landfill owner or operator elects to meet the following operational standard for temperature of this section.
 - 1. Operate each interior wellhead in the collection system with a landfill gas temperature less than 62.8 degrees Celsius (145 degrees Fahrenheit).
 - 2. 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 APCD 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 (ppm) above background at the surface of the landfill. To determine if this level is exceeded, 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. 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.
 - 1 Beginning no later than September 27, 2021, the owner or operator must:
 - i. Conduct surface testing using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the

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specifications provided in Section V.6. of this permit (40 CFR 63.1960(d)).

- ii. Conduct surface testing at all cover penetrations. Thus, the owner or operator must monitor any cover penetrations that are within an area of the landfill where waste has been placed and a gas collection system is required.
- iii. Determine the latitude and longitude coordinates of each exceedance using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places.
- e. Operate the system in accordance to Section IV.1 of this permit (40 CFR 63.1955(c)) such that all collected gases are vented to a control system designed and operated in compliance with Section IV.5. of this permit (40 CFR 63.1959(b)(2)(iii)). 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; and
 - 2. Efforts to repair the collection or control system must be initiated and completed in a manner such that downtime is kept to a minimum, and the collection and control system must be returned to operation.
- 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 <u>paragraph</u> (b), (c), or (d) of this condition are not met, corrective action must be taken as specified in Section V.2 of this permit (40 CFR 63.1960(a)(3) and (5) or (c)). If corrective actions are taken as specified in 40 CFR 63.1960, the monitored exceedance is not a deviation of the operational requirements in this permit.

40 CFR 63.1958 (a) through (g)

Installation Standards

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- 4. The owner or operator must Install and start up a collection and control system that captures the gas generated within the landfill as required by sections IV.4 and 5 of this permit (40 CFR 63.1959(b)(2)(ii)(B) or (C) and (b)(2)(iii)) within 30 months after the first annual report in which the NMOC emission rate equals or exceeds 50 Mg/yr, unless Tier 2 or Tier 3 sampling demonstrates that the NMOC emission rate is less than 50 Mg.
 - a. An active collection system must:
 - 1. 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;
 - 2. 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;
 - 3. Collect gas at a sufficient extraction rate; and
 - 4. Be designed to minimize off-site migration of subsurface gas.

40 CFR 63.1959(b)(2)(ii)((B); ICAPCD Rule 900.F.2.e, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition VII.2.

- 5. The owner or operator must route all the collected gas to a control system that complies with the following requirements:
 - a. The enclosed flare must achieve either a reduction of NMOC by 98 weightpercent or reduce the outlet NMOC concentration to less than 20 ppmv,
 dry basis as hexane at 3-percent oxygen. The reduction efficiency or
 ppmv 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 40 CFR 63.1959(e). 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 section VI.5 of this permit
 (40 CFR 63.1961(b) through (e)).

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40 CFR 63.1959(b)(2)(iii)

6. After the installation and startup of a collection and control system in compliance with this permit, the owner or operator must calculate the NMOC emission rate for purposes of determining when the system can be capped, removed, or decommissioned as provided in section IV.2 of this permit (40 CFR 63.1957(b)(3)), using the following Equation:

$$MNMOC = 1.89 \times 10^{-3} Q_{LFG} C_{NMOC} (Eq. 3)$$

Where:

 M_{NMOC} = Mass emission rate of NMOC, Mg/yr.

Q_{LFG} = Flow rate of landfill gas, m³ per minute.

 C_{NMOC} = Average NMOC concentration, ppmv as hexane.

 1.89×10^{-3} = Conversion factor.

- a. The flow rate of landfill gas, Q_{LFG}, must be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control system using a gas flow measuring device calibrated according to the provisions of section 10 of EPA Method 2E of appendix A-1 of 40 CFR part 60.
- b. The average NMOC concentration, CNMOC, must be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in EPA Method 25 or 25C of appendix A-7 to 40 CFR part 60. The sample location on the common header pipe must be before any condensate removal or other gas refining units. The landfill owner or operator must divide the NMOC concentration from EPA Method 25 or 25C of appendix A-7 to 40 CFR part 60 by 6 to convert from CNMOC as carbon to CNMOC as hexane.
- c. The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the APCD.
 - i. Within 60 days after the date of completing each performance test (as defined in 40 CFR 63.7), the owner or operator must submit the results of the

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performance test, including any associated fuel analyses, according to section IX.5 of this permit (40 CFR 63.1981(I)(1)).

40 CFR 63.1959(c)

7. For the performance test required in Section IV.6 of this permit (40 CFR 63.1959(b)(2)(iii)(B)), EPA Method 25 or 25C (EPA Method 25C of appendix A-7 to 40 CFR part 60 may be used at the inlet only) of appendix A 0f 40 CFR 60 must be used to determine compliance with the 98 weight-percent efficiency or the 20ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the APCD as provided by 40 CFR 63.1981(d)(2). EPA Method 3, 3A, or 3C of appendix A-7 to 40 CFR part 60 must be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), EPA Method 25A should be used in place of EPA Method 25. EPA Method 18 may be used in conjunction with EPA Method 25A on a limited basis (compound specific, e.g., methane) or EPA Method 3C may be used to determine methane. The methane as carbon should be subtracted from the EPA Method 25A total hydrocarbon value as carbon to give NMOC concentration as carbon. The landowner or operator must divide the NMOC concentration as carbon by 6 to convert from the C_{NMOC} as carbon to C_{NMOC} as hexane. Equation 4 must be used to calculate efficiency:

Control Efficiency =
$$(NMOC_{in} - NMOC_{out})/(NMOC_{in})$$
 (Eq. 4)

 $NMOC_{in} = Mass of NMOC entering$

control device. $NMOC_{out} = Mass of$

NMOC exiting control device.

40 CFR 63.1959(d); ICAPCD Rule 900.F.2.e, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition VII.1.

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8. The performance tests required in Section IV.5 of this permit (40 CFR 63.1959(b)(2)(iii)(A) and (B)), must be conducted under such conditions as the APCD specifies to the owner or operator based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown unless specified by the APCD. The owner or operator may not conduct performance tests during periods of malfunction. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator shall make available to the APCD such records as may be necessary to determine the conditions of performance tests.

40 CFR 63.1959(f)

Landfill Methane Rule (LMR) and 40 CFR 60, Subpart OOO Requirements

- 9. The gas collection and control system shall comply with the specific requirements of the California Air Resource Board (CARB) Methane Emissions from Municipal Solid Waste Landfills Regulation (Landfill Methane Rule (LMR)) contained in Title 17 of the California Code of Regulations (17 CCR), Subchapter 10, Article 4, Subarticle 6, AND 40 CFR 62.16716(c) wellhead operational standards (corresponding to 40 CFR 60.34f(c)), 62.16720(a)(4) wellhead monitoring (corresponding to 40 CFR 60.36f(a)(5)), 62.16722(a)(2) and (3) wellhead monitoring (corresponding to 40 CFR 60.37f(a)(2) and (3)), 62.16724(k) corrective action (corresponding to 40 CFR 60.38f(k)), and 62.16726(e)(2) and (5) recordkeeping (corresponding to 40 CFR 60.39f(e)(2) and (5)), as identified in 40 CFR part 62, subpart F.
- 10. If an owner or operator is modifying an existing gas collection and control system, the existing Design Plan must be amended to include any necessary updates or addenda, and must be certified by a professional engineer. An amended Design Plan must be submitted to the APCD within 90 days of any event that requires a change to the Design Plan. The gas collection system must be operated, maintained, and expanded in accordance with the procedures and schedules in the approved Design Plan.

17 CCR 95464(a)(4)-(6), federal authority 40 CFR Part 62.1100(b)(7).

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- 11. The owner or operator must satisfy the following requirements when operating a gas collection and control system:
 - (a) Route the collected gas to a gas control device or devices, and operate the gas collection and control system continuously except as provided in sections IV.14 and 15 of this permit (95464(d) and 95464(e) of 17 CCR).
 - (b) Operate the gas collection and control system so that there is no landfill gas leak that exceeds 500 ppmv, measured as methane, at any component under positive pressure.
 - (c) The gas collection system must be designed and operated to draw all the gas toward the gas control device or devices.
 - 17 CCR 95464(b)(1), federal authority 40 CFR Part 62.1100(b)(7).
- 12. An MSW landfill owner or operator who operates a flare must satisfy the following requirements:
 - a. Route the collected gas to an enclosed flare that meets the following requirements:
 - i. Achieves a methane destruction efficiency of at least 99 percent by weight.
 - ii. Is equipped with automatic dampers, an automatic shutdown device, a flame arrester, and continuous recording temperature sensors.
 - iii. During restart or startup there must be a sufficient flow of propane or commercial natural gas to the burners to prevent unburned collected methane from being emitted to the atmosphere.
 - iv. The gas control device must be operated within the parameter ranges established during the initial or most recent source test.

17 CCR 95464(b)(2), federal authority 40 CFR Part 62.1100(b)(7)

- 13. Each wellhead must be operated under a vacuum (negative pressure), except as provided in sections IV.14 and 15 of this permit (17 CCR 95464(d) and 95464(e)), or under any of the following conditions:
 - a. Use of a geomembrane or synthetic cover. The owner or operator must develop acceptable pressure limits for the wellheads and include them in the Design Plan; or
 - b. A decommissioned well.

17 CCR 95464(c), federal authority 40 CFR Part 62.1100(b)(7)

14. The requirements of sections IV.11.(a) and (b) and IV.13 (17 CCR 95464(b)(1)(A), 95464(b)(1)(B), and 95464(c)), do not apply to individual wells involved in well

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raising provided the following conditions are met:

- a. New fill is being added or compacted in the immediate vicinity around the well.
- b. Once installed, a gas collection well extension is sealed or capped until the raised well is reconnected to a vacuum source.

17 CCR 95464(d), federal authority 40 CFR Part 62.1100(b)(7)

- 15. The requirements of sections IV.11.(a) and (b) and IV.13 (17 CCR 95464(b)(1)(A), 95464(b)(1)(B), and 95464(c)), do not apply to individual landfill gas collection system components that must be temporarily shut down in order to repair the components, due to catastrophic events such as earthquakes, to connect new landfill gas collection system components to the existing system, to extinguish landfill fires, or to perform construction activities pursuant to section 17 CCR 95466, provided the following requirements are met:
 - a. Any new gas collection system components required to maintain compliance with this subarticle must be included in the most recent Design Plan pursuant to section 95464(a)(4).
 - b. Methane emissions are minimized during shutdown pursuant to section 17 CCCR 95464(a)(1)(D).

17 CCR 95464(e), federal authority 40 CFR Part 62.1100(b)(7)

- 16. Except as provided in sections IV.14 and 15 of this permit (17 CCR 95464(d), 95464(e), and 95466), beginning January 1, 2011, or upon commencing operation of a newly installed gas collection and control system or modification of an existing gas collection and control system pursuant to 17 CCR 95464(a)(1), whichever is later, no location on the MSW landfill surface may exceed either of the following methane concentration limits:
 - a. 500 ppmv, other than non-repeatable, momentary readings, as determined by instantaneous surface emissions monitoring.
 - b. An average methane concentration limit of 25 ppmv as determined by integrated surface emissions monitoring.
 - c. The requirements of this section (17 CCR 95465) do not apply to the working face of the landfill or to areas of the landfill surface where the landfill cover material has been removed and refuse has been exposed for the purpose of installing, expanding, replacing, or repairing components of the landfill gas, leachate, or gas condensate collection and removal system, or for law enforcement activities requiring excavation.
 - 17 CCR 95465(a) and 17 CCR 95466, federal authority 40 CFR Part

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62.1100(b)(7)

- 17. The gas collection and control system at a closed MSW landfill can be capped or removed provided the following requirements are met:
 - a. The gas collection and control system was in operation for at least 15 years, unless the owner or operator can demonstrate to the satisfaction of the APCD that due to declining methane rates the MSW landfill will be unable to operate the gas collection and control system for a 15-year period.
 - b. Surface methane concentration measurements do not exceed the limits specified in section IV.16 of this permit (17 CCR 95465).
 - c. The owner or operator submits an Equipment Removal Report to the APCD pursuant to section 17 CCR 95470(b)(2).

17 CCR 95467(a), federal authority 40 CFR Part 62.1100(b)(7)

18. The owner or operator must Operate each interior wellhead in the collection system with a landfill gas temperature less than 62.8 degrees Celsius (145 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 APCD 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).

40 CFR 62.16716(c)

- 19. The 89-acre expansion landfill gas extraction and collection system shall be installed and maintained with a minimum 90% collection efficiency. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 25625A-5, Condition VII.3.
- 20. The Permittee shall calculate total landfill gas produced at the site based on gas collected and flared. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition VII.4.

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The sum of nonattainment pollutant emissions (E) from all stationary vents exceeding 137 lbs/day shall be offset. Formula (1) shall be used to calculate the amount of emission offsets needed.

If E_(measured) >= 137 lbs/day

(1) Offsets = $E_{\text{(measured)}} x (1.2)$

ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition VIII.1 {District Only}.

Diesel Engines

- 22. Waste delivery shall be limited to 1,700 tons of waste per day. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition IX.1.
- 23. Waste delivery operations, borrowing site operations, CDI operations and earthmoving operations shall be limited to 300 operating days per year. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition IX.2.

Fugitive Dust Control

- 24. The Permittee shall control fugitive emissions in accordance with Regulation VIII of the APCD. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition X.1.
- 25. The Permittee shall always have available the capability to maintain adequate water application for fugitive dust control. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition X.2.
- 26. For any temporary, unpaved roads used during the normal project operation for a period of 30 day or less, the landfill operator shall apply water as a dust

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suppressant sufficient to maintain normal surface moisture content above 4%. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition X.3.

27. For transitional roads that will be used over periods longer than 30 days, but which would periodically be moved or reconstructed, the landfill operator shall apply wet suppression techniques, including soil stabilizers, to minimize fugitive dust emissions. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition X.4.

Organic Vapor Control

- 28. Liquids collected from the landfill shall not be treated with open air stripping unless approved by the APCD. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition XIV.1.
- 29. Fuel storage tanks shall be designed, constructed, and installed in compliance with APCD Rule 415. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition XIV.2.

Vehicular Traffic

- 30. Waste delivery shall be limited to the following:
 - a. 206 collection trucks,
 - b. 21 transfer trucks.
 - c. 185 pickup trucks.

ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition XV.1.

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- 31. Mechanic truck traffic shall be limited to 6.7 miles per day and 2,100 miles per year. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition XV.2.
- 32. Earthmoving and landfill cover activities shall be limited to 255 tons of moved soil per day. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition XV.3.
- 33. Earthmoving and landfill cover scrapers shall be limited to a combined 6 hours of daily operations. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition XV.4.

V. Compliance Provisions

40 CFR 63, Subpart AAAA Requirements

 For the purposes of determining sufficient density of gas collectors for compliance with Section IV.4 of this permit (40 CFR 63.1959(b)(2)(ii)(B)(2)), the owner or operator must design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the APCD, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

40 CFR 63.1960(a)(2)

- 2. For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with Section IV.4 of this permit (40 CFR 63.1959(b)(2)(ii)(B)(3)), the owner or operator must measure gauge pressure in the gas collection header applied to each individual well monthly. Any attempted corrective measure must not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the APCD for approval.
 - a. If a positive pressure exists, action must be initiated to correct the exceedance

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within 5 days, except for the three conditions allowed under Section IV.3.b of this permit (40 CFR 63.1958(b)).

- i. If negative pressure cannot be achieved without excess air infiltration within 15 days of the first measurement of positive pressure, the owner or operator must conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after positive pressure was first measured. The owner or operator must keep records according to Section VIII.1.i.iii of this permit (40 CFR 63.1983(e)(3)).
- ii. If corrective actions cannot be fully implemented within 60 days following the positive pressure measurement for which the root cause analysis was required, the owner or operator must also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the positive pressure measurement. The owner or operator must submit the items listed in Section IX.1.f of this permit (40 CFR 63.1981(h)(7)) as part of the next semi-annual report. The owner or operator must keep records according to Section VIII.1.i.iv of this permit (40 CFR 63.1983(e)(4)).
- iii. If corrective action is expected to take longer than 120 days to complete after the initial exceedance, the owner or operator must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the APCD, according to Section IX.3 of this permit (40 CFR 63.1981(j)). The owner or operator must keep records according to Section VIII.1.i.v of this permit (40 CFR 63.1983(e)(5)).

40 CFR 63.1960(a)(3)

3. The owner or operator must demonstrate compliance with the operational standard for temperature in Section IV.3.c of this permit (40 CFR 63.1958(c)(1)), by monitoring temperature of the landfill gas on a monthly basis as specified below (40 CFR 63.1960(a)(4)). The temperature measuring device must be calibrated annually using the

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procedure in Section 10.3 of EPA Method 2 of appendix A-1 to 40 CFR 60. Keep records as specified on Section VIII.1.i of this permit (40 CFR 63.1983(e)).

- a. The owner or operator must monitor each well monthly for temperature for the purpose of identifying whether excess air infiltration exists. If a well exceeds the operating parameter for temperature as provided in Section IV.3.c.1 of this permit (40 CFR 63.1958(c)(1)), action must be initiated to correct the exceedance within 5 days. Any attempted corrective measure must not cause exceedances of other operational or performance standards.
 - i. If a landfill gas temperature less than or equal to 62.8 degrees Celsius (145 degrees Fahrenheit) cannot be achieved within 15 days of the first measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit), the owner or operator must conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after a landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit) was first measured. The owner or operator must keep records according to Section VIII.1.i.iii of this permit (40 CFR 63.1983(e)(3)).
 - ii. If corrective actions cannot be fully implemented within 60 days following the temperature measurement for which the root cause analysis was required, the owner or operator must also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit). The owner or operator must submit the items listed in 40 CFR 63.1981(h)(7) as part of the next semi-annual report. The owner or operator must keep records according to Section VIII.1.i.iv of this permit 40 CFR 63.1983(e)(4).
 - iii. If corrective action is expected to take longer than 120 days to complete after the initial exceedance, the owner or operator must submit the root cause analysis, corrective action analysis, and

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corresponding implementation timeline to the APCD, according to Section IX.1.f and IX.2 of this permit (40 CFR 63.1981(h)(7) and (j)). The owner or operator must keep records according to Section VIII.1.i.v of this permit 40 CFR 63.1983(e)(5).

iv. If a landfill gas temperature measured at either the wellhead or at any point in the well is greater than or equal to 76.7 degrees Celsius (170 degrees Fahrenheit) and the carbon monoxide concentration measured, according to the procedures in Section VI.3.f of this permit (40 CFR 63.1961(a)(5)(vi)) is greater than or equal to 1,000 ppmv the corrective action(s) for the wellhead temperature standard (62.8 degrees Celsius or 145 degrees Fahrenheit) must be completed within 15 days.

40 CFR 63.1960(a)(4)

- 4. For purposes of compliance with Section IV.3.a of this permit (40 CFR 63.1958(a)), each owner or operator of a controlled landfill must place each well or design component as specified in the approved design plan as provided in 40 CFR 63.1981(d). Each well must be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:
 - a. 5 years or more if active; or
 - b. 2 years or more if closed or at final grade.

40 CFR 63.1960(b)

- 5. The owner or operator must use the following procedures for determining compliance with the surface methane operational standard as provided in Section IV.3.d of this permit (40 CFR 63.1958(d)).
 - a. The owner or operator must monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in paragraph (d) of this section.
 - b. The background concentration must be determined by moving the probe inlet

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upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.

- c. Surface emission monitoring must be performed in accordance with <u>section</u> 8.3.1 of EPA Method 21 of appendix A-7 of <u>part 60 of this chapter</u>, except that the probe inlet must be placed within 5 to 10 centimeters of the ground. Monitoring must be performed during typical meteorological conditions.
- d. Any reading of 500 ppm or more above background at any location must be recorded as a monitored exceedance and the actions specified in the paragraphs below must be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of Section IV.3.d of this permit (40 CFR 63.1958(d)).
 - i. The location of each monitored exceedance must be marked and the location and concentration recorded. Beginning no later than September 27, 2021, the location must be recorded using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places.
 - ii. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance must be made and the location must be re- monitored within 10 days of detecting the exceedance.
 - iii. If the re-monitoring of the location shows a second exceedance, additional corrective action must be taken and the location must be monitored again within 10 days of the second exceedance. If the remonitoring shows a third exceedance for the same location, the action specified in paragraph (v) of this section must be taken, and no further monitoring of that location is required until the action specified in paragraph (v) of this section has been taken.
 - iv. Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in paragraph (ii) or (iii) of this section must be re-monitored 1 month from the initial exceedance. If the 1-

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month re-monitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in <u>paragraph (iii)</u> or <u>(v)</u> of this section must be taken.

- v. For any location where monitored methane concentration equals or exceeds 500 ppm above background three times within a quarterly period, a new well or other collection device must be installed within 120 days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the APCD for approval.
- e. The owner or operator must implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

40 CFR 63.1960(c); ICAPCD Rule 900.F.2.e, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition XII.1.

- 6. Each owner or operator seeking to comply with the provisions of Section V.5 of this permit (40 CFR 63.1960(c)), must comply with the following instrumentation specifications and procedures for surface emission monitoring devices:
 - a. The portable analyzer must meet the instrument specifications provided in section 6 of EPA Method 21 of appendix A of <u>part 60 of this chapter</u>, except that "methane" replaces all references to "VOC".
 - b. The calibration gas must be methane, diluted to a nominal concentration of 500 ppm in air.
 - c. To meet the performance evaluation requirements in <u>section 8.1</u> of EPA Method 21 of appendix A of <u>40 CFR 60</u>, the instrument evaluation procedures of <u>section 8.1</u> of EPA Method 21 of appendix A of 40 CFR 60 must be used.
 - d. The calibration procedures provided in sections 8 and 10 of EPA Method

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21 of appendix A of 40 CFR 60 must be followed immediately before commencing a surface monitoring survey.

40 CFR 63.1960(d)

7. The provisions of 40 CFR 63 subpart AAAA apply at all times, including periods of SSM. During periods of SSM, the owner or operator must comply with the work practice requirement specified in Section IV.3.e of this permit (40 CFR 63.1958(e)) in lieu of the compliance provisions in 40 CFR 63.1960.

40 CFR 63.1960(e)(2)

Landfill Methane Rule (LMR) and 40 CFR 60, Subpart OOO Requirements

- 8. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator must monitor each well monthly for temperature as provided in section IV.18 of this permit (40 CFR 62.16716(c)). If a well exceeds the operating parameter for temperature, action must be initiated to correct the exceedance within 5 calendar days. Any attempted corrective measure must not cause exceedances of other operational or performance standards.
 - i. If a landfill gas temperature less than 62.8 degrees Celsius (145 degrees Fahrenheit) cannot be achieved within 15 calendar days of the first measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit), the owner or operator must conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after a landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit) was first measured. The owner or operator must keep records according to 40 CFR 62.16726(e)(3).
 - ii. If corrective actions cannot be fully implemented within 60 days following the measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit) for which the root cause analysis was required, the owner or operator must also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit). The owner or operator must submit the items listed in 40 CFR

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62.16724(h)(7) as part of the next annual report. The owner or operator must keep records according to 40 CFR 62.16726(e)(4).

iii. If corrective action is expected to take longer than 120 days to complete after the initial exceedance, the owner or operator must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the APCD, according to 40 CFR 62.16724(h)(7) and 40 CFR 62.16724(k). The owner or operator must keep records according to section VIII.7.b of this permit (40 CFR 62.16726(e)(5)).

40 CFR 62.16720(a)(4)

VI. Monitoring Operations

40 CFR 63, Subpart AAAA Requirements

- 1. Each owner or operator seeking to comply with Section IV.4.a of this permit (40 CFR 63.1959(b)(2)(ii)(B)) for an active gas collection system must install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:
 - a. Measure the gauge pressure in the gas collection header on a monthly basis as provided in Section V.2 of this permit (40 CFR 63.1960(a)(3)); and
 - b. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as follows:
 - i. The nitrogen level must be determined using EPA Method 3C of appendix A-2 to 40 CFR 60, unless an alternative test method is established as allowed by 40 CFR 63.1981(d)(2).
 - ii. Unless an alternative test method is established as allowed by 40 CFR 63.1981(d)(2), the oxygen level must be determined by an oxygen meter using EPA Method 3A or 3C of appendix A-2 to 40 CFR 60 or ASTM D6522-11 (incorporated by reference, see 40 CFR 63.14). Determine the oxygen level by an oxygen meter using EPA Method 3A or 3C of appendix A-2 to 40 CFR 60 or ASTM D6522-11 (if sample location is prior to combustion) except that:
 - A. The span must be set between 10- and 12-percent oxygen;

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- B. A data recorder is not required;
- C. Only two calibration gases are required, a zero and span;
- D. A calibration error check is not required; and
- E. The allowable sample bias, zero drift, and calibration drift are ±10 percent.
- iii. A portable gas composition analyzer may be used to monitor the oxygen levels provided:
 - A. The analyzer is calibrated; and
 - B. The analyzer meets all quality assurance and quality control requirements for EPA Method 3A of appendix A-2 to 40 CFR 60 or ASTM D6522-11 (incorporated by reference, see 40 CFR 63.14).

40 CFR 63.1961(a)(2)

2. The owner or operator must demonstrate compliance with the operational standard for temperature in Section IV.3.c.1 of this permit (40 CFR 63.1958(c)(1)), monitor temperature of the landfill gas on a monthly basis as provided in Section VI.2 of this permit (40 CFR 63.1960(a)(4)). The temperature measuring device must be calibrated annually using the procedure in Section 10.3 of EPA Method 2 of appendix A-1 to 40 CFR 60. Keep records specified in Section VIII.1.i of this permit (40 CFR 63.1983(e)).

40 CFR 63.1961(a)(4)

- 3. The owner or operator must initiate enhanced monitoring at each well with a measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit) as follows:
 - a. Visual observations for subsurface oxidation events (smoke, smoldering ash, damage to well) within the radius of influence of the well.
 - b. Monitor oxygen concentration as provided in Section VI.1.b of this permit (40 CFR 63.1961(a)(2));
 - c. Monitor temperature of the landfill gas at the wellhead as provided in Section VI.2 of this permit (40 CFR 63.1961(a)(4)).
 - d. Monitor temperature of the landfill gas every 10 vertical feet of the well as provided in section VI.4 of this permit (40 CFR 63.1961(a)(6)).
 - e. Monitor the methane concentration with a methane meter using EPA

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Method 3C of appendix A-6 to 40 CFR 60, EPA Method 18 of appendix A-6 to 40 CFR 60, or a portable gas composition analyzer to monitor the methane levels provided that the analyzer is calibrated and the analyzer meets all quality assurance and quality control requirements for EPA Method 3C or EPA Method 18.

- f. Monitor and determine carbon monoxide concentrations, as follows:
 - i. Collect the sample from the wellhead sampling port in a passivated canister or multi-layer foil gas sampling bag (such as the Cali-5-Bond Bag) and analyze that sample using EPA Method 10 of appendix A-4 to 40 CFR 60, or an equivalent method with a detection limit of at least 100 ppmv of carbon monoxide in high concentrations of methane; or
 - ii. Collect and analyze the sample from the wellhead using EPA Method 10 of appendix A-4 to part 60 to measure carbon monoxide concentrations.
 - iii. When sampling directly from the wellhead, you must sample for 5 minutes plus twice the response time of the analyzer. These values must be recorded. The five 1-minute averages are then averaged to give you the carbon monoxide reading at the wellhead.
 - iv. When collecting samples in a passivated canister or multi-layer foil sampling bag, you must sample for the period of time needed to assure that enough sample is collected to provide five (5) consecutive, 1-minute samples during the analysis of the canister or bag contents, but no less than 5 minutes plus twice the response time of the analyzer. The five (5) consecutive, 1-minute averages are then averaged together to give you a carbon monoxide value from the wellhead.
- g. The enhanced monitoring described in Section VI.3 of this permit (40 CFR 63.1961(a)(5)) must begin 7 calendar days after the first measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit); and
- h. The enhanced monitoring in Section VI.3 of this permit (40 CFR 63.1961(a)(5))

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must be conducted on a weekly basis. If four consecutive weekly carbon monoxide readings are under 100 ppmv, then enhanced monitoring may be decreased to monthly. However, if carbon monoxide readings exceed 100 ppmv again, the landfill must return to weekly monitoring.

i. The enhanced monitoring in Section VI.3 of this permit ((40 CFR 63.1961(a)(5)) can be stopped once a higher operating value is approved, at which time the monitoring provisions issued with the higher operating value should be followed, or once the measurement of landfill gas temperature at the wellhead is less than or equal to 62.8 degrees Celsius (145 degrees Fahrenheit).

40 CFR 63.1961(a)(5)

4. For each wellhead with a measurement of landfill gas temperature greater than or equal to 73.9 degrees Celsius (165 degrees Fahrenheit), annually monitor temperature of the landfill gas every 10 vertical feet of the well. This temperature can be monitored either with a removable thermometer, or using temporary or permanent thermocouples installed in the well.

40 CFR 63.1961(a)(6)

- 5. Each owner or operator seeking to comply with Section IV.5 of this permit (40 CFR 63.1959(b)(2)(iii)) using an enclosed combustor must calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment:
 - a. A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ±1 percent of the temperature being measured expressed in degrees Celsius or ±0.5 degrees Celsius, whichever is greater.

40 CFR 63.1961(b)

6. The owner or operator must demonstrate compliance with the 500-ppm surface methane operational standard in Section IV.3.d of this permit (40 CFR 63.1958(d)) must monitor surface concentrations of methane according to the procedures in Section V.5 of this permit (40 CFR 63.1960(c)) and the instrument specifications in Section V.6 of this permit (40 CFR 63.1960(d)). If you are complying with the 500-ppm surface methane operational standard in Section IV.3.d.1 (40 CFR 63.1958(d)(2)), for location, you must determine the latitude and longitude

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coordinates of each exceedance using an instrument with an accuracy of at least 4 meters and the coordinates must be in decimal degrees with at least five decimal places. In the semi-annual report in Section IX.1 of this permit (40 CFR 63.1981(h)), you must report the location of each exceedance of the 500-ppm methane concentration as provided in Section IV.3.d of this permit (40 CFR 63.1958(d)) and the concentration recorded at each location for which an exceedance was recorded in the previous month. Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

40 CFR 63.1961(f)

7. The monitoring requirements of Sections VI.1 through 5 of this permit (40 CFR 63.1961 (a), (b), (c), (d), and (g)) apply at all times the affected source is operating, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to complete monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable. Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with the temperature and nitrogen or oxygen operational standards in Sections IV.3.c.1, d.1, and e.1 of this permit (40 CFR 63.1958(c)(1), (d)(2), and (e)(1)), the standards apply at all times.

40 CFR 63.1961(h)

Landfill Methane Rule (LMR) and 40 CFR 60, Subpart OOO Requirements

8. The owner or operator must conduct an annual source test for any gas control device(s) subject to the requirements of sections IV.12.a of this permit (17 CCR 95464(b)(2)(A)) using the test methods identified in Section IV.14.f of this permit (17 CCR 95471(f)). An initial source test must be conducted within 180 days of

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initial start-up of the gas collection and control system. Each succeeding complete annual source test must be conducted no later than 45 days after the anniversary date of the initial source test.

a. If a gas control device remains in compliance after three consecutive source tests the owner or operator may conduct the source test every three years. If a subsequent source test shows the gas collection and control system is out of compliance the source testing frequency will return to annual.

17 CCR 95464(b)(4), federal authority 40 CFR Part 62.1100(b)(7)

- 9. Any owner or operator of a MSW landfill with a gas collection and control system must conduct instantaneous and integrated surface monitoring of the landfill surface quarterly using the procedures specified in section IV.14 of this permit (17 CCR 95471(c)).
 - a. Instantaneous Surface Monitoring: Any reading exceeding the limit specified in section IV.16.a of this permit (17 CCR 95465(a)(1)) must be recorded as an exceedance and the following actions must be taken:
 - i. The owner or operator must record the date, location, and value of each exceedance, along with re-test dates and results. The location of each exceedance must be clearly marked and identified on a topographic map of the MSW landfill, drawn to scale with the location of both the grids and the gas collection system clearly identified.
 - ii. Corrective action must be taken by the owner or operator such as, but not limited to, cover maintenance or repair, or well vacuum adjustments and the location must be re-monitored within ten calendar days of a measured exceedance.
 - 1. If the re-monitoring of the location shows a second exceedance, additional corrective action must be taken and the location must be re-monitored again no later than 10 calendar days after the second exceedance.
 - 2. If the re-monitoring shows a third exceedance, the owner or owner or operator must install a new or replacement well as determined to achieve compliance no later than 120 calendar days after detecting the third exceedance, or it is a violation of section 17 CCR 95460-95476.

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- iii. Any closed or inactive MSW landfill, or any closed or inactive areas on an active MSW landfill that has no monitored exceedances of the limit specified in section IV.16.a of this permit (17 CCR 95465(a)(1)) after four consecutive quarterly monitoring periods may monitor annually. Any exceedances of the limit specified in section IV.16.a of this permit (17 CCR 95465(a)(1)) detected during the annual monitoring that can not be remediated within10 calendar days will result in a return to quarterly monitoring of the landfill.
- iv. Any exceedances of the limit specified in section IV.16.a of this permit (17 CCR 95465(a)(1)) detected during any compliance inspections will result in a return to quarterly monitoring of the landfill.
- b Integrated Surface Monitoring: Any reading exceeding the limit specified in section IV.16.b of this permit (17 CCR 95465(a)(2)) must be recorded as an exceedance and the following actions must be taken:
 - i. The owner or operator must record the average surface concentration measured as methane for each grid along with re-test dates and results. The location of the grids and the gas collection system must be clearly marked and identified on a topographic map of the MSW landfill drawn to scale.
 - ii. Within 10 calendar days of a measured exceedance, corrective action must be taken by the owner or operator such as, but not limited to, cover maintenance or repair, or well vacuum adjustments and the grid must be re-monitored.
 - iii. If the re-monitoring of the grid shows a second exceedance, additional corrective action must be taken and the location must be re-monitored again no later than 10 calendar days after the second exceedance.
 - iv. If the re-monitoring in section VI.9.b.iii (17 CCR 95469(a)(2)(B)1). shows a third exceedance, the owner or operator must install a new or replacement well as determined to achieve compliance no later than 120 calendar days after detecting the third exceedance, or it is a violation of 17 CCR 95460 95476.

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- c. Any closed or inactive MSW landfill, or any closed or inactive areas on an active MSW landfill that has no monitored exceedances of the limit specified in section IV.16.b of this permit (17 CCR 95465(a)(2)) after 4 consecutive quarterly monitoring periods may monitor annually. Any exceedances of the limits specified in section IV.16.b of this permit (17 CCR 95465(a)(2)) detected during the annual monitoring that can not be remediated within 10 calendar days will result in a return to quarterly monitoring of the landfill.
- d. Any exceedances of the limits specified in section IV.16.b of this permit (95465(a)(2)) detected during any compliance inspections will result in a return to quarterly monitoring of the landfill.

17 CCR 95469(a), federal authority 40 CFR Part 62.1100(b)(7)

- 10. Gas Control System Equipment Monitoring: The owner or operator must monitor the gas control system using the following procedures:
 - a. For enclosed flares the following equipment must be installed, calibrated, maintained, and operated according to the manufacturer's specifications:
 - i. A temperature monitoring device equipped with a continuous recorder which has an accuracy of plus or minus (±) 1 percent of the temperature being measured expressed in degrees Celsius or Fahrenheit.
 - ii. At least one gas flow rate measuring device which must record the flow to the control device(s) at least every 15 minutes.
 - b. Components containing landfill gas and under positive pressure must be monitored quarterly for leaks. Any component leak must be tagged and repaired within 10 calendar days, or it is a violation.

17 CCR 95469(b)(1) and (b)(3), federal authority 40 CFR Part 62.1100(b)(7)

- 11. Wellhead Monitoring: The owner or operator must monitor each individual wellhead monthly to determine the gauge pressure. If there is any positive pressure reading other than as provided in sections IV.14 (17 CCR 95464(d)) and IV.15 (95464(e)), the owner or operator must take the following actions:
 - a. Initiate corrective action within five calendar days of the positive pressure measurement.
 - b. If the problem cannot be corrected within 15 days of the date the positive

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pressure was first measured, the owner or operator must initiate further action, including, but not limited to, any necessary expansion of the gas collection system, to mitigate any positive pressure readings.

c. Corrective actions, including any expansion of the gas collection and control system, must be completed and any new wells must be operating within 120 days of the date the positive pressure was first measured, or it is a violation.

17 CCR 95469(c), federal authority 40 CFR Part 62.1100(b)(7)

- 12. The owner or operator must install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as follows:
 - a. The nitrogen level must be determined using EPA Method 3C of appendix A–2 of 40 CFR part 60, unless an alternative test method is established as allowed by 40 CFR 62.16724(d)(2).
 - b. Unless an alternative test method is established as allowed by 40 CFR 62.16724(d)(2), the oxygen level must be determined by an oxygen meter using EPA Method 3A of appendix A–7 of 40 CFR part 60, EPA Method 3C of appendix A–7 of 40 CFR part 60, or ASTM D6522–11. Determine the oxygen level by an oxygen meter using EPA Method 3A, 3C, or ASTM D6522–11 (if sample location is prior to combustion) except that:
 - i. The span must be set between 10- and 12 percent oxygen;
 - ii. A data recorder is not required;
 - iii. Only two calibration gases are required, a zero and span;
 - iv. A calibration error check is not required;
 - v. The allowable sample bias, zero drift, and calibration drift are ±10 percent.
 - b. A portable gas composition analyzer may be used to monitor the oxygen levels provided:
 - i. The analyzer is calibrated; and
 - ii. The analyzer meets all quality assurance and quality control requirements for EPA Method 3A or ASTM D6522–11.

Additionally, the owner or operator must monitor temperature of the landfill gas on a monthly basis as provided in section V.8 of this permit (40 CFR

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62.16720(a)(4)). The temperature measuring device must be calibrated annually using the procedure in 40 CFR part 60, appendix A–1, EPA Method 2, section 10.3.

40 CFR 62.16722(a)(2) and (3)

Landfill Methane Rule (LMR) and 40 CFR 60, Subpart OOO Requirements

- 13. Hydrocarbon Detector Specifications: Any instrument used for the measurement of methane must be a gas detector or other equivalent instrument approved by the APCD that meets the calibration, specifications, and performance criteria of EPA Reference Method 21, Determination of Volatile Organic Compound Leaks, 40 CFR Part 60, Appendix A (as last amended 65 Fed.Reg. 61744 (October 17, 2000)), which is incorporated by reference herein, except for the following:
 - a. "Methane" replaces all references to volatile organic compounds (VOC).
 - b. The calibration gas shall be methane.

17 CCR 95471(a), federal authority 40 CFR Part 62.1100(b)(7)

- 14. Surface Emissions Monitoring Procedures: The owner or operator must measure the landfill surface concentration of methane using a hydrocarbon detector meeting the requirements of section IV.13 of this permit (95471(a)). The landfill surface must be inspected using the following procedures:
 - a. Monitoring Area: The entire landfill surface must be divided into individually identified 50,000 square foot grids. The grids must be used for both instantaneous and integrated surface emissions monitoring.
 - i. Testing must be performed by holding the hydrocarbon detector's probe within 3 inches of the landfill surface while traversing the grid.
 - ii. The walking pattern must be no more than a 25-foot spacing interval and must traverse each monitoring grid.
 - A. If the owner or operator has no exceedances of the limits specified in section IV.16 of this permit (95465) after any four consecutive quarterly monitoring periods, the walking pattern spacing may be increased to 100-foot intervals. The owner or operator must return to a 25-foot spacing interval upon any exceedances of the limits specified in section IV.16 of this

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permit (95465) that cannot be remediated within 10 calendar days or upon any exceedances detected during a compliance inspection.

- B. If an owner or operator of a MSW landfill can demonstrate that in the past three years before the effective date of this subarticle that there were no measured exceedances of the limit specified in section IV.16.a of this permit (95465(a)(1)) by annual or quarterly monitoring, the owner or operator may increase the walking pattern spacing to 100-foot intervals. The owner or operator must return to a 25-foot spacing interval upon any exceedances of the limits specified in section IV.16 of this permit (95465) that cannot be remediated within 10 calendar days or upon any exceedances detected during a compliance inspection.
- iii. Surface testing must be terminated when the average wind speed exceeds five miles per hour or the instantaneous wind speed exceeds 10 miles per hour. The APCD may approve alternatives to this wind speed surface testing termination for MSW landfills consistently having measured winds in excess of these specified limits. Average wind speed must be determined on a 15-minute average using an on-site anemometer with a continuous recorder for the entire duration of the monitoring event.
- iv. Surface emissions testing must be conducted only when there has been no measurable precipitation in the preceding 72 hours.
- b. Instantaneous Surface Emissions Monitoring Procedures.
 - The owner or operator must record any instantaneous surface readings of methane 200 ppmv or greater, other than nonrepeatable, momentary readings.
 - ii. Surface areas of the MSW landfill that exceed a methane concentration limit of 500 ppmv must be marked and remediated pursuant to section IV.9.a of this permit (95469(a)(1)).
 - iii. The wind speed must be recorded during the sampling period.

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- iv. The landfill surface areas with cover penetrations, distressed vegetation, cracks or seeps must also be inspected visually and with a hydrocarbon detector.
- c. Integrated Surface Emissions Monitoring Procedures.
 - Integrated surface readings must be recorded and then averaged for each grid.
 - ii. Individual monitoring grids that exceed an average methane concentration of 25 ppmv must be identified and remediated pursuant to section IV.9.b of this permit (95469(a)(2)).
 - iii. The wind speed must be recorded during the sampling period.
- d. Gas Collection and Control System Leak Inspection Procedures. Leaks must be measured using a hydrocarbon detector meeting the requirements of section IV.13 of this permit (95471(a)).
- e. Determination of Expected Gas Generation Flow Rate. The expected gas generation flow rate must be determined as prescribed in the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories, Chapter 3, which is incorporated by reference herein, using a recovery rate of 75 percent.
- f. Control Device Destruction Efficiency Determination. The following methods of analysis must be used to determine the efficiency of the control device in reducing methane:
 - i. Enclosed Combustors: One of the following test methods, all of which are incorporated by reference herein (and all as promulgated in 40 CFR, Part 60, Appendix A, as last amended 65 Fed.Reg. 61744 (October 17, 2000) at the pages cited below must be used to determine the efficiency of the control device in reducing methane by at least 99 percent, or in reducing the outlet methane concentration for lean burn engines to less than 3,000 ppmv, dry basis, corrected to 15 percent oxygen:
 - U.S. EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions By Gas Chromatography (65 Fed.Reg. at 62007);
 - U.S. EPA Reference Method 25, Determination of Total Gaseous

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Nonmethane Organic Emissions as Carbon (65 Fed.Reg. at 62044);

U.S. EPA Reference Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer (65 Fed.Reg. at 62062); or

U.S. EPA Reference Method 25C, Determination of Nonmethane Organic Compounds in Landfill Gases (65 Fed.Reg. at 62066).

The equation in 17 CCR 95471(f)(1) must be used to calculate destruction efficiency.

- g. Determination of Gauge Pressure. Gauge pressure must be determined using a hand-held manometer, magnahelic gauge, or other pressure measuring device approved by the APCD. The device must be calibrated and operated in accordance with the manufacture's specifications.
- h. Alternative Test Methods. Alternative test methods may be used provided that they are approved in writing by the APCD.
 17 CCR 95471(b) through (h), federal authority 40 CFR Part 62.1100(b)(7)
- 15. The Permittee shall source test the flare stack annually upon receiving a source test plan approval from the APCD. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 25625A-5, Condition XII.2.
- 16. The Permittee shall meet the monitoring provisions in 40 CFR 63.1961. ICAPCD Rule 900.F.2.b, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/2018, PTO 2625B-5, Condition XII.3.

Particulate Monitoring Program

17. The Permittee shall maintain the current ambient particulate and meteorological monitoring at the landfill site. The particulate monitoring program may be revised accordingly to provide for the necessary changes required to ensure accuracy. ICAPCD Rule 900.F.2.e, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised

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6/26/01; ICAPCD Rule 207, New Source Review, revised 09/11/18, PTO 2625B-5, Condition XI.1.

VII. Compliance Provisions

40 CFR 63, Subpart AAAA Requirements

- 1. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the following:
 - a. A deviation occurs when the control device operating parameter boundaries described in 40 CFR 63.1983(c)(1) are exceeded.

40 CFR 63.1965(a)

- 2. A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three15-minute monitoring periods within the hour.
 - a. Averages are calculated according to section VIII.1.b.iii of this permit (40 CFR 63.1983(b)(2)(i)) for average combustion temperature and section VIII.1.c.i of this permit (40 CFR 63.1983(c)(1)(i)) for 3-hour average combustion temperature for enclosed combustors, except that the data collected during the event listed below are not to be included in any average computed.
 - i. Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.
 - ii. Sartups.
 - iii. Shutdowns.
 - iv. Malfunctions.

40 CFR 63.1965(b) and 40 CFR 63.1975

VIII. Recordkeeping Requirements

40 CFR 63, Subpart AAAA Requirements

1. The owner or operator must keep records as specified in 40 CFR 63, subpart AAAA.

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The owner or operator must also keep records as specified in the general provisions of 40 CFR part 63, subpart AAAA as shown in Table 1.

- a. The owner or operator of an MSW landfill must keep for at least 5 years upto-date, readily accessible, on-site records of the design capacity report that triggered 40 CFR 63.1959(b), 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.
- b. The 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 listed below 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.
 - i. The maximum expected gas generation flow rate as calculated in 40 CFR 63.1960(a)(1).
 - ii. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 63.1962(a)(1) and (2).
 - iii. The average temperature measured at least every 15 minutes and averaged over the same time period of the performance test.
 - iv. The percent reduction of NMOC determined as specified in section IV.4 of this permit (40 CFR 63.1959(b)(2)(iii)(B)) achieved by the control device.
- c. The owner or operator of a controlled landfill must keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in Section VI of this permit (40 CFR 63.1961) as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

The following constitute exceedances that must be recorded and reported under section IX.1of this permit (40 CFR 63.1981(h)):

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- i. For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million Btu per hour) or greater, all 3-hour periods of operation during which the average temperature was more than 28 degrees Celsius (82 degrees Fahrenheit) below the average combustion temperature during the most recent performance test at which compliance with section IV.5 of this permit (40 CFR 63.1959(b)(2)(iii)) was determined.
- d. The owner or operator of a landfill must keep records of periods when the collection system or control device is not operating.
- e. The owner or operator must keep records of the date, time, and duration of each startup and/or shutdown period, recording the periods when the affected source was subject to the standard applicable to startup and shutdown.
- f. The owner or operator must demonstrate compliance with the operational standard in Section IV.3.e (40 CFR 63.1958(e)(1)), in the event that an affected unit fails to meet an applicable standard, record the information below:
 - i. For each failure record the date, time and duration of each failure and the cause of such events (including unknown cause, if applicable).
 - ii. For each failure to meet an applicable standard; record and retain a list of the affected sources or equipment.
 - iii. Record actions taken to minimize emissions in accordance with the general duty of section IV.1 of this permit (40 CFR 63.1955(c)) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
- g. The owner or operator must keep the written procedures required by 40 CFR 63.8(d)(2) on record for the life of the affected source or until the affected source is no longer subject to the provisions of 40 CFR 63, Subpart AAAA, to be made available for inspection, upon request, by the APCD. If the performance evaluation plan is revised, you must keep previous (*i.e.*, superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the APCD, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under 40 CFR 63.8(d)(2).

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- h. The owner or operator must keep for the life of the collection system an upto-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
 - i. The owner or operator must keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under Section V.5 of this permit (40 CFR 63.1960(b)).
 - ii. The owner or operator must keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR 63.1962(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR 63.1962(a)(3)(ii).
- i. The owner or operator subject to the provisions of this subpart must keep for at least 5 years up-to-date, readily accessible records of the following:
 - i. All collection and control system exceedances of the operational standards in Section IV.3 of this permit (40 CFR 63.1958), the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.
 - ii. Each owner or operator must keep records of each wellhead temperature monitoring value of greater than 68.2 degrees Celsius (145 degrees Fahrenheit), except:
 - A. Each owner or operator required to conduct the enhanced monitoring provisions in Section VI.3 of this permit (40 CFR 63.1961(a)(5)), must also keep records of all enhanced monitoring activities.
 - B. Each owner or operator required to submit the *24-hour high* temperature report in Section IX.4 of this permit (40 CFR 63.1981(k)), must also keep a record of the email transmission.
 - iii. For any root cause analysis for which corrective actions are required in Section V.2.a.i of this permit (40 CFR 63.1960(a)(3)(i)(A)) or Section V.3.a.i of this permit (40 CFR 63.1960(a)(4)(i)(A)), keep a record of the root cause analysis conducted, including a description of the recommended corrective action(s) taken, and the date(s) the

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corrective action(s) were completed.

- iv. For any root cause analysis for which corrective actions are required in Section V.2.a.ii of this permit 40 CFR 63.1960(a)(3)(i)(B) or Section V.3.a.ii of this permit (40CFR63.1960(a)(4)(i)(B), keep a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.
- v. For any root cause analysis for which corrective actions are required in Section V.2.a.iii of this permit (40 CFR 63.1960(a)(3)(i)(C)) or Section V.3.a.iii of this permit (40 CFR 63.1960(a)(4)(i)(C)), keep a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates, and a copy of any comments or final approval on the corrective action analysis or schedule from the APCD.
- j. The owner or operator must keep for at least 5 years up-to-date, readily accessible records of all collection and control system monitoring data for parameters measured in Section VI.1 through 4 of this permit (40 CFR 63.1961(a)(1) through (6)).
- k. The owner or operator seeks to demonstrate compliance with the operational standard for temperature in Section V.2.a.i of this permit 40 CFR 63.1958(c)(1), the owner or operator must keep the following records.
 - i. Records of the landfill gas temperature on a monthly basis as monitored in Section V.3 of this permit (40 CFR 63.1960(a)(4)).

40 CFR 63.1983

Landfill Methane Rule (LMR) and 40 CFR 60, Subpart OOO Requirements

- 2. An owner or operator must maintain the following records, whether in paper, electronic, or other format, for at least five years:
 - a. All gas collection system downtime exceeding five calendar days, including individual well shutdown and disconnection times, and the reason for the downtime.

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- b. All gas control system downtime in excess of one hour, the reason for the downtime, and the length of time the gas control system was shutdown.
- c. Expected gas generation flow rate calculated pursuant to section IV.14.e of this permit (17 CCR 95471(e)).
- d. Records of all instantaneous surface readings of 200 ppmv or greater; all exceedances of the limits in sections IV.11.b or IV.16 of this permit (17 CCR 95464(b)(1)(B) or 95465), including the location of the leak (or affected grid), leak concentration in ppmv, date and time of measurement, the action taken to repair the leak, date of repair, any required re-monitoring and the re-monitored concentration in ppmv, and wind speed during surface sampling; and the installation date and location of each well installed as part of a gas collection system expansion.
- e. Records of any positive wellhead gauge pressure measurements, the date of the measurements, the well identification number, and the corrective action taken.
- f. Annual solid waste acceptance rate and the current amount of waste-inplace.
- g. Records of the nature, location, amount, and date of deposition of nondegradable waste for any landfill areas excluded from the collection system.
- h. Results of any source tests conducted pursuant to section VI.8 of this permit (17 CCR 95464(b)(4)).
- i. Records describing the mitigation measures taken to prevent the release of methane or other emissions into the atmosphere:
 - When solid waste was brought to the surface during the installation or preparation of wells, piping, or other equipment;
 - 2. During repairs or the temporary shutdown of gas collection system components; or,
 - When solid waste was excavated and moved.
- j. Records of any construction activities pursuant to section 17 CCR 95466. The records must contain the following information:
 - A description of the actions being taken, the areas of the MSW landfill that will be affected by these actions, the reason the actions are required, and any landfill gas collection system components that will be affected by these actions.
 - 2. Construction start and finish dates, projected equipment installation dates, and projected shut down times for individual gas collection

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system components.

- 3. A description of the mitigation measures taken to minimize methane emissions and other potential air quality impacts.
- k. Records of the equipment operating parameters specified to be monitored under section VI.10 of this permit (17 CCR 95469(b)(1)) as well as records for periods of operation during which the parameter boundaries established during the most recent source test are exceeded. The records must include the following information:
 - For enclosed flares, all 3-hour periods of operation during which the average temperature difference was more than 28 degrees Celsius (or 50 degrees Fahrenheit) below the average combustion temperature during the most recent source test at which compliance with sections IV.12 of this permit (17 CCR 95464(b)(2)) was determined.

17 CCR 95470(a)(1), federal authority 40 CFR Part 62.1100(b)(7)

- 3. The owner or operator must maintain the following records, whether in paper, electronic, or other format, for the life of each gas control device, as measured during the initial source test or compliance determination:
 - a. The control device vendor specifications.
 - b. The expected gas generation flow rate as calculated pursuant to section IV.14.e of this permit (17 CCR 95471(e)).
 - c. The percent reduction of methane achieved by the control device determined pursuant to section IV.14.f of this permit (17 CCR 95471(f)).

17 CCR 95470(a)(2), federal authority 40 CFR Part 62.1100(b)(7)

4. Record Storage: The owner or operator must maintain copies of the records and reports required by this permit and provide them to the APCD within five business days upon request. Records and reports must be kept at a location within the State of California.

17 CCR 95470(a)(3), federal authority 40 CFR Part 62.1100(b)(7)

- 5. Closure Notification: Any owner or operator of a MSW landfill which has ceased accepting waste must submit a Closure Notification to the APCD within 30 days of waste acceptance cessation.
 - a. The Closure Notification must include the last day solid waste was accepted, the anticipated closure date of the MSW landfill, and the estimated waste-in-place.

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b. The APCD may request additional information as necessary to verify that permanent closure has taken place in accordance with the requirements of any applicable federal, State, local, or tribal statues, regulations, and ordinances in effect at the time of closure.

17 CCR 95470(b)(1), federal authority 40 CFR Part 62.1100(b)(7)

- **6.** Equipment Removal Report: A gas collection and control system Equipment Removal Report must be submitted to the APCD 30 days prior to well capping, removal or cessation of operation of the gas collection, treatment, or control system equipment. The report must contain all of the following information:
 - A copy of the Closure Notification submitted pursuant to section 17 CCR 95470(b)(1).
 - b. A copy of the initial source test report or other documentation demonstrating that the gas collection and control system has been installed and operated for a minimum of 15 years, unless the owner or operator can demonstrate to the satisfaction of the APCD that due to declining methane rates the landfill is unable to operate the gas collection and control system for a 15-year period.
 - Surface emissions monitoring results needed to verify that landfill surface methane concentration measurements do not exceed the limits specified in section IV.16 of this permit (17 CCR 95465).

17 CCR 95470(b)(2), federal authority 40 CFR Part 62.1100(b)(7)

- 7. The owner or operator of a controlled landfill must keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters as follows:
 - a. The owner or operator must also keep records of each wellhead temperature monitoring value of 68.2 degrees Celsius (145 degrees Fahrenheit) or above, each wellhead nitrogen level at or above 20 percent, and each wellhead oxygen level at or above 5 percent.
 - b. For any root cause analysis for which corrective actions are required in 40 CFR 62.16720(a)(3)(iii) or 40 CFR 62.16720(a)(4)(iii), keep a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates, and a copy of any comments or final approval on the corrective action analysis or schedule from the regulatory agency.

40 CFR 62.16726(e)(2) and (5)

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Fugitive Dust Observation

- 8. The Permittee shall maintain records of all visible emissions observation conducted. The Visible fugitive emission form (Attachment B) for EPA Method 22 shall be used to record all visible inspections. Additionally, the following records shall be required:
 - a. All EPA Method 22 and Method 9 observations shall be logged, and shall include: name of observer, ii.) date and time of observation, iii.) unit ID number, and iv.) results of VE observation.
 - b. For each emissions point where corrective action is required, i.) the nature of visible emissions, ii) description of corrective actions taken to abate visible emissions, and iii.) date and time visible emissions were abated.
 - c. When EPA Method 9 is required: i) all visible emission observations conducted by a certified opacity reader, and ii) name of the person conducting the inspection and measurement, or monitoring.

ICAPCD Rule 900.F.2.f, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 6/26/01; ICAPCD Rule 207, New Source Review, revised 09/11/18.

Other Recordkeeping

- 9. When applicable, maintain onsite all records pertaining to LFG flow rate and emission rates. These records shall be made available to the APCD upon request. ICAPCD Rule 900.F.2.f, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 6/26/01; ICAPCD Rule 207, New Source Review, revised 09/11/18, PTO 2625B-5, Condition XIII.3.
- 10. Maintain onsite for 3 years all records of fugitive dust control applications (chemical suppressants). A dust control plan for normal watering activities shall be made available to the APCD. These records shall be made available to the APCD upon request. ICAPCD Rule 900.F.2.f, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 6/26/01; ICAPCD Rule 207, New Source Review, revised 09/11/18, PTO 2625B-5, Condition XIII.4.
- 11. Permittee shall maintain and make available records to verify daily limits have not been exceeded. ICAPCD Rule 900.F.2.f, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of

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1990, revised 6/26/01; ICAPCD Rule 207, New Source Review, revised 09/11/18, PTO 2625B-5, Condition XIII.8.

IX. Reporting

40 CFR 63, Subpart AAAA Requirements

- 1. The owner or operator of a landfill seeking to comply with Section IV.4 of this permit (40 CFR 63.1959(b)(2)) using an active collection system designed in accordance with section IV.4 of this permit (40 CFR 63.1959(b)(2)(ii)) must submit to the APCD semi-annual reports. Beginning no later than September 27, 2021, the owner or operator must submit the report, following the procedure specified in Section IX.5 of this permit (40 CFR 63.1981(I)). The initial report must be submitted within 180 days of installation and startup of the collection and control system and must include the initial performance test report required under 40 CFR 63.7 of subpart A, as applicable. In the initial report, the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in lieu of the performance test report if the report has been previously submitted to the EPA's CDX. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 63.1983(c). The semiannual reports must contain the following information as required by Section IX.1.a through f of this permit (40 CFR 63.1981(h)(1) through (8)) as applicable.
 - a. Number of times that applicable parameters monitored under Section IV.3.b c and d of this permit (40 CFR 63.1958(b), (c), and (d)) were exceeded and when the gas collection and control system was not operating under Section IV.3.e of this permit (40 CFR 63.1958(e)), including periods of SSM. For each instance, report the date, time, and duration of each exceedance.
 - i. Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with the operational standard for temperature in Section IV.3.c.1 of this permit (40 CFR 63.1958(c)(1)), provide a statement of the wellhead operational standard for temperature and oxygen you are complying with for the period covered by the report. Indicate the number of times each of those parameters monitored under Section VI.2 of this permit (40 CFR 63.1961(a)(4)) were exceeded. For each instance, report the date, time, and duration of each exceedance.
 - b. Description and duration of all periods when the control device or treatment system was not operating and length of time the control device or treatment system was not operating.

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- c. All periods when the collection system was not operating.
- d. The location of each exceedance of the 500-ppm methane concentration as provided in Section IV.3.d of this permit (40 CFR 63.1958(d)) and the concentration recorded at each location for which an exceedance was recorded in the previous month. Beginning no later than September 27, 2021, for location, you record the latitude and longitude coordinates of each exceedance using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places.
- e. The date of installation and the location of each well or collection system expansion added pursuant to Section V.2 and 3, 4 and 5.d of this permit (40 CFR 63.1960(a)(3) and (4), (b), and (c)(4)).
- f. For any corrective action analysis for which corrective actions are required in Section V.2.a of this permit (40 CFR 63.1960(a)(3)(i)) that take more than 60 days to correct the exceedance, the root cause analysis conducted, including a description of the recommended corrective action(s), the date for corrective action(s) already completed following the positive pressure or high temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

40 CFR 63.1981(h)

- 2. The owner or operator seeking to comply with Section IV.5 of this permit (40 CFR 63.1959(b)(2)(iii)) must include the following information with the initial performance test report required under 40 CFR 63.7 of subpart A:
 - A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;
 - The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;
 - The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;
 - d. The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and

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the calculations of gas generation flow rate for each excluded area;

- e. The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and
- f. The provisions for the control of off-site migration.

40 CFR 63.1981(i)

- 3. The owner or operator must submit information regarding corrective actions according to the following:
 - a. For corrective action that is required according to Section V.2 or 3 of this permit (40 CFR 63.1960(a)(3) or (4)) and is not completed within 60 days after the initial exceedance, you must submit a notification to the APCD as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature exceedance.
 - b. For corrective action that is required according to Section V.2 or 3 of this permit (40 CFR 63.1960(a)(3) or (4)) and is expected to take longer than 120 days after the initial exceedance to complete, the owner or operator must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the APCD as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature monitoring value of 62.8 degrees Celsius (145 degrees Fahrenheit) or above. The APCD must approve the plan for corrective action and the corresponding timeline.

40 CFR 63.1981(j)

4. The owner or operator must demonstrate compliance with the operational standard for temperature in Section IV.3.c.1 of this permit (40 CFR 63.1958(c)(1)) and a landfill gas temperature measured at either the wellhead or at any point in the well is greater than or equal to 76.7 degrees Celsius (170 degrees Fahrenheit) and the carbon monoxide concentration measured is greater than or equal to 1,000 ppmv, then the owner or operator must report the date, time, well identifier, temperature and carbon monoxide reading via email to the APCD within 24 hours of the measurement unless a higher operating temperature value has been approved by the APCD for the well under this subpart or under 40 CFR part 60, subpart WWW; 40 CFR part 60, subpart XXX; or a Federal plan or EPA approved and effective state plan or tribal plan that implements either 40 CFR part 60, subpart Cc or 40 CFR part 60, subpart Cf

40 CFR 63.1981(k)

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- 5. The owner or operator must submit reports electronically as follows:
 - a. Within 60 days after the date of completing each performance test required by this permit, the owner or operator must submit the results of the performance test following the procedures specified in <u>paragraphs</u> (a)(i) through (iii).
 - i. Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test. Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's CDX (https://cdx.epa.gov/). The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.
 - ii. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.
 - iii. Confidential business information (CBI). If the owner or operator claims some of the information submitted is CBI, the owner or operator must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/ CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX.
 - The owner or operator required to submit reports following the procedure specified in this paragraph must submit reports to the EPA via CEDRI.
 CEDRI can be accessed through the EPA's CDX. The owner or operator must use the appropriate electronic report in CEDRI for this subpart or an

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alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri). Once the spreadsheet template upload/forms for the reports have been available in CEDRI for 90 days, the owner or operator must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. The NMOC emission rate reports, semi-annual reports, and bioreactor 40-percent moisture reports should be electronically reported as a spreadsheet template upload/form to CEDRI. If the reporting forms specific to this subpart are not available in CEDRI at the time that the reports are due, the owner or operator must submit the reports to the APCD at the appropriate address listed in 40 CFR 63.13 of subpart A.

c. The owner or operator must also submit all reports electronically to the APCD at: thomasbrinkerhoff@co.imperial.ca.us or jesusramirez@co.imperial.ca.us

40 CFR 63.1981(I)

- 6. The owner or operator who has already been required to submit a design plan under 40 CFR 63.1981(d) must submit a revised design plan to the APCD for approval as follows:
 - a. At least 90 days before expanding operations to an area not covered by the previously approved design plan.
 - b. Prior to installing or expanding the gas collection system in a way that is not consistent with the design plan that was submitted to the APCD according to 40 CFR 63.181(d).

40 CFR 63.1981(e)

7. The owner or operator of a controlled landfill must submit a closure report to the APCD within 30 days of waste acceptance cessation. The APCD may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the APCD, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 63.9(b) of subpart A.

40 CFR 63.1981(f)

8. The owner or operator of a controlled landfill must submit an equipment

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removal report as provided in 40 CFR 60.757(e). The owner or operator of a controlled landfill must submit an equipment removal report to the APCD 30 days prior to removal or cessation of operation of the control equipment. The equipment removal report must contain all of the following items:

- a. A copy of the closure report submitted in accordance with Section IX.7 of this permit (40 CFR 63.1981(f));
- b. A copy of the initial performance test report demonstrating that the 15-year minimum control period has expired, or information that demonstrates that the gas collection and control system will be unable to operate for 15 years due to declining gas flows. In the equipment removal report, the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in lieu of the performance test report if the report has been previously submitted to the EPA's Central Data Exchange (CDX); and
- c. Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 Mg or greater of NMOC per year. If the NMOC emission rate reports have been previously submitted to the EPA's CDX, a statement that the NMOC emission rate reports have been submitted electronically and the dates that the reports were submitted to the EPA's CDX may be submitted in the equipment removal report in lieu of the NMOC emission rate reports.
- d. The APCD may request such additional information as may be necessary to verify that all of the conditions for removal in Section IV.2 of this permit (40 CFR 63.1957(b)) have been met.

40 CFR 63.1981(g)

Landfill Methane Rule (LMR) and 40 CFR 60, Subpart OOO Requirements

- 9. Annual Report: Any owner or operator subject to the requirements of this permit, except section 17 CCR 95463, must prepare an annual report for the period of January 1 through December 31 of each year. Each annual report must be submitted to the APCD by March 15 of the following year. The annual report must contain the following information:
 - a. The MSW landfill name, owner and operator, address, and solid waste information system (SWIS) identification number.
 - b. Total volume of landfill gas collected (reported in standard cubic feet).
 - c. Average composition of the landfill gas collected over the reporting period

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(reported in percent methane and percent carbon dioxide by volume).

- d. Gas control device type, year of installation, rating, fuel type, and total amount of landfill gas combusted in each control device.
- e. The date that the gas collection and control system was installed and in full operation.
- f. The percent methane destruction efficiency of each gas control device(s).
- g. Type and amount of supplemental fuels burned with the landfill gas in each device.
- h. Total volume of landfill gas shipped off-site, the composition of the landfill gas collected (reported in percent methane and percent carbon dioxide by volume), and the recipient of the gas.
- i. Most recent topographic map of the site showing the areas with final cover and a geomembrane and the areas with final cover without a geomembrane with corresponding percentages over the landfill surface.
- j. The information required by sections VIII.2.a b, c, d, e, f, h and k of this permit [95470(a)(1)(A), 95470(a)(1)(B), 95470(a)(1)(C), 95470(a)(1)(D), 95470(a)(1)(E), and 95470(a)(1)(F), 95470(a)(1)(H), and 95470(a)(1)(K)].

17 CCR 95470(b)(3), federal authority 40 CFR Part 62.1100(b)(7)

10. Any report, or information submitted pursuant to this permit must contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, must state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

17 CCR 95470(b)(6), federal authority 40 CFR Part 62.1100(b)(7)

- 11. The owner or operator must submit a Corrective Action report according to paragraphs below. If complying with the operational provisions of 40 CFR 63.1958, 63.1960, and 63.1961 of this chapter, as allowed at 40 CFR 62.16716, 62.16720, and 62.16722, the owner or operator must follow the corrective action and the corresponding timeline reporting requirements in 40 CFR 63.1981(j) in lieu of paragraphs below.
 - a. For corrective action that is required according to 40 CFR 62.16720(a)(3)(iii) or 62.16720(a)(4)(iii) and is expected to take longer than 120 days after the initial exceedance to complete, you must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the APCD as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature monitoring value of 68.2 degrees Celsius (145 degrees Fahrenheit) or above. The APCD must

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approve the plan for corrective action and the corresponding timeline.

b. For corrective action that is required according to 40 CFR 62.16720(a)(3)(iii) or 40 CFR 62.16720(a)(4)(iii) and is not completed within 60 days after the initial exceedance, you must submit a notification to the APCD as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature exceedance.

40 CFR 62.16724(k)

Other Reporting Requirements

- 12. The Permittee shall report any deviation from requirements in this Title V Operating Permit, other than deviations reported to the APCD pursuant to the APCD Upset/Breakdown rule, to the APCD within 2 days of occurrence. The permittee shall use approved forms to report any deviations. ICAPCD Rule 900.F.2.g, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11.
- 13. The Permittee shall submit a written monitoring report to the APCD and USEPA every six months. The report shall identify any deviations from permit requirements, including those previously reported to the APCO. The Permittee shall submit one report postmarked by March 1 of each year that covers the period from July 1 through December 31 of the previous calendar year, and one report postmarked by September 1 that covers the period from January 1 through June 30 of each calendar year. All reports of a deviation from permit requirements shall include the probable cause of the deviation and any preventive or corrective action taken. The Permittee shall use APCD approved forms for the report regarding deviation from permit requirements and shall also include a written statement from the responsible official which certifies the truth, accuracy, and completeness of the report. When no deviations have occurred during the reporting period, such information shall be stated in the report. ICAPCD Rule 900.F.2.g, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11.
- 14. The Permittee shall submit a report to the APCD annually with the placement of LFG collectors and their connections to the flare if applicable. ICAPCD Rule 900.F.2.g, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 6/26/01; ICAPCD Rule 207, New Source Review, revised 09/11/18, PTO 25625A-5, Condition XIII.1.

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- 15. The Permittee shall submit the following information annually
 - a. LFG flow rate from passive or negative systems.
 - b. Heating value of the LFG on wet and dry bases at the flare station inlet.
 - c. Total diesel fuel consumption.
 - d. Total MSW weight received at the landfill.

ICAPCD Rule 900.F.2.g, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 6/26/01; ICAPCD Rule 207, New Source Review, revised 09/11/18, PTO 2625B-5, Condition XIII.5.

- 16. The Permittee shall submit the flare annual source test results to the APCO within 60 days of the test if applicable. ICAPCD Rule 900.F.2.g, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 6/26/01; ICAPCD Rule 207, New Source Review, revised 09/11/18, PTO 2625B-5, Condition XIII.6.
- 17. The Permittee shall submit a quarterly report containing particulate monitoring results, expressed as micrograms per cubic meter. ICAPCD Rule 900.F.2.g, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 6/26/01; ICAPCD Rule 207, New Source Review, revised 09/11/18, PTO 2625B-5, Condition XIII.7.

X. <u>Emergency Provisions</u>

- The Permittee shall notify the APCD of any upset conditions, breakdown or scheduled maintenance which cause a violation of emission limitations prescribed by APCD Rules and Regulations, or by State law. The APCD shall be notified as soon as reasonably possible but not later than two (2) hours after its detection. The completion of corrective measures or the shutdown of emitting equipment is required within 24 hours of occurrence of a breakdown condition. ICAPCD Rule 207, New Source Review, revised 09/11/18; PTO 2625B-5, Condition XIII.2.
- 2. The Permittee shall submit a written report to the APCD within ten days after a breakdown occurrence has been corrected. This report shall include: a) a statement that the occurrence has been corrected, together with the date of correction and proof of compliance; b) the reason(s) or cause(s) of the occurrence; c) a description of the corrective measures undertaken; and d) the type of emission and estimated quantity of the emissions caused by the occurrence. ICAPCD Rule 207, New Source Review, revised 09/11/18; PTO 2625B-5, Condition XIII.2.

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- 3. Within two weeks of an emergency event, the operator shall submit to the APCD a properly signed, contemporaneous log or other relevant evidence which demonstrates that: a) an emergency occurred; b) the Permittee can identify the cause(s) of the emergency; c) the facility was being properly operated at the time of the emergency; d) all steps were taken to minimize the emissions resulting from the emergency; and e) within two working days of the emergency event, the Permittee provided the APCD with a description of the emergency and any mitigation or corrective actions taken. ICAPCD Rule 900.F.2.I, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11.
- 4. In any enforcement proceeding, the Permittee has the burden of proof for establishing that an emergency occurred. ICAPCD Rule 900.F.2.I, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11.

XI. Compliance Certification

1. The Permittee shall submit compliance certification reports to the U.S.EPA, Director, Air Division, 75 Hawthorne Street, AIR-3, San Francisco, CA 94105 and the APCD every 12 months. These reports shall be postmarked by February 28th of each year and that covers the previous calendar year. The reports shall include the following requirements: a) identify the basis for each permit term or condition and a means of monitoring compliance with the term or condition; b) the compliance status and method(s) used to determine compliance for the current time period and over the entire reporting period, including whether compliance during the period was continuous or intermittent; and c) any additional inspection, monitoring, or entry requirement that may be promulgated pursuant to Sections 114(a) and 504(b) of the CAA. The permittee shall use APCD approved forms for the compliance certification and shall also include a written statement from the responsible official which certifies the truth, accuracy, and completeness of the report. ICAPCD Rule 900.F.2.n, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11.

XII. Risk Management Plan

1. This stationary source, as defined in 40 CFR Section 68.3, is subject to Part 68, the Accidental Release Prevention regulations. This stationary source shall

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certify compliance with the requirements of part 68 as part of the annual compliance certification. 40 CFR Part 70 or 71; 40 CFR Part 68.3, Risk Management Plan.

XIII. Right of Entry

- 1. The Regional APCD of United States Environmental Protection Agency (U.S. EPA), the APCD of the California Air Resources Board, the APCO, or their authorized representatives, upon the presentation of credentials, shall be permitted to enter upon the premises:
 - a. To inspect the stationary source, including equipment, work practices, operations, and emissions-related activity; and
 - b. To inspect and duplicate records required by this Operating Permit; and
 - c. To sample substances or monitor emissions from the source or other parameters to assure compliance with the Permit or applicable requirements. Monitoring of emissions can include source testing. ICAPCD Rule 900.F.2.j, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11; ICAPCD Rule 207, New Source Review, revised 09/11/18, PTO 2625B-5, Condition III.1

XIV. Severability

1. The provisions of this Operating Permit are severable and if any provisions of this Operating Permit are held invalid, the remainder of this Operating Permit shall not be affected thereby. ICAPCD Rule 900.F.2.m, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11.

XV. Permit Life

1. This Operating Permit shall become invalid five years from the date of issuance unless a timely and complete renewal application is submitted to the APCD. The permittee shall apply for renewal of this Operating Permit no earlier than 18 months and no later than 6 months before the expiration date of the current permit to operate. Upon submittal of a timely and complete renewal application, this

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Operating Permit shall remain in effect until the APCD issues or denies the renewal application. ICAPCD Rule 900.F.2.o, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11.

XVI. Payment of Fees

1. The Permittee shall remit the Title V annual fee to the APCD on a timely basis. Failure to remit fees on a timely basis shall result in forfeiture of this Operating Permit. Operation without a permit to operate subjects the source to potential enforcement action by the APCD and the U.S. EPA pursuant to section 502(a) of the Clean Air Act. ICAPCD Rule 900.F.2.p, Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal CAA Amendments of 1990, revised 12/20/11.

XVII. Offsets

1. The sum of nonattainment pollutant emissions (E) from all stationary vents exceeding 137 lbs/day shall be offset. Formula (1) shall be used to calculate the amount of emission offsets needed.

If $E_{\text{(measured)}} >= 137 \text{ lbs/day}$

(1) Offsets = $E_{\text{(measured)}} \times (1.2)$

.ICAPCD Rule 207, New Source Review, revised 09/11/18, PTO 2625B-5, Condition XVI.1 {District Only}.

2. ERCs totaling 10.88 tons of PM10 shall be relinquished to the APCD. The Permittee may offset with Agricultural ERCs at 10.88 tons of Agricultural PM10 ERCs annually until permit PM10 ERCs can be obtained. ICAPCD Rule 207, New Source Review, revised 09/11/18, PTO 2625B-5, Condition XVI.1 {District Only}.