

## Air Quality

### TIER I OPERATING PERMIT

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**Permittee** **Bannock County Solid Waste Department, Fort Hall Mine Road Landfill**

**Permit Number** **T1-2010.0155**

**Project ID** **60626**

**Facility ID** **005-00062**

**Facility Location** **1500 North Fort Hall Mine Road  
Pocatello, Idaho 83204**

#### Permit Authority

This permit (a) is issued according to the “Rules for the Control of Air Pollution in Idaho” (Rules), (IDAPA 58.01.01.300-386); (b) incorporates all applicable terms and conditions of prior air quality permits issued by the Department of Environmental Quality (DEQ) for the permitted source, unless the permittee emits toxic pollutants subject to state-only requirements pursuant to IDAPA 58.01.01.210, and the permittee elects not to incorporate those terms and conditions into this operating permit.

The permittee shall comply with the terms and conditions of this permit. The effective date of this permit is the date of signature by DEQ on the cover page.

**Date Issued** **DRAFT XX, 2013**

**Date Expires**

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**Robert Baldwin, Permit Writer**

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**Mike Simon, Stationary Source Manager**

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# 1. Acronyms, Units and Chemical Nomenclature

CFR	Code of Federal Regulations
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	CO <sub>2</sub> equivalent emissions
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
FHMRL	Fort Hall Mine Road Landfill
GHG	greenhouse gases
HAP	hazardous air pollutants
ICE	internal combustion engines
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
LFG	landfill gas
MACT	Maximum Achievable Control Technology
Mg	megagrams
Mg/yr	megagrams per year
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides
NESHAP	National Emission Standards for Hazardous Air Pollutants
NSPS	New Source Performance Standards
O&M	operation and maintenance
O <sub>2</sub>	oxygen
PC	permit condition
PM	particulate matter
PM <sub>2.5</sub>	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM <sub>10</sub>	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm	part per million
PTC	permit to construct
PTE	potential to emit
RICE	reciprocating internal combustion engines
<i>Rules</i>	<i>Rules for the Control of Air Pollution in Idaho</i>
SIP	State Implementation Plan
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	sulfur oxides
T/yr	tons per consecutive 12-calendar month period
T1	Tier I operating permit
TAP	toxic air pollutants
VOC	volatile organic compound

## 2. Permit Scope

### Purpose

- 2.1 This Tier I operating permit establishes requirements in accordance with the Idaho State Implementation Plan control strategy and the Rules.
- This permit is the initial Tier I operating permit for the Fort Hall Mine Road Landfill.
- 2.2 This Tier I operating permit incorporates the following permit:
- Permit to Construct No. P-2009.0146, issued April 6, 2010

### Regulated Sources

- 2.3 Table 2.1 lists all sources of regulated emissions in this permit.

**Table 2.1 Regulated Sources**

Permit Section	Source	Control Equipment
3	General operational conditions for the facility including but not limited to: roads paved and unpaved, dozing and grading activities, and applying daily cover	Reasonable controls prescribed in Facility-Wide conditions
4	Landfill with NMOC emissions rate less than 50 Mg/yr	No control equipment required until NMOC emissions $\geq$ 50 Mg/yr
5	Landfill with NMOC emissions rate greater than or equal 50 Mg/yr	NMOC capture and collection system; open flare or LFG-fired IC engine
6	Flare	None
7	IC Engine with generator	None

### 3. Facility-Wide Conditions

Table 3.1 contains a summary of requirements that apply generally to emissions units at the facility.

**Table 3.1 Applicable Requirements Summary**

Permit Conditions	Parameter	Limit / Standard Summary	Applicable Requirements Reference	Monitoring, Recordkeeping, and Reporting Requirements
3.1	Fugitive Dust	Reasonable control	IDAPA 58.01.01.650–651	3.2–3.4, 3.20, 3.25
3.5	Odors	Reasonable control	IDAPA 58.01.01.775–776	3.6, 3.20, 3.25
3.7	Visible Emissions	20% opacity for no more than 3 minutes in any 60-minute period	IDAPA 58.01.01.625	3.8, 3.9, 3.20, 3.25
3.10	Excess Emissions	Compliance with IDAPA 58.01.01.130-136	IDAPA 58.01.01.130–136	3.10–3.14, 3.20, 3.25
3.15	Open Burning	Compliance with IDAPA 58.01.01.600-617	IDAPA 58.01.01.600–616	3.20, 3.25
3.16	Asbestos	Compliance with 40 CFR 61, Subpart M	40 CFR 61, Subpart M	3.20, 3.25
3.17	Recycling and Emissions Reductions	Compliance with 40 CFR 82, Subpart F	40 CFR 82, Subpart F	3.20, 3.25
3.18, 0	NSPS General Provisions	Compliance with 40 CFR 60, Subpart A Compliance with 40 CFR 63, Subpart AAAAA	IDAPA 58.01.01.107.03	3.20, 3.25
3.20	Monitoring	Maintenance of required records	IDAPA 58.01.01.322.06	3.20
3.21	Testing	Compliance testing	IDAPA 58.01.01.157	3.20, 3.23, 3.24, 3.25
3.25	Reports and Certifications	Submittal of required reports, notifications, and certifications	IDAPA 58.01.01.322.08	3.25
3.26	Incorporation of Federal Requirements by Reference	Compliance with applicable federal requirements referenced	IDAPA 58.01.01.107	
3.27	Greenhouse Gases Emissions	GHG Mandatory Reporting Rule	40 CFR 98 subpart HH	3.27

#### Fugitive Dust

- 3.1 All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.  
[IDAPA 58.01.01.650-651, 3/30/07]
- 3.2 The permittee shall monitor and maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive emissions.  
[IDAPA 58.01.01.322.06, 07, 5/1/94]
- 3.3 The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the permittee’s assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.  
[IDAPA 58.01.01.322.06, 07, 5/1/94]

- 3.4 The permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

## Odors

- 3.5 The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.
- 3.6 The permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

[IDAPA 58.01.01.775-776 (state-only), 5/1/94]

[IDAPA 58.01.01.322.06, 07 (state-only), 5/1/94]

## Visible Emissions

- 3.7 The permittee shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, NO<sub>x</sub>, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.
- 3.8 The permittee shall conduct a monthly facility-wide inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions. Sources that are monitored using a continuous opacity monitoring system (COMS) are not required to comply with this permit condition. The inspection shall consist of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emission, the permittee shall either:
- a) take appropriate corrective action as expeditiously as practicable to eliminate the visible emissions. Within 24 hours of the initial see/no see evaluation and after the corrective action, the permittee shall conduct a see/no see evaluation of the emissions point in question. If the visible emissions are not eliminated, the permittee shall comply with b).
- or
- b) perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20%, as measured using Method 9, for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective actions and report the period or periods as an excess emission in the annual compliance certification and in accordance with IDAPA 58.01.01.130-136.

[PTC P-2009.0146, Permit Condition No. 6, 4/6/2010; IDAPA 58.01.01.625, 4/5/00]

[IDAPA 58.01.01.322.06, 5/1/94]

- 3.9 The permittee shall maintain records of the results of each visible emission inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

[IDAPA 58.01.01.322.07, 5/1/94]

## Excess Emissions

### *Excess Emissions - General*

- 3.10 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions. The provisions of IDAPA 58.01.01.130-136 shall govern in the event of conflicts between the excess emissions facility wide conditions (Permit Conditions 3.11 through 3.15) and the regulations of IDAPA 58.01.01.130-136.

During an excess emissions event, the permittee shall, with all practicable speed, initiate and complete appropriate and reasonable action to correct the conditions causing the excess emissions event; to reduce the frequency of occurrence of such events; to minimize the amount by which the emission standard is exceeded; and shall, as provided below or upon request of DEQ, submit a full report of such occurrence, including a statement of all known causes, and of the scheduling and nature of the actions to be taken.

**[PTC P-2009.0146, Permit Condition No. 39, 4/10/2010; IDAPA 58.01.01.132, 4/5/00]**

### *Excess Emissions - Startup, Shutdown, Scheduled Maintenance*

- 3.11 In all cases where startup, shutdown, or scheduled maintenance of any equipment or emission unit is expected to result or results in an excess emissions event, the permittee shall demonstrate compliance with IDAPA 58.01.01.133.01(a) through (d), including, but not limited to, the following:

- Prohibiting any scheduled startup, shutdown, or maintenance resulting in excess emissions shall occur during any period in which an Atmospheric Stagnation Advisory or a Wood Stove Curtailment Advisory has been declared by DEQ in the Pocatello area.
- Notifying DEQ of the excess emissions event as soon as reasonably possible, but no later than two hours prior to: the start of the event, unless the permittee demonstrates to DEQ's satisfaction that a shorter advance notice was necessary.
- Reporting and recording the information required pursuant to the excess emissions reporting and recordkeeping requirements (Permit Conditions 3.14 and 3.15) and IDAPA 58.01.01.135 and 136 for each excess emissions event due to startup, shutdown, or scheduled maintenance.

**[PTC P-2009.0146, Permit Condition No. 39, 4/6/2010; IDAPA 58.01.01.133, 4/11/06]**

### *Excess Emissions - Upset, Breakdown, or Safety Measures*

- 3.12 In all cases where upset or breakdown of equipment or an emissions unit, or the initiation of safety measures, results or may result in an excess emissions event, the permittee shall demonstrate compliance with IDAPA 58.01.01.134.01(a) and (b) and the following:

- Immediately undertake all appropriate measures to reduce and, to the extent possible, eliminate excess emissions resulting from the event and to minimize the impact of such excess emissions on the ambient air quality and public health.
- Notify DEQ of any upset, breakdown, or safety event that results in excess emissions. Such notification shall identify the time, specific location, equipment or emissions unit involved, and (to the extent known) the cause(s) of the occurrence. The notification shall be given as soon as reasonably possible, but no later than 24 hours after the event, unless the permittee demonstrates to DEQ's satisfaction that the longer reporting period was necessary.
- Report and record the information required pursuant to the excess emissions reporting and recordkeeping facility wide conditions (Permit Conditions 3.14 and 3.15) and IDAPA 58.01.01.135 and 136 for each excess emissions event caused by an upset, breakdown, or safety measure.
- During any period of excess emissions caused by upset, breakdown, or operation under facility safety measures, DEQ may require the permittee to immediately reduce or cease operation of the equipment or emissions unit causing the period until such time as the condition causing the excess has been corrected or brought under control. Such action by DEQ shall be taken upon consideration of the factors listed in IDAPA 58.01.01.134.03 and after consultation with the permittee.

[PTC P-2009.0146, Permit Condition No. 39, 4/6/2010; IDAPA 58.01.01.134, 4/11/06]

#### *Excess Emissions – Reporting and Recordkeeping*

3.13 The permittee shall submit a written report to DEQ for each excess emissions event, no later than 15 days after the beginning of such an event. Each report shall contain the information specified in IDAPA 58.01.01.135.02.

[PTC P-2009.0146, Permit Condition No. 39, 4/6/2010; IDAPA 58.01.01.135, 4/11/06]

3.14 The permittee shall maintain excess emissions records at the facility for the most recent five calendar-year period. The excess emissions records shall be made available to DEQ upon request and shall include the information requested by IDAPA 58.01.01.136.03(a) and (b) as summarized in the following:

- An excess emissions log book for each emissions unit or piece of equipment containing copies of all reports that have been submitted to DEQ pursuant to IDAPA 58.01.01.135 for the particular emissions unit or equipment; and
- Copies of all startup, shutdown, and scheduled maintenance procedures and upset, breakdown, or safety preventative maintenance plans that have been developed by the permittee in accordance with IDAPA 58.01.01.133 and 134, and facility records as necessary to demonstrate compliance with such procedures and plans.

[PTC P-2009.0146, Permit Condition No. 39, 4/6/2010; IDAPA 58.01.01.136, 4/5/00]

#### **Open Burning**

3.15 The permittee shall comply with the *Rules for Control of Open Burning*, IDAPA 58.01.01.600-616.

[IDAPA 58.01.01.600-616, 5/08/09]

#### **Asbestos**

3.16 NESHAP 40 CFR 61, Subpart M - National Emission Standard for Asbestos

The permittee shall comply with all applicable emission standards pursuant to 40 CFR 61, Subpart M – Asbestos.

[40 CFR 61, Subpart M]

#### **Recycling and Emissions Reductions**

3.17 40 CFR Part 82 - Protection of Stratospheric Ozone

The permittee shall comply with applicable standards for recycling and emissions reduction of refrigerants and their substitutes pursuant to 40 CFR 82, Subpart F, Recycling and Emissions Reduction.

[40 CFR 82, Subpart F]

## NSPS General Provisions

### 3.18 NSPS 40 CFR 60, Subpart A – General Provisions

*FHMRL is subject to NSPS 40 CFR 60, Subpart WWW and is therefore required to comply with the applicable General Provisions of 40 CFR 60, Subpart A.*

**Table 3.2 NSPS 40 CFR 60, SUBPART A Summary of General Provisions**

Section	Section Title	Summary of Section
60.2	Definitions	60.751 Definitions. As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in subpart A of this part.
60.4	Addresses	<u>All requests, reports, applications, submittals, and other communications associated with 40 CFR 60, Subparts A and WWW shall be submitted to:</u> Pocatello Regional Office Department of Environmental Quality 444 Hospital Way #300 Pocatello, Idaho 83204
60.11 (d), (f), and (g)	Compliance with Standards and Maintenance Requirements	<ol style="list-style-type: none"> <li>At all times, including periods of startup, shutdown, and malfunction, the owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.</li> <li>For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.</li> </ol>
60.11(b), (c), and (e)	Compliance with Standards and Maintenance Requirements (Opacity)	<ol style="list-style-type: none"> <li>Compliance with opacity standards shall be determined by Method 9 in Appendix A of 40 CFR 60. The permittee may elect to use COM measurements in lieu of Method 9, provided notification is made at least 30 days before the performance test.</li> <li>The opacity standards shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided. <b>[PTC P-2009.0146, Permit Condition No.6, 4/6/2010]</b></li> </ol>
60.12	Circumvention	No permittee shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard.
60.14	Modification	<ol style="list-style-type: none"> <li>A physical or operational change which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification, and upon modification an existing facility shall become an affected facility in accordance with the requirements and exemptions in 40 CFR 60.14.</li> <li>Within 180 days of the completion of any physical or operational change, compliance with all applicable standards must be achieved.</li> </ol>
60.15	Reconstruction	An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate in accordance with the requirements of 40 CFR 60.15.

**[40 CFR 60, Subpart A]**

## NESHAP General Provisions

### 3.19 NESHAP 40 CFR 63, Subpart AAAAA – General Provisions

FHMRL is currently not subject to 40 CFR 63, Subpart AAAAA because its estimated uncontrolled NMOC emissions are less than 50 Mg/yr. When FHMRL’s estimated uncontrolled NMOC emissions equal or exceed 50 Mg/yr, FHMRL will then be subject to, and shall comply with all requirements of 40 CFR 63, Subpart AAAAA as they apply.

The permittee shall comply with the requirements of 40 CFR 63, Subpart AAAAA – General Provisions as applicable as listed in Table 3.3.

**Table 3.3 NESHAP 40 CFR 63, SUBPART AAAAA Summary of General Provisions**

<b>Part 63 Citation</b>	<b>Description</b>	<b>Explanation</b>
63.1(a)	Applicability: general applicability	Affected sources are already subject to this part
63.1(b)	Applicability determination for stationary sources	
63.1(c)	Title V permitting	
63.2	Definitions	
63.4	Prohibited activities and circumvention	Affected sources are already subject to the provisions of paragraph (b) through the same provisions under 40 CFR, part 60 subpart A.
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	
63.6(e)	Operation and maintenance requirements, startup, shutdown and malfunction plan provisions	Affected sources are already subject to the provisions of (1)(i) and (ii); (3)(i), (iii),(iv),(v),(vi),(vii)(viii)and (ix).
63.6(f)	Compliance with nonopacity emission standards	Affected sources are already subject to the provisions of paragraphs (f)(I) and (2)(i) through the same provisions under 40 CFR, part 60 subpart A.
63.10(b)(2)(i)(b)(2)(v)	General recordkeeping requirements	
63.10(d)(5)	If actions taken during a startup, shutdown, and malfunction plan are consistent with the procedures in the startup, shutdown, and malfunction plan, this information shall be included in a semi-annual startup, shutdown, and malfunction plan report. Any time an action taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event	
63.12(a)	These provisions do not preclude the State from adopting and enforcing any standard, limitation, etc., requiring permits, or requiring emissions reductions in excess of those specified	
63.15	Availability of information and confidentiality	

[40 CFR 63, Subpart AAAAA]

## Monitoring and Recordkeeping

3.20 The permittee shall maintain sufficient records to assure compliance with all of the terms and conditions of this operating permit. Records of monitoring information shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[PTC P-2009.0146, Permit Condition No. 38, 4/06/2010; IDAPA 58.01.01.322.06, 07, 5/1/94]

## Performance Testing

3.21 If performance testing is required, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test or shorter time period as provided in a permit, order, consent decree, or by DEQ approval. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests such testing not be performed on weekends or state holidays.

[PTC P-2009.0146, Permit Condition No. 35, 4/06/2010; IDAPA 58.01.01.157, 4/5/00]

3.22 All testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, prior to conducting any performance test, the permittee is encouraged to submit in writing to DEQ, at least 30 days in advance, the following for approval:

- The type of method to be used
- Any extenuating or unusual circumstances regarding the proposed test
- The proposed schedule for conducting and reporting the test

[PTC P-2009.0146, Permit Condition No. 36, 4/06/10; IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 5/1/94]

3.23 Unless a longer time is approved by DEQ, the permittee shall submit a compliance test report for the respective test to DEQ within **30 days** following the date in which a compliance test required by this permit is concluded. The compliance test report shall include all process operating data collected during the test period as well as the test results, raw test data, and associated documentation, including any approved test protocol.

[PTC P-2009.0146, Permit Condition No. 37, 4/06/2010; IDAPA 58.01.01.157, 4/5/00]

3.24 The proposed test date(s), test date rescheduling notice(s), compliance test report, and all other correspondence shall be sent to the DEQ address specified in the reports and certifications in accordance with permit conditions.

[PTC P-2009.0146, Permit Condition No. 37, 4/6/2010; IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 5/1/94]

## Reports and Certifications

3.25 All periodic reports and certifications required by this permit shall be submitted to DEQ within 30 days of the end of each specified reporting period. Excess emissions reports and notifications shall be submitted in accordance with IDAPA 58.01.01.130-136. Reports, certifications, and notifications shall be submitted to:

Department of Environmental Quality  
Pocatello Regional Office  
444 Hospital Way #300  
Pocatello, ID 83204  
Phone: (208) 236-6160  
Fax: (208) 236-6168

*The periodic compliance certification required in the general provisions shall also be submitted within 30 days of the end of the specified reporting period to:*

EPA Region 10  
Air Operating Permits, OAQ-107  
1200 Sixth Ave.  
Seattle, WA 98101

[PTC P-2009.0146, Permit Condition No. 29, 4/06/2010; IDAPA 58.01.01.322.08, 11, 4/5/00]

### **Incorporation of Federal Requirements by Reference**

3.26 Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for the purposes of the reference, including any notes and appendices therein. Documents include, but are not limited to:

- Standards of Performance for New Stationary Sources (NSPS), 40 CFR Part 60
- National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP), 40 CFR Part 63

For permit conditions referencing or cited in accordance with any document incorporated by reference (including permit conditions identified as NSPS or NESHAP), should there be any conflict between the requirements of the permit condition and the requirements of the document, the requirements of the document shall govern, including any amendments to that regulation.

[IDAPA 58.01.01.107, 4/7/11]

### ***Municipal Solid Waste Landfills - Mandatory Greenhouse Gas Reporting, Requirement***

3.27 In accordance with 40 CFR 98.342, owners and operators of municipal solid waste landfills that accepted waste on or after January 1, 1980 and that meet the requirements of 40 CFR 98.2(a)(1) must report methane gas generation and emissions from landfills, methane destruction resulting from landfill gas collection and combustion systems, and emissions of carbon dioxide, methane, and nitrous oxide from stationary combustion units following the requirements of 40 CFR 98, Subpart C (40 CFR 98.340-342).

Any notifications or reporting required by 40 CFR 98, Subpart HH shall be submitted to the following address:

EPA Region 10  
Director, Office of Air Quality  
1200 Sixth Avenue  
(OAQ-107)

via the e-GGRT website (last visited at <https://ghgreporting.epa.gov/ghg/login.do>)

[40 CFR 98 subpart HH]

## ***Operations and Maintenance Manual***

**3.28** Within 60 days of commencing construction, the permittee shall have developed and submitted to DEQ an Operations and Maintenance (O&M) manual for the flare, engine, and dewatering system which describes the procedures that will be followed to comply with General Provisions of the PTC issued April 6, 2010 and the manufacturer specifications. The operation and monitoring requirements specified in the O&M manual are incorporated by reference to this permit and are enforceable permit conditions. The O&M manual may be updated as needed. This manual shall remain on site at all times and shall be made available to DEQ representatives upon request.

**[PTC P-2009.0146, Permit Condition No. 7, 4/06/2010]**

## 4. Landfill Applicable Requirements with NMOC Emission Rate Less Than 50 Mg/yr

### Summary Description

FHMRL has chosen to voluntarily install a system to capture, collect and treat NMOC emissions. Currently, the Landfill's estimated uncontrolled NMOC emissions are around 7.5 Mg/yr. The regulatory trigger to install the capture and collection system, pursuant to 40 CFR 60, Subpart WWW, is when the landfill's uncontrolled NMOC emissions are equal to or greater than 50 Mg/yr.

Until the regulatory requirement to install the capture, collection and treatment system is triggered, the only applicable regulatory requirements are to monitor the NMOC emissions and submit a totalized NMOC report to DEQ either annually or once every five years.

4.1 Table 4.1 describes the devices used to control emissions from the landfill.

**Table 4.1 Landfill Description**

Emissions Units / Processes	Control Devices
Landfill	None

4.2 Table 4.2 contains only a summary of the requirements that apply to the landfill. Specific permit requirements are listed below in Table 4.2.

**Table 4.2 Applicable Requirements Summary**

Permit Conditions	Parameter	Limit / Standard Summary	Applicable Requirements Reference	Operating, Monitoring, and Recordkeeping Requirements
<b>Landfill with NMOC emission rate below 50 Mg/yr</b>				
4.3	Landfill	NMOC calculation	PTC P-2009.0146, 4/6/2010 40 CFR 60.752(b)	4.4, 4.6, 4.7, 4.10, 4.11
4.4	Landfill	Annual NMOC emission report	PTC P-2009.0146, 4/6/2010 40 CFR 60.752(b)(1)(i)	4.10, 4.11, 4.12
4.5	Landfill	Recalculation of NMOC emissions annually	PTC P-2009.0146, 4/6/2010 40 CFR 60.752 (b)(1)(ii)	4.10, 4.11
4.6	Landfill	Equation to calculate NMOC emission rate for passive landfill	PTC P-2009.0146, 4/6/2010 40 CFR 60.754 (a)(1)(i)	4.10, 4.11
4.7	Landfill	NMOC emission rate with active collection system	PTC P-2009.0146, 4/6/2010 40 CFR 60.754(a)(3)	4.10, 4.11
4.8	Landfill	Comparison to 50 megagrams per year standard	PTC P-2009.0146, 4/6/2010 40 CFR 60.754(a)(2)	4.10, 4.11
4.9	Landfill	Site specific methane generation rate determination procedure	PTC P-2009.0146, 4/6/2010 40 CFR 60.754(a)(2)	4.11
4.13	Landfill	Collection system installation 30 months after reaching 50 megagrams per year standard	PTC P-2009.0146, 4/6/2010	4.10, 4.11

### Operating Requirements

4.3 In accordance with 40 CFR 60.752(b), when the landfill design capacity becomes equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the permittee shall either comply with 40 CFR

60.752(b)(2) or calculate an NMOC emission rate for the landfill using the procedures specified in 40 CFR 60.754.

**[PTC P-2009.0146, Permit Condition No. 13, 4/06/2010; 40 CFR 60.752(b)]**

- 4.4 In accordance with 40 CFR 60.752(b)(1)(i), the permittee shall submit an annual emission report to DEQ, except as provided for in 40 CFR 60.757(b)(1)(ii).

**[PTC P-2009.0146, Permit Condition No. 17, 4/06/2010; 40 CFR 60.752(b)(1)(i)]**

- 4.5 In accordance with 40 CFR 60.752(b)(1)(ii), the NMOC emission rate shall be recalculated annually using the procedures specified in 40 CFR 60.754(a)(1) or (3) until such time as the calculated NMOC emission rate is equal to or greater than 50 Mg/yr, or the landfill is closed.

**[PTC P-2009.0146, Permit Condition No. 13, 4/06/2010; 40 CFR 60.752(b)(1)(ii)]**

#### **NSPS 40 CFR 60.754 - Test methods and procedures.**

- 4.6 In accordance with 40 CFR 60.754(a)(1)(i), the permittee shall calculate the NMOC emission rate using the equation for the actual year to year solid waste acceptance is known.

**[PTC P-2009.0146, Permit Condition No. 13, 4/06/2010; 40 CFR 60.754(a)(1)(i)]**

- 4.7 In accordance with 40 CFR 60.754(a)(3), after installation of the collection system the permittee shall determine the NMOC concentration by the Tier 2 procedures.

**[PTC P-2009.0146, Permit Condition No. 13, 4/06/2010; 40 CFR 60.754(a)(3)]**

- 4.8 In accordance with 40 CFR 60.754(a)(2), the permittee shall compare the calculated NMOC emission rate to the standard of 50 megagrams per year.

(i) If the NMOC emission rate calculated 40 CFR 60.754(a)(1) is less than 50 megagrams per year, then the permittee shall submit an emission rate report as provided in 40 CFR 60.757(b)(1), shall recalculate the NMOC emission rate annually as required under 40 CFR 60.752(b)(1).

(ii) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the permittee shall either comply with 40 CFR 60.752(b)(2), or determine a site specific NMOC concentration and recalculated the NMOC emission rate using the procedure provided in 40 CFR 60.754(a)(3).

**[PTC P-2009.0146, Permit Condition No. 13, 4/06/2010; 40 CFR 60.754(a)(2),(2)(i) and (2)(ii)]**

- 4.9 In accordance with 40 CFR 60.754(a)(4), the site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of appendix A of this part. The permittee shall estimate the NMOC mass emission rate using equations in 40 CFR 60.754 (a)(1)(i) or (a)(1)(ii) and using a site-specific methane generation rate constant k, and the site-specific NMOC concentration as determined in 40 CFR 60.754 (a)(3) instead of the default values provided in 40 CFR 60.754 (a)(1). The landfill owner or operator shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.

(i) If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the owner or operator shall comply with §60.752(b)(2).

(ii) If the NMOC mass emission rate is less than 50 megagrams per year, then the permittee shall submit a periodic emission rate report as provided in §60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in §60.757(b)(1) using the equations in 40 CFR 60.754 (a)(1) and using the site-specific methane generation rate constant and NMOC concentration obtained in 40 CFR 60.754 (a)(3). The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations

**[PTC P-2009.0146, Permit Condition No. 13, 4/06/2010; 40 CFR 60.754(a)(4),(4)(i) and (4)(ii)]**

## **Recordkeeping Requirements**

### **NSPS 40 CFR 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills – Recordkeeping Requirements.**

4.10 In accordance with 40 CFR 60.758(a),

Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of an MSW landfill subject to the provisions of 40 CFR 60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(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.

[PTC P-2009.0146, Permit Condition No. 23, 4/06/2010; 40 CFR 758(a)]

4.11 In accordance with 40 CFR 60.758(d)

Except as provided in §60.752(b)(2)(i)(B), each owner or operator subject to the provisions of this subpart shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

(1) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under §60.755(b).

(2) Each owner or operator subject to the provisions of this subpart shall 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 §60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in §60.759(a)(3)(ii).

[PTC P-2009.0146, Permit Condition No. 23, 4/06/2010; 40 CFR 758(d)]

## **Reporting Requirements**

### **NSPS 40 CFR 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills – NMOC Emission Rate Reports**

4.12 In accordance with 40 CFR 60.757(b), each owner or operator subject to the requirements of this subpart shall submit an NMOC emission rate report to the DEQ initially and annually thereafter, except as provided for in paragraphs (b)(1)(ii) or (b)(3) of this permit condition. DEQ may request such additional information as may be necessary to verify the reported NMOC emission rate.

(1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR 60.754(a) or (b), as applicable.

(i) The initial NMOC emission rate report may be combined with the initial design capacity report required in this permit and shall be submitted no later than indicated in paragraphs (1)(i)(A) and (B) of this permit condition. Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in 40 CFR 60.757 (b)(1)(ii) and (b)(3).

(A) June 10, 1996, for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991, but before March 12, 1996, or

(B) Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commenced construction, modification, or reconstruction on or after March 12, 1996.

(ii) If the estimated NMOC emission rate as reported in the annual report to the DEQ is less than 50 Mg/yr in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate

of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the DEQ. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the DEQ. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

- (2) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.
- (3) Each owner or operator subject to the requirements of Subpart WWW is exempted from the requirements of paragraphs (1) and (2) of this permit condition, after the installation of a collection and control system in compliance with 40 CFR 60.752(b)(2), during such time as the collection and control system is in operation and in compliance with 40 CFR 60.753 and 60.755.

**[PTC P-2009.0146, Permit Condition No. 17, 4/06/2010; 40 CFR 60.757(b)]**

- 4.13 In accordance with IDAPA 58.01.01.860.07, all owners or operators of landfills subject to Section 860 that have nonmethane organic compound emission rates less than fifty (50) Mg/yr on or after November 19, 1999 shall install collection and control systems within thirty (30) months after the date the first annual nonmethane organic compound emission rate equals or exceeds fifty (50) Mg/yr as specified in 40 CFR Section 60.36c(b).

**[PTC P2009.0146, Permit Condition No. 8, 4/06/2010]**

## 5. Landfill Applicable Requirements when NMOC Emissions Rate is greater than or equal to 50 Mg/yr

### Summary Description

Section 5 requirements apply to the landfill when the landfill's uncontrolled NMOC emissions rate is equal to or exceeds 50 megagrams per year.

- 5.1 Table 5.1 and the Section 5 permit conditions describe applicable requirements for the landfill when the NMOC emissions rate becomes greater than or equal to 50 Mg/yr.

**Table 5.1 Applicable requirements Summary**

Permit Conditions	Parameter	Limit / Standard Summary	Applicable Requirements Reference	Operating, Monitoring, and Recordkeeping Requirements
<b>Landfill with NMOC emission rate equal to or greater than 50 Mg/yr</b>				
5.2	Landfill	Startup, shutdown, and malfunction plan	PTC P-2009.0146, 4/6/2010, 40 CFR 63.1960	5.3
5.4	Landfill	NMOC emission rate calculation, active collection system installation, closure requirements	PTC P-2009.0146, 4/6/2010 40 CFR 60.752(b) and (d)	5.6, 5.7, 5.8, 5.9, 5.10, 5.11, 5.12 5.15
5.5	Landfill	Active collection and control system operations requirements	PTC P-2009.0146, 4/6/2010 40 CFR 60.753	5.12, 5.16
5.6, 5.7, 5.8, 5.9, 5.10, 5.11	Landfill	Test methods and procedures	PTC P-2009.0146, 4/6/2010 40 CFR 60.754 (a), (b), (d), and (e)	5.12, 5.14, 5.15.
5.13	Landfill	Monitoring requirements	PTC P-2009.0146, 4/6/2010 40 CFR 60.756 (a), (c), (d), (e) and (f)	5.12, 5.14, 5.15

### Operating Requirements

#### NESHAP 40 CFR 63, Subpart AAAA – General and Continuing Compliance Requirements for Municipal Solid Waste Landfills

- 5.2 In accordance with 40 CFR 63.1960, if the permittee is required by 40 CFR 60, Subpart WWW to install a collection and control system, the permittee must develop a written startup, shutdown, and malfunction (SSM) plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site.

40 CFR 63.1960 How is compliance determined?

Compliance is determined in the same way it is determined for 40 CFR part 60, subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.

[PTC P-2009.0146, Permit Condition No. 24, 4/06/2010; 40 CFR 63.1960]

- 5.3 In accordance with 40 CFR 63.1980(b), the permittee must also keep records and reports as specified in the general provisions of 40 CFR Part 60 and Table 1 of 40 CFR 63 subpart AAAAA. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.

[PTC P-2009.0146, Permit Condition No.25, 4/06/2010; 40 CFR 63.1890(b)]

#### **NSPS 40 CFR 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills**

- 5.4 In accordance with 40 CFR 60.752(b), the permittee of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, shall either comply with 40 CFR 60.752(b)(2) or calculate an NMOC emission rate for the landfill using the procedures specified in §60.754. The NMOC emission rate shall be recalculated annually, except as provided in §60.757(b)(1)(ii) of this subpart. The owner or operator of an MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters is subject to part 70 or 71 permitting requirements.

40 CFR 60.752(b)(1) was addressed in section 4 of this permit

In accordance with 40 CFR 60.752(b)(2) if the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall:

- (i) Submit a collection and control system design plan prepared by a professional engineer to the Administrator within 1 year:
  - (A) The collection and control system as described in the plan shall meet the design requirements of 40 CFR 60.752(b)(2)(ii).
  - (B) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of §§60.753 through 60.758 proposed by the owner or operator.
  - (C) The collection and control system design plan shall either conform with specifications for active collection systems in §60.759 or include a demonstration to the Administrator's satisfaction of the sufficiency of the alternative provisions to §60.759.
  - (D) The Administrator shall review the information submitted under 40 CFR 60.752 (b)(2)(i) (A),(B) and (C) and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems.
- (ii) Install a collection and control system that captures the gas generated within the landfill as required by 40 CFR 60.752 (b)(2)(ii)(A) or (B) and (b)(2)(iii) within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the emission rate is less than 50 megagrams per year, as specified in §60.757(c)(1) or (2).
  - (A) An active collection system shall:
    - (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 or treatment 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:
      - (i) 5 years or more if active; or

- (ii) 2 years or more if closed or at final grade.
  - (3) Collect gas at a sufficient extraction rate;
  - (4) Be designed to minimize off-site migration of subsurface gas.
- (B) A passive collection system shall:
- (1) Comply with the provisions specified in 40 CFR 60.752(b)(2)(ii)(A)( 1 ), ( 2 ), and (2)(ii)(A)( 4 ).
  - (2) Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under §258.40.
- (iii) Route all the collected gas to a control system that complies with the requirements in either 40 CFR 60.752(b)(2)(iii) (A), (B) or (C).
- (A) An open flare designed and operated in accordance with §60.18 except as noted in §60.754(e);
  - (B) A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in §60.754(d).
    - (2) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in §60.756;
  - (C) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of 40 CFR 60.752(b)(2)(iii) (A) or (B).
- (iv) Operate the collection and control device installed to comply with this subpart in accordance with the provisions of §§60.753, 60.755 and 60.756.
- (v) The collection and control system may be capped or removed provided that all the conditions of 40 CFR 60.752 (b)(2)(v) (A), (B), and (C) are met:
- (A) The landfill shall be a closed landfill as defined in §60.751 of this subpart. A closure report shall be submitted to the Administrator as provided in §60.757(d);
  - (B) The collection and control system shall have been in operation a minimum of 15 years; and
  - (C) Following the procedures specified in §60.754(b) of this subpart, the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

**[PTC P-2009.0146, Permit Condition Nos. 9, 19, 4/06/2010; 40 CFR 60.752(b)]**

In accordance with 40 CFR 60.752(d);

When a MSW landfill subject to this subpart is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under part 70 or 71 of this chapter for the landfill if the landfill is not otherwise subject to the requirements of either part 70 or 71 and if either of the following conditions are met:

- (1) The landfill was never subject to the requirement for a control system under 40 CFR 60.752 (b)(2); or
- (2) The owner or operator meets the conditions for control system removal specified in 40 CFR 60.752 (b)(2)(v).

**[PTC P-2009.0146, Permit Condition Nos. 9, 20, 4/06/2010; 40 CFR 60.752(d)]**

**NSPS 40 CFR 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills – Operational standards for collection and control systems**

5.5 In accordance with 40 CFR 60.753;

Each owner or operator of an MSW landfill with a gas collection and control system used to comply with the provisions of §60.752(b)(2)(ii) of this subpart shall:

(a) In accordance with 40 CFR 60.753(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;

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40 CFR 60.753(a)]**

(b) In accordance with 40 CFR 573(b), operate the collection system with negative pressure at each wellhead except under the following conditions:

- (1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in §60.757(f)(1);
- (2) Use of a geomembrane or synthetic cover. The owner or operator shall 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 shall be approved by the Administrator;

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40 CFR 60.753(b)]**

(c) In accordance with 40 CFR 60.753(c), operate each interior wellhead in the collection system with a landfill gas temperature less than 55 °C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

- (1) The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by §60.752(b)(2)(i) of this subpart.
- (2) Unless an alternative test method is established as allowed by §60.752(b)(2)(i) of this subpart, the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:
  - (i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
  - (ii) A data recorder is not required;
  - (iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
  - (iv) A calibration error check is not required;
  - (v) The allowable sample bias, zero drift, and calibration drift are ±10 percent.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40 CFR 60.753(c)]**

(d) In accordance with 40 CFR 60.753(d), operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 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 shall 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.

[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010, 40 CFR 60.753(d)]

- (e) In accordance with 40 CFR 60.753(e), operate the system such that all collected gases are vented to a control system designed and operated in compliance with §60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour; and

[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010, 40 CFR 60.753(e)]

- (f) Operate the control or treatment system at all times when the collected gas is routed to the system.

[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010, 40 CFR 60.753(f)]

- (g) In accordance with 40 CFR 60.753(g), if monitoring demonstrates that the operational requirements in 40 CFR 60.753(b), (c), or (d) are not met, corrective action shall be taken as specified in §60.755(a)(3) through (5) or §60.755(c) of this subpart. If corrective actions are taken as specified in §60.755, the monitored exceedance is not a violation of the operational requirements in 40 CFR 60.753.

[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40 CFR 60.753(g)]

#### **NSPS 40 CFR 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills – Test methods and procedures**

- 5.6 In accordance with 40 CFR 60.754(a)(3) Tier 2. The landfill owner or operator shall determine the NMOC concentration using the following sampling procedure. The landfill owner or operator shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years.

If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25 or 25C of appendix A of this part. Method 18 of appendix A of this part may be used to analyze the samples collected by the Method 25 or 25C sampling procedure. Taking composite samples from different probes into a single cylinder is allowed; however, equal sample volumes must be taken from each probe. For each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal. Composite sample volumes should not be less than one liter unless evidence can be provided to substantiate the accuracy of smaller volumes. Terminate compositing before the cylinder approaches ambient pressure where measurement accuracy diminishes. If using Method 18, the owner or operator must identify all compounds in the sample and, as a minimum, test for those compounds published in the most recent Compilation of Air Pollutant Emission Factors (AP-42), minus carbon monoxide, hydrogen sulfide, and mercury. As a minimum, the instrument must be calibrated for each of the compounds on the list. Convert the concentration of each Method 18 compound to  $C_{\text{NMOC}}$  as hexane by multiplying by the ratio of its carbon atoms divided by six. If more than the required number of samples are taken, all samples must be used in the analysis. The landfill owner or operator must divide the NMOC concentration from Method 25 or 25C of appendix A of this part by six to convert from  $C_{\text{NMOC}}$  as carbon to  $C_{\text{NMOC}}$  as hexane. If the landfill has an active or passive gas removal system in place, Method 25 or 25C samples may be collected from these systems instead of surface probes provided the removal system can be shown to provide sampling as representative as the two sampling probe per hectare requirement. For active collection systems, samples may be collected from the common header pipe before the gas moving or condensate removal equipment. For these systems, a minimum of three samples must be collected from the header pipe.

- (i) The landfill owner or operator shall recalculate the NMOC mass emission rate using the equations provided in 40 CFR 60.754 (a)(1)(i) or (a)(1)(ii) and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in 40 CFR 60.754(a)(1).
- (ii) If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 50 megagrams per year, then the landfill owner or operator shall either comply with §60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in 40 CFR 60.754(a)(4).
- (iii) If the resulting NMOC mass emission rate is less than 50 megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in §60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in this section.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40.CFR 60.754(a)(3)]**

5.7 In accordance with 40 CFR 60.754(a)(4) Tier 3. The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of appendix A of this part. The landfill owner or operator shall estimate the NMOC mass emission rate using equations in 40 CFR 60.754 (a)(1)(i) or (a)(1)(ii) and using a site-specific methane generation rate constant k, and the site-specific NMOC concentration as determined in 40 CFR 60.754 (a)(3) instead of the default values provided in 40 CFR 60.754 (a)(1). The landfill owner or operator shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.

- (i) If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the owner or operator shall comply with §60.752(b)(2).
- (ii) If the NMOC mass emission rate is less than 50 megagrams per year, then the owner or operator shall submit a periodic emission rate report as provided in §60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in §60.757(b)(1) using the equations in 40 CFR 60.754 (a)(1) and using the site-specific methane generation rate constant and NMOC concentration obtained in 40 CFR 60.754 (a)(3). The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40.CFR 60.754(a)(4)]**

5.8 In accordance with 40 CFR 60.754(a)(5), the owner or operator may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in 40 CFR 60.754 (a)(3) and (a)(4) if the method has been approved by the Administrator.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40.CFR 60.754(a)(5)]**

5.9 In accordance with 40 CFR 60.754(b), After the installation of a collection and control system in compliance with §60.755, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in §60.752(b)(2)(v), using the following equation:

$$M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} C_{\text{NMOC}}$$

where,

$M_{\text{NMOC}}$  = mass emission rate of NMOC, megagrams per year

$Q_{\text{LFG}}$  = flow rate of landfill gas, cubic meters per minute

$C_{\text{NMOC}}$  = NMOC concentration, parts per million by volume as hexane

- (1) The flow rate of landfill gas,  $Q_{\text{LFG}}$ , shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of appendix A of this part.
- (2) The average NMOC concentration,  $C_{\text{NMOC}}$ , shall 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 Method 25C or Method 18 of appendix A of this part. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C of appendix A of this part by six to convert from  $C_{\text{NMOC}}$  as carbon to  $C_{\text{NMOC}}$  as hexane.
- (3) 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 Administrator.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40.CFR 60.754(b)]**

- 5.10 In accordance with 40 CFR 60.754(d), For the performance test required in §60.752(b)(2)(iii)(B), Method 25, 25C, or Method 18 of appendix A of this part must be used to determine compliance with the 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by §60.752(b)(2)(i)(B). Method 3 or 3A shall 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), Method 25A should be used in place of Method 25. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}})$$

where,

$\text{NMOC}_{\text{in}}$  = mass of NMOC entering control device

$\text{NMOC}_{\text{out}}$  = mass of NMOC exiting control device

**[PTC P-2009.0146, Permit Condition No.9, 4/06/2010; 40.CFR 60.754(d)]**

- 5.11 In accordance with 40 CFR 60.754 (e) For the performance test required in §60.752(b)(2)(iii)(A), the net heating value of the combusted landfill gas as determined in §60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under §60.18(f)(4).

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40 CFR 60.754(e)]**

### **NSPS 40 CFR 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills – Compliance provisions**

- 5.12 In accordance with 40 CFR 60.755,

- (a) Except as provided in §60.752(b)(2)(i)(B), the specified methods in 40 CFR 60.755(a)(1) through (a)(6) shall be used to determine whether the gas collection system is in compliance with §60.752(b)(2)(ii).

- (1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with §60.752(b)(2)(ii)(A)(1), one of the following equations shall be used. The  $k$  and  $L_o$  kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. If  $k$  has been determined as specified in §60.754(a)(4), the value of  $k$

determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

(i) For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2L_oR (e^{-kc} - e^{-kt})$$

where,

$Q_m$  = maximum expected gas generation flow rate, cubic meters per year

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$R$  = average annual acceptance rate, megagrams per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$t$  = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure,  $t$  is the age of the landfill at installation, years

$c$  = time since closure, years (for an active landfill  $c = 0$  and  $e^{-kc} = 1$ )

(ii) For sites with known year-to-year solid waste acceptance rate:

where,

$$Q_M = \sum_{i=1}^n 2 k L_o M_i (e^{-kt_i})$$

$Q_M$  = maximum expected gas generation flow rate, cubic meters per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$M_i$  = mass of solid waste in the  $i^{\text{th}}$  section, megagrams

$t_i$  = age of the  $i^{\text{th}}$  section, years

(iii) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in 40 CFR 60.755(a)(1) (i) and (ii). If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in 40 CFR 60.755 (a)(1) (i) or (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

(2) For the purposes of determining sufficient density of gas collectors for compliance with §60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Administrator, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

(3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with §60.752(b)(2)(ii)(A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under §60.753(b). If negative pressure cannot be achieved without excess air

infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

- (4) Owners or operators are not required to expand the system as required in 40 CFR 60.755 (a)(3) during the first 180 days after gas collection system startup.
- (5) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in §60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.
- (6) An owner or operator seeking to demonstrate compliance with §60.752(b)(2)(ii)(A)( 4 ) through the use of a collection system not conforming to the specifications provided in §60.759 shall provide information satisfactory to the Administrator as specified in §60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40.CFR 60.755(a)]**

- (b) For purposes of compliance with §60.753(a), each owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in §60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:
  - (1) 5 years or more if active; or
  - (2) 2 years or more if closed or at final grade.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40.CFR 60.755(b)]**

- (c) The following procedures shall be used for compliance with the surface methane operational standard as provided in §60.753(d).
  - (1) After installation of the collection system, the owner or operator shall 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 40 CFR 60.755 (d).
  - (2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.
  - (3) Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of this part, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
  - (4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR 60.755 (c)(4) (i) through (v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of §60.753(d).
    - (i) The location of each monitored exceedance shall be marked and the location recorded.
    - (ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.

- (iii) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in 40 CFR 60.755(c)(4)(v) shall be taken, and no further monitoring of that location is required until the action specified in 40 CFR 60.755(c)(4)(v) 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 40 CFR 60.755 (c)(4) (ii) or (iii) shall be re-monitored 1 month from the initial exceedance. If the 1-month remonitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month remonitoring shows an exceedance, the actions specified in 40 CFR 60.755(c)(4) (iii) or (v) shall be taken.
  - (v) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.
- (5) The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40.CFR 60.755(c)]**

- (d) Each owner or operator seeking to comply with the provisions in 40 CFR 60.755(c) shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:
- (1) The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of appendix A of this part, except that “methane” shall replace all references to VOC.
  - (2) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.
  - (3) To meet the performance evaluation requirements in section 3.1.3 of Method 21 of appendix A of this part, the instrument evaluation procedures of section 4.4 of Method 21 of appendix A of this part shall be used.
  - (4) The calibration procedures provided in section 4.2 of Method 21 of appendix A of this part shall be followed immediately before commencing a surface monitoring survey.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40.CFR 60.755(d)]**

- (e) The provisions of this subpart apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40.CFR 60.755(e)]**

**NSPS 40 CFR 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills – Monitoring of operations**

5.13 In accordance with 40 CFR 60.756, except as provided in §60.752(b)(2)(i)(B),

- (a) Each owner or operator seeking to comply with §60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:
  - (1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in §60.755(a)(3); and
  - (2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in §60.755(a)(5); and

(3) Monitor temperature of the landfill gas on a monthly basis as provided in §60.755(a)(5).

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40 CFR 60.756(a)]**

(c) Each owner or operator seeking to comply with §60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

- (1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
- (2) A device that records flow to or bypass of the flare. The owner or operator shall either:
  - (i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
  - (ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40 CFR 60.756(c)]**

(d) Each owner or operator seeking to demonstrate compliance with §60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the Administrator as provided in §60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator shall review the information and either approve it, or request that additional information be submitted. The Administrator may specify additional appropriate monitoring procedures.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40 CFR 60.756(d)]**

(e) Each owner or operator seeking to install a collection system that does not meet the specifications in §60.759 or seeking to monitor alternative parameters to those required by §60.753 through §60.756 shall provide information satisfactory to the Administrator as provided in §60.752(b)(2)(i) (B) and (C) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator may specify additional appropriate monitoring procedures.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40 CFR 60.756(e)]**

(f) Each owner or operator seeking to demonstrate compliance with §60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in §60.755(d). 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.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40 CFR 60.756(f)]**

#### **NSPS 40 CFR 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills – Reporting requirements**

5.14 In accordance with 40 CFR 60.757, except as provided in §60.752(b)(2)(i)(B),

- (a) Each owner or operator subject to the requirements of this subpart shall submit an initial design capacity report to the Administrator.
  - (3) An amended design capacity report shall be submitted to the Administrator providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to or above 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in §60.758(f).

**[PTC P-2009.0146, Permit Condition Nos.9, 16, 4/06/2010; 40 CFR 60.757(a)(3)]**

- (b) Each owner or operator subject to the requirements of this subpart shall submit an NMOC emission rate report to the Administrator initially and annually thereafter, except as provided for in 40 CFR 60.757(b)(1)(ii) or (b)(3). The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.
- (1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in §60.754(a) or (b), as applicable.
- (i) The initial NMOC emission rate report may be combined with the initial design capacity report required in 40 CFR 60.757(a) and shall be submitted no later than indicated in 40 CFR 60.757 (b)(1)(i)(A) and (B). Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in 40 CFR 60.757 (b)(1)(ii) and (b)(3).
- (A) June 10, 1996, for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991, but before March 12, 1996, or
- (B) Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996.
- (ii) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 50 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Administrator. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Administrator. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.
- (2) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.
- (3) Each owner or operator subject to the requirements of this subpart is exempted from the requirements of 40 CFR 60.757 (b)(1) and (2), after the installation of a collection and control system in compliance with §60.752(b)(2), during such time as the collection and control system is in operation and in compliance with §§60.753 and 60.755.

**[PTC P-2009.0146, Permit Condition Nos. 9, 17, 4/06/2010; 40 CFR 60.757(b)]**

- (c) Each owner or operator subject to the provisions of §60.752(b)(2)(i) shall submit a collection and control system design plan to the Administrator within 1 year of the first report required under 40 CFR 60.757(b) in which the emission rate equals or exceeds 50 megagrams per year, except as follows:
- (1) If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in §60.754(a)(3) and the resulting rate is less than 50 megagrams per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 180 days of the first calculated exceedance of 50 megagrams per year.
- (2) If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in §60.754(a)(4), and the resulting NMOC emission rate is less than 50 Mg/yr, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised

NMOC emission rate report based on the provisions of §60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Administrator within 1 year of the first calculated emission rate exceeding 50 megagrams per year.

**[PTC P-2009.0146, Permit Condition Nos. 9, 18, 4/06/2010; 40 CFR 60.757(c)]**

- (d) Each owner or operator of a controlled landfill shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 758.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under §60.7(a)(4).

**[PTC P-2009.0146, Permit Condition Nos. 9, 19, 4/06/2010; 40 CFR 60.757(d)]**

- (e) Each owner or operator of a controlled landfill shall submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment.
- (1) The equipment removal report shall contain all of the following items:
- (i) A copy of the closure report submitted in accordance with 40 CFR 60.757(d) ;
  - (ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and
  - (iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.
- (2) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in §60.752(b)(2)(v) have been met.

**[PTC P-2009.0146, Permit Condition Nos. 9, 20, 4/06/2010; 40 CFR 60.757(e)]**

- (f) Each owner or operator of a landfill seeking to comply with §60.752(b)(2) using an active collection system designed in accordance with §60.752(b)(2)(ii) shall submit to the Administrator annual reports of the recorded information in 40 CFR 60.757 (f)(1) through (f)(6). The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under §60.8. For enclosed combustion devices and flares, reportable exceedances are defined under §60.758(c).
- (1) Value and length of time for exceedance of applicable parameters monitored under §60.756(a), (b), (c), and (d).
  - (2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under §60.756.
  - (3) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.
  - (4) All periods when the collection system was not operating in excess of 5 days.
  - (5) The location of each exceedance of the 500 parts per million methane concentration as provided in §60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.
  - (6) The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), and (c)(4) of §60.755.

**[PTC P-2009.0146, Permit Condition Nos. 9, 21, 4/06/2010; 40 CFR 60.757(f)]**

- (g) Each owner or operator seeking to comply with §60.752(b)(2)(iii) shall include the following information with the initial performance test report required under §60.8:

- (1) 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;
- (2) 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;
- (3) 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;
- (4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and
- (5) 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
- (6) The provisions for the control of off-site migration.

**[PTC P-2009.0146, Permit Condition Nos. 9, 22, 4/06/2010; 40 CFR 60.757(g)]**

**NSPS 40 CFR 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills – Recordkeeping requirements**

5.15 In accordance with 40 CFR 758;

- (a) Except as provided in §60.752(b)(2)(i)(B), each owner or operator of an MSW landfill subject to the provisions of §60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered §60.752(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.

**[PTC P-2009.0146, Permit Condition Nos. 9, 23, 4/06/2010; 40 CFR 60.758(a)]**

- (b) Except as provided in §60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in 40 CFR 60.758(b)(1) through (b)(4) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.
  - (1) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.752(b)(2)(ii):
    - (i) The maximum expected gas generation flow rate as calculated in §60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.
    - (ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in §60.759(a)(1).
  - (4) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in §60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

**[PTC P-2009.0146, Permit Condition Nos. 9, 23, 4/06/2010; 40 CFR 60.758(b)]**

- (c) Except as provided in §60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of this subpart shall keep for 5 years up-to-date, readily accessible continuous records of the

equipment operating parameters specified to be monitored in §60.756 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.

- (2) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under §60.756.
- (4) Each owner or operator seeking to comply with the provisions of this subpart by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under §60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

**[PTC P-2009.0146, Permit Condition Nos. 9, 23, 4/06/2010; 40 CFR 60.758(c)]**

(d) Except as provided in §60.752(b)(2)(i)(B), each owner or operator subject to the provisions of this subpart shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

- (1) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under §60.755(b).
- (2) Each owner or operator subject to the provisions of this subpart shall 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 §60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in §60.759(a)(3)(ii).

**[PTC P-2009.0146, Permit Condition Nos. 9, 23, 4/06/2010; 40 CFR 60.758(d)]**

(e) Except as provided in §60.752(b)(2)(i)(B), each owner or operator subject to the provisions of this subpart shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in §60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

**[PTC P-2009.0146, Permit Condition Nos. 9, 23, 4/06/2010, 40 CFR 60.758(e)]**

## **NSPS 40 CFR 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills – Specifications for active collection systems**

5.16 In accordance with 40 CFR 60.759;

- (a) Each owner or operator seeking to comply with §60.752(b)(2)(i) shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Administrator as provided in §60.752(b)(2)(i)(C) and (D):
  - (1) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.
  - (2) The sufficient density of gas collection devices determined in 40 CFR 60.759(a)(1) shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.

- (3) The placement of gas collection devices determined in 40 CFR 60.759 (a)(1) shall control all gas producing areas, except as provided by 40 CFR 60.759(a)(3)(i) and (a)(3)(ii).
- (i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under §60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Administrator upon request.
- (ii) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Administrator upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

$$Q_i = 2 k L_o M_i (e^{-kt_i}) (C_{NMOC}) (3.6 \times 10^{-9})$$

where,

$Q_i$  = NMOC emission rate from the  $i^{\text{th}}$  section, megagrams per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$M_i$  = mass of the degradable solid waste in the  $i^{\text{th}}$  section, megagram

$t_i$  = age of the solid waste in the  $i^{\text{th}}$  section, years

$C_{NMOC}$  = concentration of nonmethane organic compounds, parts per million by volume

$3.6 \times 10^{-9}$  = conversion factor

- (iii) The values for  $k$  and  $C_{NMOC}$  determined in field testing shall be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (this distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for  $k$ ,  $L_o$ , and  $C_{NMOC}$  provided in §60.754(a)(1) or the alternative values from §60.754(a)(5) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in 40 CFR 60.759 (a)(3)(i).

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40 CFR 60.759(a)]**

- (b) Each owner or operator seeking to comply with §60.752(b)(2)(i)(A) shall construct the gas collection devices using the following equipment or procedures:
- (1) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.
- (2) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill.

Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

- (3) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40 CFR 60.759(b)]**

- (c) Each owner or operator seeking to comply with §60.752(b)(2)(i)(A) shall convey the landfill gas to a control system in compliance with §60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

- (1) For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in 40 CFR 60.759 (c)(2) shall be used.
- (2) For new collection systems, the maximum flow rate shall be in accordance with §60.755(a)(1).

**[PTC P-2009.0146, Permit Condition No. 9, 4/06/2010; 40 CFR 60.759(c)]**

#### 5.17 Notification and Reporting Addresses

Any notifications or reporting required by 40 CFR 60, Subparts JJJJ, WWW, and 40 CFR 63, Subpart AAAA shall be submitted to both of the following addresses:

EPA Region 10  
Director, Office of Air Quality  
1200 Sixth Avenue  
(OAQ-107)  
Seattle, WA 98101

And,

All information:  
Air Quality Permit Compliance  
Department of Environmental Quality  
Pocatello Regional Office  
444 Hospital Way No. 300  
Pocatello, ID 83201  
(208) 236-6160

Performance test related information only:  
Air Quality Source Test Review  
Department of Environmental Quality  
State Office  
1410 N. Hilton St.  
Boise, ID 83706  
(208) 373-0502

**[PTC P-2009.0146, Permit Condition No. 29, 4/6/2010; 40 CFR 60, Subparts JJJJ, WWW, and 40 CFR 63, Subpart AAAA]**

## 6. Flare

### Summary Description

The flare is subject to the opacity requirement stated in the Facility-wide Conditions until the landfill produces a NMOC emissions rate equal to or exceeds 50 megagrams per year. The permit conditions within Section 5 are the requirements the permittee shall operate the flare after the NMOC emissions rate is equal to or exceeds the 50 megagrams per year limit. The new opacity limit for the flare is stated within 40 CFR 60.18. The performance test as stated in 40 CFR 60.754(e) noted in permit condition 6.3 of this permit is the method to determine the molecular weight of the landfill gas for calculating the flare gas exit velocity under 40 CFR 60.18(f). The performance test is a one-time test. However, FHMRL may select to operating the flare at the following conditions but FHMRL is not required to operate the flare to the requirements in this section until the uncontrolled NMOC emission rate is equal to or exceeds the 50 megagrams per year trigger.

6.1 Table 6.1 describes the devices used to control emissions from the flare.

**Table 6.1 Flare Description**

Emissions Units / Processes	Control Devices
Flare	None

6.2 Table 6.2 contains only a summary of the requirements that apply to the flare. Specific permit requirements are listed below Table 6.2.

**Table 6.2 Applicable Requirements Summary**

Permit Conditions	Parameter	Limit / Standard Summary	Applicable Requirements Reference	Operating, Monitoring, and Recordkeeping Requirements
6.3	Flare	Opacity	PTC P-2009.0146, 4/6/2010 40 CFR 60.752(b)(2)(iii)(A)	6.3, 6.4, 6.5

### Operating Requirements

6.3 In accordance with 40 CFR 60.752(b)(2)(iii)(A), When the landfill is operating at a NMOC emission rate equal to or exceeding the 50 Mg/yr limit as determined by 40 CFR 60.754, an open flare shall be designed and operated in accordance with 40 CFR 60.18 except as noted in 40 CFR 60.754(e).

[40 CFR 60.752(b)(2)(iii)(A)]

### Monitoring and Recordkeeping Requirements

6.4 In accordance with 40 CFR 60.756(c) each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(iii) using an open flare shall install calibrate, maintain, and operate according to the manufacturer's specifications the following equipment

- (1) A heat sensing device, such as an ultraviolet beam sensor or thermacouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
- (2) A device that records flow to or bypass of the flare. The owner or operator shall either:
  - (i) Install, calibrate, and maintain a gas flow rate, measuring device that shall record the flow to the control device at least every 15 minutes; or
  - (ii) Secure the bypass valve in the closed position with a car seal or a lock and key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month

to ensure the valve is maintained in the closed position and that the gas flow is not diverted through by the bypass line.

[40 CFR 60.756(c)]

**6.5** In accordance with 40 CFR 60.758(c), except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of 40 CFR 60, Subpart WWW shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756 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. FHMRL shall do the performance test required to determine the molecular weight once during the time limit of this permit.

(2)Each owner or operator subject to the provisions of Subpart WWW shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.

(4)Each owner or operator seeking to comply with the provisions of Subpart WWW by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

[40 CFR 60.758(c)]

## 7. Caterpillar 3516 Engine or Equivalent

FHMRL shall comply with the following applicable requirements upon such time that it commences construction of the Caterpillar 3516 IC engine or equivalent.

7.1 Table 7.1 describes the devices used to control emissions from the 3516 Caterpillar engine or equivalent.

**Table 7.1IC Engine or Equivalent Description**

Emissions Units / Processes	Control Devices
Caterpillar 3516 IC engine or equivalent	None

7.2 Table 7.2 contains only a summary of the requirements that apply to the 3516 Caterpillar engine or equivalent. Specific permit requirements are listed below Table 7.2.

**Table 7.2 Applicable Requirements Summary**

Permit Conditions	Parameter	Limit / Standard Summary	Applicable Requirements Reference	Operating, Monitoring, and Recordkeeping Requirements
7.3	Emission limits	NO <sub>x</sub> , CO, VOC	40 CFR 60.4233(e)	7.6, 7.7, 7.8, 7.9, 7.11, 7.12
7.4	Visible emissions	Opacity	IDAPA 58.01.01.625	3.8, 3.9, 7.4
7.5	Compliance Demonstration	Methods	40 CFR 60.4253(b)	7.5
7.6	Catalyst Maintenance	AFR controller	40 CFR 60.4242(g)	7.6
7.7	Performance Testing	Must be conducted within 10% or 100% of peak	40 CFR 60.4244	7.7, 7.8, 7.9, 7.10, 7.11

### Permit Limits/ Summary Standards

7.3 NSPS 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

In accordance with 40 CFR 60.4233(e), the permittee must comply with the emission standards in Table 7.3 for their stationary SI ICE.

**Table 7.3 to Subpart JJJJ of Part 60—NO<sub>x</sub>, CO, and VOC Emission Standards for Stationary SI Landfill/Digester Gas Engines**

Engine type and fuel	Maximum engine power	Manufacture date	Emission standards <sup>a</sup>					
			g/HP-hr			ppmvd at 15% O <sub>2</sub>		
			NO <sub>x</sub>	CO	VOC <sup>b</sup>	NO <sub>x</sub>	CO	VOC <sup>b</sup>
Landfill/Digester Gas Lean Burn	500≥HP<1,350	1/1/2008 7/1/2010	3.0	5.0	1.0	220	610	80
			2.0	5.0	1.0	150	610	80

<sup>a</sup>Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O<sub>2</sub>.

<sup>b</sup>For purposes of Subpart JJJJ, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included

[PTC P-2009.0146, Permit Condition No. 5, 4/06/2010; 40 CFR 60.4233(e)]

- 7.4 Emissions from the engine stack, or any other stack, vent, or functionally equivalent opening associated with the engine, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[PTC P-2009.0146, Permit Condition No. 6, 4/10/2010]

### **Operating Requirements**

#### **NSPS 40 CFR 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines – Compliance Demonstration**

- 7.5 In accordance with 40 CFR 60.4243(b), the permittee must demonstrate compliance according to one of the methods specified in (a) or (b) as follows:

- (a) Purchasing an engine certified according to procedures specified in Subpart JJJJ, for the same model year and demonstrating compliance according to one of the methods specified in (i) or (ii):
- (i) If owner or operator operates and maintains the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, owner or operator must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if the permittee is an owner or operator.
- (ii) If owner or operator does not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, owner or operator engine will be considered a non-certified engine, and owner or operator must demonstrate compliance as follows:

If permittee is an owner or operator of a stationary SI internal combustion engine greater than 500 HP, permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, permittee must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

- (b) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in the engine emission limits section of this permit and according to the requirements specified in the engine testing requirements section of this permit, as applicable, and must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, permittee must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

[PTC P-2009.0146, Permit Condition No. 10, 4/06/2010; 40 CFR 60.4243(b)]

#### **NSPS 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines – Catalyst Maintenance**

- 7.6 In accordance with 40 CFR 60.4243(g), it is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

[PTC P-2009.0146, Permit Condition No. 11, 4/06/2010; 40 CFR 60.4243(g)]

#### **NSPS 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines – Performance Testing**

- 7.7 In accordance with 40 CFR 60.4244, owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this permit condition.

- (a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 CFR 60.8 and under the specific conditions that are specified by Table 7.4 to this permit.

**Table 7.4 Requirements for Performance Tests**

<b>For each</b>	<b>Complying with the requirement to</b>	<b>You must</b>	<b>Using</b>	<b>According to the following requirements</b>
1. Stationary SI internal combustion engine demonstrating compliance according to §60.4244.	a. limit the concentration of NO <sub>x</sub> in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005) <sup>a</sup> .	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O <sub>2</sub> concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B <sup>b</sup> of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005) <sup>a</sup> .	(b) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for NO <sub>x</sub> concentration.
		iii. Determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60.	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see §60.17).	(c) Measurements to determine moisture must be made at the same time as the measurement for NO <sub>x</sub> concentration.
		v. Measure NO <sub>x</sub> at the exhaust of the stationary internal combustion engine.	(5) Method 7E of 40 CFR part 60, appendix A, Method D6522–00(2005) <sup>a</sup> Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see §60.17)..	(d) Results of this test consist of the average of the three 1-hour or longer runs.
	b. limit the concentration of CO in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A.	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O <sub>2</sub> concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B <sup>b</sup> of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005) <sup>a</sup> .	(b) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for CO concentration.
		iii. Determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60.	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03	(c) Measurements to determine moisture must be made at the same time as the measurement for CO concentration.

			(incorporated by reference, see §60.17)..	
		v. Measure CO at the exhaust of the stationary internal combustion engine.	(5) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522–00(2005) <sup>a</sup> , Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17).	(d) Results of this test consist of the average of the three 1-hour or longer runs.
	c. limit the concentration of VOC in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A.	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O <sub>2</sub> concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B <sup>b</sup> of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005) <sup>a</sup> .	(b) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for VOC concentration.
		iii. Determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60.	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see §60.17).	(c) Measurements to determine moisture must be made at the same time as the measurement for VOC concentration.
		v. Measure VOC at the exhaust of the stationary internal combustion engine.	(5) Methods 25A and 18 of 40 CFR part 60, appendix A, Method 25A with the use of a methane cutter as described in 40 CFR 1065.265, Method 18 or 40 CFR part 60, appendix A, <sup>cd</sup> Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see §60.17).	(d) Results of this test consist of the average of the three 1-hour or longer runs.

<sup>a</sup> ASTM D6522–00 is incorporated by reference; see 40 CFR 60.17. Also, the permittee may petition the Administrator for approval to use alternative methods for portable analyzer.

<sup>b</sup> The permittee may use ASME PTC 19.10–1981, Flue and Exhaust Gas Analyses, for measuring the O<sub>2</sub> content of the exhaust gas as an alternative to EPA Method 3B.

<sup>c</sup> The permittee may use EPA Method 18 of 40 CFR part 60, appendix A, provided that you conduct an adequate pre-survey test prior to the emissions test, such as the one described in OTM 11 on EPA's Web site ( <http://www.epa.gov/ttn/emc/prelim/otm11.pdf> ).

<sup>d</sup> The permittee may use ASTM D6420–99 (2004), Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography/Mass Spectrometry as an alternative to EPA Method 18 for measuring total nonmethane organic.

(b) The owner or operator may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 60.8(c). If your stationary SI internal combustion engine is non-operational, the owner or operator do not need to start up the engine solely to conduct a performance test; however, the owner or operator must conduct the performance test within 180 days upon startup of the engine.

- (c) The owner or operator must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.
- (d) To determine compliance with the NO<sub>x</sub> mass per unit output emission limitation, convert the concentration of NO<sub>x</sub> in the engine exhaust using Equation 1 of this permit condition:

$$ER = (C_d \times 1.912 \times 10^{-3} \times Q \times T)/HP\text{-hr} \text{ (Eq. 1)}$$

Where:

ER = Emission rate of NO<sub>x</sub> in g/HP-hr.

C<sub>d</sub> = Measured NO<sub>x</sub> concentration in parts per million by volume (ppmv).

1.912×10<sup>-3</sup> = Conversion constant for ppm NO<sub>x</sub> to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

- (e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this permit condition:

$$ER = (C_d \times 1.164 \times 10^{-3} \times Q \times T)/HP\text{-hr} \text{ (Eq. 2)}$$

Where:

ER = Emission rate of CO in g/HP-hr.

C<sub>d</sub> = Measured CO concentration in ppmv.

1.164×10<sup>-3</sup> = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

- (f) For purposes of Subpart JJJJ, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this permit condition:

$$ER = (C_d \times 1.833 \times 10^{-3} \times Q \times T)/HP\text{-hr} \text{ (Eq. 3)}$$

Where:

ER = Emission rate of VOC in g/HP-hr.

C<sub>d</sub> = VOC concentration measured as propane in ppmv.

1.833×10<sup>-3</sup> = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(g) If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then the owner or operator has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this permit condition. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this permit condition.

$$RF_i = C_{Mi}/C_{Ai} \text{ (Eq. 4)}$$

Where:

$RF_i$  = Response factor of compound i when measured with EPA Method 25A.

$C_{Mi}$  = Measured concentration of compound i in ppmv as carbon.

$C_{Ai}$  = True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_i \times C_{imeas} \text{ (Eq. 5)}$$

Where:

$C_{icorr}$  = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

$RF_i$  = Response factor of compound i when measured with EPA Method 25A.

$C_{imeas}$  = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 \times C_{icorr} \text{ (Eq. 6)}$$

Where:

$C_{Peq}$  = Concentration of compound i in mg of propane equivalent per DSCM.

$C_{icorr}$  = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

[PTC P-2009.0146, Permit Condition No. 12, 4/06/2010; 40 CFR 60.4244]

## **Monitoring and Recordkeeping Requirements**

### **7.8 NSPS 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines – Recordkeeping and Reporting**

In accordance with 40 CFR 60.4245(a), owners and operators of all stationary SI ICE must keep records of the information in paragraphs (1) through (4) of this permit condition.

(1) All notifications submitted to comply with Subpart JJJJ and all documentation supporting any notification.

(2) Maintenance conducted on the engine.

(3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

[PTC P-2009.0146, Permit Condition No. 26, 4/06/2010; 40 CFR 60.4245(a)]

**NSPS 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines – Recordkeeping and Reporting for Non-Certified Engines**

**7.9** In accordance with 40 CFR 60.4245(c), owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231 must submit an initial notification as required in 40 CFR 60.7(a)(1). The notification must include the information in paragraphs (1) through (5) of this permit condition.

- (1) Name and address of the owner or operator;
- (2) The address of the affected source;
- (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- (4) Emission control equipment; and
- (5) Fuel used.

[PTC P-2009.0146, Permit Condition No. 27, 4/06/2010; 40 CFR 60.4245(c)]

**Reporting Requirements**

**NSPS 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines – Performance Testing Reporting**

**7.10** In accordance with 40 CFR 60.4245(d), owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in the performance testing requirement section of this PTC within 60 days after the test has been completed.

[PTC P-2009.0146, Permit Condition No. 28, 4/06/2010; 40 CFR 60.4245(d)]

**7.11** Notification and Reporting Addresses

Any notifications or reporting required by 40 CFR 60 Subpart JJJJ, Subpart WWW, and 40 CFR 63 Subpart AAAA shall be submitted to both of the following addresses:

EPA Region 10  
Director, Office of Air Quality  
1200 Sixth Avenue  
(OAQ-107)  
Seattle, WA 98101

And,

All information:  
Air Quality Permit Compliance  
Department of Environmental Quality  
Pocatello Regional Office  
444 Hospital Way No. 300  
Pocatello, ID 83201  
(208) 236-6160

Performance test related information only:  
Air Quality Source Test Review  
Department of Environmental Quality  
State Office  
1410 N. Hilton St.  
Boise, ID 83706  
(208) 373-0502

[PTC P-2009.0146, Permit Condition No. 29, 4/06/2010; 40 CFR 60 Subpart JJJJ, Subpart WWW, and 40 CFR 63 Subpart AAAA]

## 8. Permit Shield

The facility has requested a permit shield for the following regulations because they are not applicable requirements under Title V of the Clean Air Act. DEQ has determined that the following requirements are not applicable and that all of the criteria set forth in IDAPA 58.01.01.325.01(b) for the Permit Shield, with respect to these requirements, have been met.

NEPA, CERCLA, SARA, EPCRA, FIFRA, TSCA, CWA, NPDES and RCRA Subtitle C are not applicable requirements under Title V of the CAA.

DEQ grants a permit shield for the following regulations:

CAM does not apply because no source has post-control emissions greater than or equal to 100 T/yr.

40 CFR 68.130 – Chemical Accident Prevention Provisions. FHMRL has certified the Landfill does not contain quantities of Regulated Toxic and Flammable substances in quantities such that the requirements of 40 CFR 68.130 apply.

Those provisions identified in Section 5 of this Permit, so long as the NMOC emissions rate is less than 50 Mg/year.

### OTHER STATE AND FEDERAL AIR QUALITY REQUIREMENTS CURRENTLY DETERMINED NOT APPLICABLE TO THE PERMITTEE

#### Reason Code

#### **IDAPA Chapter 58.01.01:**

Section 214 Preconstruction Requirements for Major HAP Sources	b
Section 215 Mercury Emission Standard for New or Modified Sources	a
Section 336 Tier I Permits for Portable Sources	b
Section 400-461 Tier II Operating Permits (Emissions Bubbles; Banked Emissions)	b
Section 500 Registration for Portable Equipment	b
Section 563-574 Transportation Conformity	b
Section 580 Classification of PSD Areas	i
Section 582 Conformity for Northern Ada County PM <sub>10</sub> Maintenance Area	d
Section 592-599 State I Vapor Collection	b/d
Section 617-624 Dangerous Material Fires, Infectious Waste Burning, Crop Residue	b
Section 626 Visible Emissions from Wigwam Burners	b
Section 675-725 Fuel Burning Equipment, Sulfur Content	b
Section 750-751 Control of Fluoride Emissions	a
Section 760-764 Dairy Farms	b
Section 776.02 Odors from Rendering Plants	b
Section 785-787 Incinerators	b/e
Section 790-858, 861-999 Rules for Specific Source Categories	b

#### **40 CFR**

Part 49 Tribal Clean Air Authority	c
Part 51-53 State Implementation Plans, Ambient Air Monitoring	i
Part 55 Outer Continent Shelf Air Regulations	b
Part 56 Regional Consistency	i

Part 57 Nonferrous Smelter Rules	b
Part 58 Ambient Air Quality Surveillance	i
Part 59 VOC Standards for Consumer and Commercial Products	b
Part 60, except subparts A, WWW, JJJJ, and appendixes	b
Part 61, except subpart A, M, and appendixes	b
Part 62 Approval and Promulgation of State Plans for Designated Facilities and Pollutants	b/i
Part 63, including subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for reciprocating internal combustion engines (RICE), except subpart AAAA	b/j/k
Part 64 Compliance Assurance Monitoring (CAM)	g
Part 65 Consolidated Federal Air Rule	b
Part 71-80	b
Part 81 Designation of Areas	i
Part 82, except subpart F	b
Parts 85-97	b
Part 98, except for subparts A, C, and HH	b

**Reason code definitions:**

- a this pollutant is not emitted by the facility
- b the facility is not currently in this source category
- c the facility is not in a special control/nonattainment area
- d the facility is not in this county
- e the facility does not have this emissions unit
- f the facility does not use this fuel type
- g the facility does not have any emissions units which are subject to CAM requirements, as determined under 40 CFR 64.2
- h this method/procedure is not used by the facility
- i this rule applies only to DEQ and regional authorities
- j the engine is a new stationary RICE located at an area source subject to 40 C.F.R. part 60 subpart JJJJ, therefore, 40 CFR Part 63, subpart ZZZZ is not applicable except to cross reference requirements in 40 C.F.R. part 60 subpart JJJJ.
- k the provisions of subpart AAAA are not applicable, so long as the NMOC emissions rate is less than 50 Mg/year.

## 9. Insignificant Activities

### Summary Description

- 9.1 Activities and emission units identified as insignificant under IDAPA 58.01.01.317.01(b) are listed in the following table to qualify for a permit shield. There are no monitoring, recordkeeping, or reporting requirements for insignificant emission units or activities beyond those required in the facility-wide permit conditions (Section 3 ).

**Table 9.1 Insignificant Activities**

<b>Description</b>	<b>Insignificant Activities IDAPA 58.01.01.317.01(b)(i)</b>
Propane Tank	30

This propane tank supplies fuel to the flare's pilot light.

## 10. General Provisions

### General Compliance

- 10.1 The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application.  
[PTC P-2009.0146, Permit Condition No. 30, 4/6/2010; IDAPA 58.01.01.322.15.a, 5/1/94; 40 CFR 70.6(a)(6)(i)]
- 10.2 It shall not be a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the terms and conditions of this permit.  
[IDAPA 58.01.01.322.15.b, 5/1/94; 40 CFR 70.6(a)(6)(ii)]
- 10.3 Any permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.  
[IDAPA 58.01.01.315.01, 5/1/94; 40 CFR 70.5(b)]

### Reopening

- 10.4 This permit may be revised, reopened, revoked and reissued, or terminated for cause. Cause for reopening exists under any of the circumstances listed in IDAPA 58.01.01.386. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable in accordance with IDAPA 58.01.01.360 through 369.  
[IDAPA 58.01.01.322.15.c, 5/1/94; IDAPA 58.01.01.386, 3/19/99; 40 CFR 70.7(f)(1), (2); 40 CFR 70.6(a)(6)(iii)]
- 10.5 The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.  
[IDAPA 58.01.01.322.15.d, 5/1/94; 40 CFR 70.6(a)(6)(iii)]

### Property Rights

- 10.6 This permit does not convey any property rights of any sort, or any exclusive privilege.  
[IDAPA 58.01.01.322.15.e, 5/1/94; 40 CFR 70.6(a)(6)(iv)]

### Information Requests

- 10.7 The permittee shall furnish all information requested by DEQ, within a reasonable time, that DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.  
[Idaho Code §39-108; IDAPA 58.01.01.122, 4/5/00; IDAPA 58.01.01.322.15.f, 4/5/00; 40 CFR 70.6(a)(6)(v)]
- 10.8 Upon request, the permittee shall furnish to DEQ copies of records required to be kept by this permit. For information claimed to be confidential, the permittee may furnish such records along with a claim of confidentiality in accordance with Idaho Code §9-342A and applicable implementing regulations including IDAPA 58.01.01.128.  
[IDAPA 58.01.01.322.15.g, 5/1/94; IDAPA 58.01.01.128, 4/5/00; 40 CFR 70.6(a)(6)(v)]

### Severability

- 10.9 The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.  
[PTC P-2009.0146, Permit Condition No. 44, 4/6/2010; IDAPA 58.01.01.322.15.h, 5/1/94; 40 CFR 70.6(a)(5)]

## Changes Requiring Permit Revision or Notice

- 10.10 The permittee may not commence construction or modification of any stationary source, facility, major facility, or major modification without first obtaining all necessary permits to construct or an approval under IDAPA 58.01.01.213, or complying with IDAPA 58.01.01.220 through 223. The permittee shall comply with IDAPA 58.01.01.380 through 386 as applicable.  
[IDAPA 58.01.01.200-223, 4/2/08; IDAPA 58.01.01.322.15.i, 3/19/99; IDAPA 58.01.01.380-386, 7/1/02; 40 CFR 70.4(b)(12), (14), (15); 40 CFR 70.7(d), (e)]
- 10.11 Changes that are not addressed or prohibited by the Tier I operating permit require a Tier I operating permit revision if such changes are subject to any requirement under Title IV of the Clean Air Act (CAA), 42 United States Code (U.S.C.) Section 7651 through 7651c, or are modifications under Title I of the CAA, 42 U.S.C. Section 7401 through 7515. Administrative amendments (IDAPA 58.01.01.381), minor permit modifications (IDAPA 58.01.01.383), and significant permit modifications (IDAPA 58.01.01.382) require a revision to the Tier I operating permit. IDAPA 58.01.01.502(b)(10) changes are authorized in accordance with IDAPA 58.01.01.384. Off permit changes and required notice are authorized in accordance with IDAPA 58.01.01.385.  
[IDAPA 58.01.01.381-385, 4/5/00; IDAPA 58.01.01.209.05, 4/11/06; 40 CFR 70.4(b)(14), (15)]

## Federal and State Enforceability

- 10.12 Unless specifically identified as a "State only" provision, all terms and conditions in this permit, including any terms and conditions designed to limit a source's potential to emit, are enforceable: (i) by DEQ in accordance with state law; and (ii) by the United States or any other person in accordance with federal law.  
[IDAPA 58.01.01.322.15.j, 5/1/94; 40 CFR 70.6(b)(1), (2)]
- 10.13 Provisions specifically identified as a "State-only" provision are enforceable only in accordance with state law. "State-only" provisions are those that are not required under the Federal Clean Air Act or under any of its applicable requirements or those provisions adopted by the state prior to federal approval.  
[Idaho Code §39-108; IDAPA 58.01.01.322.15.k, 3/23/98]

## Inspection and Entry

- 10.14 Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:
- Enter upon the permittee's premises where a Tier I source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
  - Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
  - Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.
- [PTC P-2009.0146, Permit Condition No. 33, 4/6/2010; Idaho Code §39-108; IDAPA 58.01.01.322.15.l, 5/1/94; 40 CFR 70.6(c)(2)]

## New Applicable Requirements

- 10.15 The permittee shall comply with applicable requirements that become effective during the permit term on a timely basis.  
[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.10.a.ii, 5/1/94; 40 CFR 70.6(c)(3) citing 70.5(c)(8)]

## Fees

- 10.16 The permittee shall pay annual registration fees to DEQ in accordance with IDAPA 58.01.01.387 through IDAPA 58.01.01.397.  
[IDAPA 58.01.01.387, 4/2/03; 40 CFR 70.6(a)(7)]

## Certification

10.17 All documents submitted to DEQ shall be certified in accordance with IDAPA 58.01.01.123 and comply with IDAPA 58.01.01.124.

[PTC P-2009.0146, Permit Condition No. 40, 4/6/2010; IDAPA 58.01.01.322.15.o, 5/1/94; 40 CFR 70.6(a)(3)(iii)(A); 40 CFR 70.5(d)]

## Renewal

10.18 The permittee shall submit an application to DEQ for a renewal of this permit at least six months before, but no earlier than 18 months before, the expiration date of this operating permit. To ensure that the term of the operating permit does not expire before the permit is renewed, the permittee is encouraged to submit a renewal application nine months prior to the date of expiration.

[IDAPA 58.01.01.313.03, 4/5/00; 40 CFR 70.5(a)(1)(iii)]

10.19 If a timely and complete application for a Tier I operating permit renewal is submitted, but DEQ fails to issue or deny the renewal permit before the end of the term of this permit, then all the terms and conditions of this permit including any permit shield that may have been granted pursuant to IDAPA 58.01.01.325 shall remain in effect until the renewal permit has been issued or denied.

[IDAPA 58.01.01.322.15.p, 5/1/94; 40 CFR 70.7(b)]

## Permit Shield

10.20 Compliance with the terms and conditions of the Tier I operating permit, including those applicable to all alternative operating scenarios and trading scenarios, shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

- Such applicable requirements are included and are specifically identified in the Tier I operating permit; or
- DEQ has determined that other requirements specifically identified are not applicable and all of the criteria set forth in IDAPA 58.01.01.325.01(b) have been met.
- The permit shield shall apply to permit revisions made in accordance with IDAPA 58.01.01.381.04 (administrative amendments incorporating the terms of a permit to construct), IDAPA 58.01.01.382.04 (significant modifications), and IDAPA 58.01.01.384.03 (trading under an emissions cap).
- Nothing in this permit shall alter or affect the following:
  - Any administrative authority or judicial remedy available to prevent or terminate emergencies or imminent and substantial dangers;
  - The liability of a permittee for any violation of applicable requirements prior to or at the time of permit issuance;
  - The applicable requirements of the acid rain program, consistent with 42 U.S.C. Section 7651(g)(a); and
  - The ability of EPA to obtain information from a source pursuant to Section 114 of the CAA; or the ability of DEQ to obtain information from a source pursuant to Idaho Code §39-108 and IDAPA 58.01.01.122.

[Idaho Code §39-108 and 112; IDAPA 58.01.01.122, 4/5/00; IDAPA 58.01.01.322.15.m, 5/1/94; IDAPA 58.01.01.325, 3/19/99; IDAPA 58.01.01.381.04, 382.04, 383.05, 384.03, 385.03, 3/19/99; 40 CFR 70.6(f)]

## Compliance Schedule and Progress Reports

10.21 The permittee shall comply with the following:

- For each applicable requirement for which the source is not in compliance, the permittee shall comply with the compliance schedule incorporated in this permit.
- For each applicable requirement that will become effective during the term of this permit and that provides a detailed compliance schedule, the permittee shall comply with such requirements in accordance with the detailed schedule.
- For each applicable requirement that will become effective during the term of this permit that does not contain a more detailed schedule, the permittee shall meet such requirements on a timely basis.
- For each applicable requirement with which the permittee is in compliance, the permittee shall continue to comply with such requirements.

[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.9, 5/1/94; IDAPA 58.01.01.314.10, 4/5/00;  
40 CFR 70.6(c)(3) and (4)]

## Periodic Compliance Certification

10.22 The permittee shall submit compliance certifications during the term of the permit for each emissions unit to DEQ and the EPA as follows:

- The compliance certifications for all emissions units shall be submitted annually from March 1<sup>st</sup> to February 28<sup>th</sup> or 29<sup>th</sup> or more frequently if specified by the underlying applicable requirement or elsewhere in this permit by DEQ.
- The initial compliance certification for each emissions unit shall address all of the terms and conditions contained in the Tier I operating permit that are applicable to such emissions unit including emissions limitations, standards, and work practices;
- The compliance certification shall be in an itemized DEQ website form providing the following information (provided that the identification of applicable information may cross-reference the permit or previous reports as applicable):
  - The identification of each term or condition of the Tier I operating permit that is the basis of the certification;
  - The identification of the method(s) or other means used by the permittee for determining the compliance status with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the methods and means required under Subsections 322.06, 322.07, and 322.08;
  - The status of compliance with the terms and conditions of the Tier I operating permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in Subsection 322.11.c.ii above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and
- Such information as DEQ may require to determine the compliance status of the emissions unit.

10.23 All original compliance certifications shall be submitted to DEQ and a copy of all compliance certifications shall be submitted to the EPA.

[PTC P-2009.0146, Permit Condition No. 40, 4/6/2010; IDAPA 58.01.01.322.11, 4/6/05; 40 CFR 70.6(c)(5)(iii) as amended,  
62 Fed. Reg. 54900, 54946 (10/22/97); 40 CFR 70.6(c)(5)(iv)]

## **False Statements**

10.24 No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.

[PTC P-2009.0146, Permit Condition No.41, 4/6/2010; IDAPA 58.01.01.125, 3/23/98]

## **No Tampering**

10.25 No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[PTC P-2009.0146, Permit Condition No.42, 4/6/2010; IDAPA 58.01.01.126, 3/23/98]

## **Semiannual Monitoring Reports**

10.26 In addition to all applicable reporting requirements identified in this permit, the permittee shall submit reports of any required monitoring at least every six months. The permittee's semiannual reporting periods shall be from March 1<sup>st</sup> to August 31<sup>st</sup> and September 1<sup>st</sup> to February 28<sup>th</sup> or 29<sup>th</sup>. All instances of deviations from this operating permit's requirements must be clearly identified in the report. The semiannual reports shall be submitted to DEQ within 30 days of the end of the specified reporting period.

[PTC P-2009.0146, Permit Condition No. 21, 4/6/2010; IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.322.08.c, 4/5/00; 40 CFR 70.6(a)(3)(iii)]

## **Reporting Deviations and Excess Emissions**

10.27 The permittee shall promptly report all deviations from permit requirements including upset conditions, their probable cause, and any corrective actions or preventive measures taken. For excess emissions, the report shall be made in accordance with IDAPA 58.01.01.130-136. For all other deviations, the report shall be made in accordance with IDAPA 58.01.01.322.08.c, unless otherwise specified in this permit.

[IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.135, 4/11/06; 40 CFR 70.6(a)(3)(iii)]

## **Permit Revision Not Required**

10.28 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit.

[IDAPA 58.01.01.322.05.b, 4/5/00; 40 CFR 70.6(a)(8)]

## **Emergency**

10.29 In accordance with IDAPA 58.01.01.332, an "emergency," as defined in IDAPA 58.01.01.008, constitutes an affirmative defense to an action brought for noncompliance with such technology-based emissions limitation if the conditions of IDAPA 58.01.01.332.02 are met.

[IDAPA 58.01.01.332.01, 4/5/00; 40 CFR 70.6(g)]

## **Permit to Construct General Provisions**

### **General Compliance**

10.30 The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[PTC P-2009.0146, Permit Condition No. 31, 4/6/2010; IDAPA 58.01.01.211, 5/1/94]

10.31 Nothing in this permit is intended to relieve, or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules and regulations.

[PTC P-2009.0146, Permit Condition No. 32, 4/6/2010; IDAPA 58.01.01.212.01, 5/1/94]