



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

September 23, 2011

Roger Saterfiel, Director
Kootenai County Farm Landfill
3650 North Ramsey Road
Coeur d'Alene, Idaho 83815

RE: Facility ID No. 055-00044, Kootenai County Farm Landfill, Coeur d'Alene
Final Amended Tier I Operating Permit Letter

Dear Mr. Saterfiel:

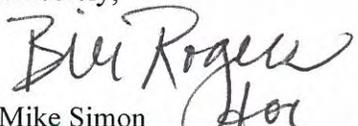
The Department of Environmental Quality (DEQ) is issuing Amended Tier I Operating Permit No. T1-2010.0028 Project 60911 to Kootenai County Farm Landfill at Coeur d'Alene in accordance with IDAPA 58.01.01.300 through 386, Rules for the Control of Air Pollution in Idaho (Rules).

The enclosed permit is effective immediately, summarizes the applicable requirements for your facility, and requires an annual compliance certification for all emissions units. This permit replaces Tier I Operating Permit No. T1-2010.0028, issued January 14, 2011. The enclosed operating permit is based on the information contained in your permit application received on August 11, 2011. Modifications to and/or renewal of this operating permit shall be requested in a timely manner in accordance with the Rules.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Almer Casile, Air Quality Analyst, at 208-769-1422 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call Robert Baldwin at 208 373-0502 or robert.baldwin@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,


Mike Simon
Stationary Source Program Manager
Air Quality Division

MS/REB

Permit No. T1-2010.0028 PROJ 60911

Enclosure



**Air Quality
TIER I OPERATING PERMIT**

**State of Idaho
Department of Environmental Quality**

PERMIT No.: T1-2010.0028

FACILITY ID No.: 055-00044

AQCR: 62 **CLASS:** A **ZONE:** 11

SIC: 4953 **NAICS:** 52212

UTM COORDINATE (km): 504.8, 5364.2

1. PERMITTEE

Kootenai County Farm Landfill

2. PROJECT

Amended Tier I Operating Permit Project No. 60911

3. MAILING ADDRESS

3650 North Ramsey Road

CITY

Coeur d'Alene

STATE

Idaho

ZIP

83815

4. FACILITY CONTACT

Roger Saterfiel

TITLE

Director

TELEPHONE

208-446-1430

5. RESPONSIBLE OFFICIAL

Roger Saterfiel

TITLE

Director

TELEPHONE

208-446-1430

6. EXACT PLANT LOCATION

22089 South Highway 95

COUNTY

Kootenai

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Solid waste disposal facility

8. PERMIT AUTHORITY

This Tier I operating permit is issued pursuant to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.300 through 386. The permittee shall comply with the terms and conditions of this permit.

This permit incorporates all applicable terms and conditions of prior air quality permits issued by the Idaho 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 effective date of this permit is the date of signature by DEQ on the cover page.

**ROBERT BALDWIN, PERMIT WRITER
DEPARTMENT OF ENVIRONMENTAL QUALITY**

Bill Rogers for
**MIKE SIMON, STATIONARY SOURCE PROGRAM MANAGER
DEPARTMENT OF ENVIRONMENTAL QUALITY**

DATE ISSUED:	January 14, 2011
DATE MODIFIED/AMENDED:	September 23, 2011
DATE EXPIRES:	January 14, 2016

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Acronyms, Units, and Chemical Nomenclature

acfm	actual cubic feet per minute
AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EPA	U.S. Environmental Protection Agency
gpm	gallons per minute
gr	grain (1 lb = 7,000 grains)
HAP	hazardous air pollutants
hp	horsepower
hr/yr	hours per year
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
KCFL	Kootenai County Farm Landfill
km	kilometers
lb/hr	pounds per hour
m	meters
MACT	Maximum Achievable Control Technology
MMBtu	million British thermal units
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMOC	Non-Methane Organic Compounds
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
PC	Permit Condition
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm	parts per million
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTE	potential to emit
scf	standard cubic feet
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SM	synthetic minor

SO ₂	sulfur dioxide
SO _x	sulfur oxides
SSMP	Startup, Shutdown & Maintenance Plan
T/yr	tons per year
TAP	toxic air pollutants
U.S.C.	United States Code
UTM	Universal Transverse Mercator
VOC	volatile organic compounds
µg/m ³	micrograms per cubic meter

1. TIER I OPERATING PERMIT SCOPE

Purpose

- 1.1 This amended Tier I permit is to correct formatting errors and to clarify two permit conditions. No permit conditions were changed for the original Tier I permit issued on January 14, 2011. Facility's request is located in the Statement of Basis appendix.
- 1.2 This Tier I operating permit establishes facility-wide requirements in accordance with the Idaho State Implementation Plan control strategy and the Rules.

This permit is the initial Tier I permit for Kootenai County Farm Landfill.

- 1.3 This Tier I permit incorporates the following permit(s):
- Permit to Construct No. P-020100, issued March 24, 2003 amending P-940104 issued April 6, 1994 correcting the maximum design capacity of KCLF.
 - Permit to Construct No. P-990122, issued December 13, 1999 for installation of Flare No. 2
 - Permit to Construct No. P-940104 issued April 6, 1994 for construction of landfill gas collection system and installation of Flare No. 1 replacing P-020100.

Regulated Sources

- 1.4 Listed are all sources of emissions regulated in this Tier I operating permit.

REGULATED SOURCES

Permit Section	Source Description	Emissions Control
2	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
3	Kootenai County Farm Landfill Existing Cell and East Expansion Cell	Landfill gas collection system vented to two flares, Flare No. 1 and Flare No. 2
3	Kootenai County Farm Landfill Existing Cell and East Expansion Cell	Fugitive emissions from landfill, Periodic measurements taken per 40 CFR 60 Subpart WWW

2. FACILITY-WIDE CONDITIONS

Table 2.1 contains a summary of requirements that apply generally to emissions units at the facility.

Table 2.1 APPLICABLE REQUIREMENTS SUMMARY

Permit Condition	Parameter	Permit Limit/ Standard Summary	Applicable Requirement References	Monitoring and Recordkeeping Requirements
2.1	Fugitive dust	Reasonable control	IDAPA 58.01.01.650-651	2.2, 2.3, 2.4, 2.11
2.5	Odors	Reasonable control	IDAPA 58.01.01.775-776	2.6, 2.11
2.7	Visible missions	20% opacity for no more than 3 minutes in any 60-minute period	IDAPA 58.01.01.625	2.8, 2.11
2.9	Excess missions	Compliance with IDAPA 58.01.01.130-136	IDAPA 58.01.01.130-136	2.9, 2.11
2.14	Fuel oil sulfur content limit	ASTM Grade 1 fuel oil – 0.3% by weight; ASTM Grade 2 fuel oil - 0.5% by weight	IDAPA 58.01.01.728	2.14, 2.11
2.15	Open burning	Compliance with IDAPA 58.01.01.600-617	IDAPA 58.01.01.600-617	2.11
2.16	Renovation or demolition	40 CFR 61, Subpart M	40 CFR 61, Subpart M	2.11
2.17	Chemical accident prevention	Compliance with 40 CFR 68	40 CFR 68	2.11, 2.17
2.18	Recycling and emission reductions	Compliance with 40 CFR 82, Subpart F	40 CFR 80, Subpart F	2.11, 2.18

Fugitive Dust

- 2.1 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]
- 2.2 The permittee shall monitor and maintain records of the frequency and the method(s) used (e.g., water, chemical dust suppressants) to reasonably control fugitive dust emissions.
[IDAPA 58.01.01.322.06, 07, 5/1/94]
- 2.3 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]
- 2.4 The permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive dust emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive dust emissions are effective. If fugitive dust 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 fugitive dust emissions 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 dust emissions, and the date the corrective action was taken.
[IDAPA 58.01.01.322.06, 07, 5/1/94]

Odors

- 2.5 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.
[IDAPA 58.01.01.775-776 (state only), 5/1/94]
- 2.6 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 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 (state-only), 5/1/94]

Visible Emissions

- 2.7 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, nitrogen oxides, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.
[IDAPA 58.01.01.625, 4/5/00]
- 2.8 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 action and report the exceedance in its annual compliance certification and in accordance with IDAPA 58.01.01.130-136.

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 58.01.01.322.06, 07, 5/1/94; IDAPA 58.01.01.322.08, 4/5/00]

Excess Emissions

Excess Emissions - General

- 2.9 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 Permit Condition 2.9 and the regulations of IDAPA 58.01.01.130-136.
- 2.9.1 The person responsible for or in charge of a facility during an excess emissions event 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.

[IDAPA 58.01.01.132, 4/5/00]

Excess Emissions – Startup, Shutdown, Scheduled Maintenance

- 2.9.2 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 owner or operator of the facility or emissions unit generating the excess emissions shall demonstrate compliance with IDAPA 58.01.01.133.01(a) through (d), including, but not limited to, the following:

[IDAPA 58.01.01.133, 4/5/00]

- A prohibition of 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.

[IDAPA 58.01.01.133.01.a, 3/20/97]

- 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 owner or operator demonstrates to DEQ's satisfaction that a shorter advance notice was necessary.

[IDAPA 58.01.01.133.01.b, 4/5/00]

- The owner or operator of a source of excess emissions shall report and record the information required pursuant to Permit Conditions 2.9.4 and 2.9.5 and IDAPA 58.01.01.135 and 136 for each excess emissions event due to startup, shutdown, or scheduled maintenance.

[IDAPA 58.01.01.133.01.c, 3/20/97]

Excess Emissions – Upset, Breakdown, or Safety Measures

- 2.9.3 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 owner or operator of the facility or emissions unit generating the excess emissions shall demonstrate compliance with IDAPA 58.01.01.134.01(a) and (b) and the following:

[IDAPA 58.01.01.134, 4/11/06]

- 2.9.3.1 For all equipment or emissions units from which excess emissions result during upset or breakdown conditions, or for other situations that may necessitate the implementation of safety measures which cause excess emissions, the facility owner or operator shall comply with the following:

[IDAPA 58.01.01.134.02, 4/5/00]

- The owner or operator shall 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.

[IDAPA 58.01.01.134.02.a, 4/5/00]

- The owner or operator shall 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 owner or operator demonstrates to DEQ's satisfaction that the longer reporting period was necessary.

[IDAPA 58.01.01.134.02.b, 4/5/00]

- The owner or operator shall report and record the information required pursuant to Permit Conditions 2.9.4 and 2.9.5 and IDAPA 58.01.01.135 and 136 for each excess emissions event caused by an upset, breakdown, or safety measure.

[IDAPA 58.01.01.134.02.c, 3/20/97]

- 2.9.3.2 During any period of excess emissions caused by upset, breakdown, or operation under facility safety measures, DEQ may require the owner or operator 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 facility owner or operator.

[IDAPA 58.01.01.134.03 4/5/00]

Excess Emissions – Reporting and Recordkeeping

- 2.9.4 A written report for each excess emissions event shall be submitted to DEQ by the owner or operator 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.

[IDAPA 58.01.01.135.01 and 02, 4/11/06]

- 2.9.5 The owner or operator 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:

[IDAPA 58.01.01.136.01, 02, 3/20/97; IDAPA 58.01.01.136.03, 4/5/00]

- 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

[IDAPA 58.01.01.136.03.a, 4/5/00]

- Copies of all startup, shutdown, and scheduled maintenance procedures and upset, breakdown, or safety preventative maintenance plans that have been developed by the owner or operator in accordance with IDAPA 58.01.01.133 and 134, and facility records as necessary to demonstrate compliance with such procedures and plans.

[IDAPA 58.01.01.136.03.b, 3/20/97]

Performance Testing

- 2.10 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.

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

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.

The proposed test date(s), test date rescheduling notice(s), compliance test report, and all other correspondence shall be sent to the following address:

Air Quality Permit Compliance
Department of Environmental Quality
Coeur d'Alene Regional Office
2110 Ironwood Pkwy.
Coeur d'Alene, Idaho 83814
Phone: (208) 769-1422 Fax: (208) 769-1404

[IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 5/1/94]

Monitoring and Recordkeeping

- 2.11 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.

[IDAPA 58.01.01.322.07, 5/1/94]

Reports and Certifications

- 2.12** 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:

Air Quality Permit Compliance
Department of Environmental Quality
Coeur d'Alene Regional Office
2110 Ironwood Pkwy.
Coeur d'Alene, Idaho 83814
Phone: (208) 769-1422 Fax: (208) 769-1404

The periodic compliance certification required by General Provision 21 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

[IDAPA 58.01.01.322.08, 11, 5/1/94]

Fuel-Burning Equipment

- 2.13** The permittee shall not discharge PM to the atmosphere from any fuel-burning equipment in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid, 0.050 gr/dscf of effluent gas corrected to 8% oxygen by volume for coal, and 0.080 gr/dscf of effluent gas corrected to 8% oxygen by volume for wood products.

[IDAPA 58.01.01.676-677, 5/1/94]

Sulfur Content

- 2.14** The permittee shall not sell, distribute, use, or make available for use any distillate fuel oil containing more than the following percentages of sulfur:
- ASTM Grade 1 fuel oil - 0.3% by weight.
 - ASTM Grade 2 fuel oil - 0.5% by weight.

[IDAPA 58.01.01.728, 5/1/94]

- 2.14.1** The permittee shall not sell, distribute, use, or make available for use, any coal containing greater than 1.0% sulfur by weight.

[IDAPA 58.01.01.729, 5/1/94]

- 2.14.2** The permittee shall maintain documentation of supplier verification of distillate fuel oil sulfur content on an as-received basis.

[IDAPA 58.01.01.322.06, 5/1/94]

Open Burning

- 2.15 The permittee shall comply with the *Rules for Control of Open Burning*, IDAPA 58.01.01.600-623.
[IDAPA 58.01.01.600-623, 04/02/08T]

Asbestos

- 2.16 The permittee shall comply with all applicable portions of 40 CFR 61, Subpart M – Asbestos.
[40 CFR 61, Subpart M]

Regulated Substances for Accidental Release Prevention

- 2.17 An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, shall comply with the requirements of the Chemical Accident Prevention Provisions at 40 CFR 68 no later than the latest of the following dates:
- Three years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR 68.130.
 - The date on which a regulated substance is first present above a threshold quantity in a process.
- [40 CFR 68.10 (a)]

Recycling and Emissions Reductions

- 2.18 The permittee shall comply with applicable standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, Recycling and Emissions Reduction.
[40 CFR 82, Subpart F]

Documentation for Exemptions under IDAPA 58.01.01.200

- 2.19 Unless the source is subject to, and the owner or operator complies with IDAPA 58.01.01.385, the owner or operator of the source, except for those sources listed in IDAPA 58.01.01.222.02.a. through 222.02.g., shall maintain documentation on site that shall indentify the exemption determined to identify the source and verify that the source qualifies for the identified exemption. The records shall be kept for a period of time not less than five years from the date the exemption determination has been made or for the life of the source for which the exemption has been determined to apply, whichever is greater, or until such time as a permit to construct or an operating permit is issued which covers the operation of the source. The owner or operator shall submit the documentation to DEQ upon request.
[IDAPA 58.01.01.220.2, 4/5/00; IDAPA 58.01.01.322.01, 3/19/99]

NSPS/NESHAP General Provisions

- 2.20 NSPS 40 CFR 60, Subpart A – General Provisions
The permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A – General Provisions in accordance with 40 CFR 60.1. A summary of requirements for affected facilities is provided.

NSPS 40 CFR 60, SUBPART A – SUMMARY OF GENERAL PROVISIONS

Table 2.2 NSPS 40 CFR 60 SUBPART A - SUMMARY OF GENERAL PROVISIONS FOR AFFECTED FACILITIES

Section	Section Title	Summary of Section
60.2	Definitions	<u><i>For delegated NSPS</i></u> 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><i>For delegated NSPS</i></u> All requests, reports, applications, submittals, and other communications associated with 40 CFR 60, Subparts A and WWW shall be submitted to: Coeur d’Alene Regional Office Department of Environmental Quality 2110 Ironwood Pkwy Coeur d’Alene, ID 83814
60.11 (d), (f), and (g)	Compliance with Standards and Maintenance Requirements	<ol style="list-style-type: none"> 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. 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.
60.11(b), (c), and (e)	Compliance with Standards and Maintenance Requirements (Opacity)	<ol style="list-style-type: none"> 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. The opacity standards shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided.
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"> A physical or operational change which results in an increase in the emission rate to the atmosphere or 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. Within 180 days of the completion of any physical or operational change, compliance with all applicable standards must be achieved.
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]

2.21 NESHAP 40 CFR 63, Subpart A – General Provisions

The permittee shall comply with the requirements of 40 CFR 63, Subpart A – General Provisions. A summary of applicable requirements for affected sources is provided in Table 2.4

Table 2.4 NSPS 40 CFR 63 SUBPART A – SUMMARY OF GENERAL PROVISIONS FOR AFFECTED FACILITIES

Part 63 Citation	Description	Explanation
63.1(a)	Applicability: general applicability of NESHAP in this part.	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		Affected sources are already subject to the provisions of paragraph (b) through the same provisions under 40 CFR, part 60 subpart A.
Part 63 Citation	Description	Explanation
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 non-opacity emission standards	Affected sources are already subject to the provisions of paragraphs (f)(1) 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 A]

Incorporation of Federal Requirements by Reference

- 2.22 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.

3. WEST AND EAST EXPANSION CELL

Summary Description

Kootenai County Landfill (KCFL) operation consists of the existing active West Cell and a future constructed East Expansion Cell that is planned to begin accepting municipal solid waste (MSW) in approximately 2012. The West Cell encompasses an area of approximately 29 acres of a 440 acre parcel of land with a design capacity of 2.33 million tons. The East Expansion Cell is designed to expand to the east of the Landfill. The West Cell will be temporarily closed and covered; the East Expansion Cell will be expanded back so that it will eventually be built on top of the West Cell. The entire landfill will encompass an area of approximately 79 acres, will have a total design capacity of 8.72 million tons and is anticipated to be closed in 2034.

Table 3.1 describes the devices used to control emissions from landfill and east expansion cell.

Table 3.1 EMISSIONS UNITS AND EMISSIONS CONTROL DEVICES

Emissions Unit / Process	Emissions Control Device
Kootenai County Farm Landfill Existing West Cell and East Expansion Cell	Collection and control system including Flare #1 and Flare #2

Table 3.2 contains only a summary of the requirements that apply to Flare #1 and Flare #2. Specific permit requirements are listed below Table 3.2.

Table 3.2 APPLICABLE REQUIREMENTS SUMMARY

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Operating and Monitoring and Recordkeeping Requirements
3.1	Flare #1	VOC maximum concentration of 20 ppmdv as hexane at 3% O ₂	PTC No. P-020100, 40 CFR 60.752(b)(2)(iii)(B)	40 CFR Subpart WWW, 3.14
3.3	Flare #1	≤20% opacity	IDAPA 58.01.01.625	2.7, 2.8
3.1	Flare #2	VOC maximum concentration of 20 ppmdv as hexane at 3% O ₂	40 CFR 60.752(b)(2)(iii)(B)	40 CFR Subpart WWW, 3.14
3.3	Flare #2	≤20% opacity	PTC No. P-990122	2.7, 2.8

Permit Limits / Standard Summary

Flare No. 1 and Flare No. 2

- 3.1 Volatile organic compounds (VOCs) shall be reduced to a maximum concentration of twenty part per million by volume on a dry basis (20 ppm_{dv}) out of the stack outlet as hexane at 3% O₂.
[PTC No. P-020100, 3/24/03, 40 CFR 60 Subpart WWW]
- 3.2 Fugitive emission shall be in compliance with Permit Conditions 2.1-2.4.
[PTC No. P-020100, 3/24/03; IDAPA 58.01.01.322.06, 07, 5/1/94]
- 3.3 Opacity emission shall be in compliance with Permit Conditions 2.7 and 2.8.
[IDAPA 58.01.01.625, 4/5/00]
- 3.4 **40 CFR 60.752 Standard for Air Emissions from Municipal Solid Waste Landfills**
Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, shall either comply with paragraph (b)(2) of this section or calculate an NMOC emission rate for the landfill using the procedures specified in §60.754 (PC 3.26-3.28).
[40.CFR 60.752(b)(2)]
- 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 40 CFR 60.753 through 40 CFR 60.758 proposed by the owner or operator.
[40.CFR 60.752(b)(2)(i)(B)]
 - The collection and control system design plan shall conform to the specifications for active collection systems in 40 CFR 60.759 (PC 58-63).
[40 CFR 60.752(b)(2)(i)(C)]
- 3.5 An active collection system shall route all the collected gas to a control system that complies with the requirements of 40 CFR 60.752(b)(2)(iii)(B) (PC3.6) in accordance with 40 CFR 60.752(b)(2)(iii) (PC3.5).
[40 CFR 60.752(b)(2)(iii)]
- 3.6 The active collection system shall have 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 ppm by volume, dry basis as hexane at 3 % 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 40 CFR 60.754(d) (PC 3.28) in accordance with 40 CFR 60 754(b)(2)(iii)(B).
[40 CFR 60.752(b)(2)(iii)(B)]
- 3.7 In an active collection system the control devices (Flare No. 1 and Flare No. 2) shall be operated within the parameter ranges established during the initial or most recent performance test as required in 40 CFR 60.752(b)(2) (PC 3.4-3.9) and 40 CFR 60.752(d) (PC 3.10). The operating parameters to be

monitored are specified in 40 CFR 60.756(b) (PC 3.43) in accordance with 40 CFR 60.752(b)(2)(iii)(B)(2);

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

3.8 The permittee shall operate the collection and control device installed to comply with this subpart in accordance with the provisions of 40 CFR 60.753 (PC 3.17-24), 60.755 (PC 3.29-39) and 60.756 (PC 3.42-44).

[40 CFR 60.752(b)(2)(iv)]

3.9 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) (PC 3.9) are met:

[40 CFR 60.752(b)(2)(v)]

- The landfill shall be a closed landfill as defined in 40 CFR 60.751 (PC 3.79). A closure report shall be submitted to DEQ as provided in 40 CFR 60.757(d) (PC 3.59);

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

- The collection and control system shall have been in operation a minimum of 15 years; and

[40 CFR 60.752(b)(2)(v)(B)]

- Following the procedures specified in 40 CFR 60.754(b) (PC 3.27) 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.

[40 CFR 60.752(b)(2)(v)(C)]

3.10 When the landfill is closed the permittee is no longer subject to the requirement to maintain an operating permit under 40 CFR 70 for the landfill if the landfill is not otherwise subject to the requirements of 40 CFR 70 and if the permittee meets the conditions for control system removal specified in accordance with 40 CFR 60.752(d) (PC 3.10).

[40 CFR 60.752(d)]

Operating Requirements

3.11 The gauge pressure at each wellhead in the gas collection header shall be maintained in accordance with 40 CFR 60.754 (PC 3.26).

[PTC No. P-020100, 3/24/03; 40 CFR 60.754]

3.12 The ultra-violet scanner on the flare device shall monitor the flare's flame at all times.

[PTC No. P-020100, 3/24/03; PTC No. P-990122, 12/13/99]

3.13 Flare No. 1. The combustion temperature shall be maintained at a minimum of 1500 °F. Combustion temperature shall be maintained at or above the temperature recorded during the most recent source test that demonstrated compliance with Permit Condition Section 3.1.

[PTC No. P-020100, 3/24/03]

3.14 Flare No. 2. Combustion temperature shall be maintained at greater than or equal to an hourly average of 1,500 degrees Fahrenheit.

[PTC No. P-990122, 12/13/99]

3.15 The landfill gas flow rate shall not exceed the maximum design capacity of the enclosed gas flare (flare #1).

3.16 The collection system shall capture and collect landfill gas at sufficient extraction rates. Gas collection system expansion shall be performed for each area, cell, or group of cells for which future refuse will be accepted.

[PTC No. P-020100, 3/24/03]

3.17 **NSPS 40 CFR 60.753 Operational Standards for Collection and Control Systems**

In accordance with 40 CFR 60.753(a) the permittee shall 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 five (5) years or more if active.

[40 CFR 60.753(a)]

3.18 In accordance with 40 CFR 60.753(b) the permittee shall operate the collection system with negative pressure at each wellhead except under the following conditions:

- For a fire or increased well temperature: The permittee 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 40 CFR 60.757(f)(1) (**PC 3.56**);
- When using of a geomembrane or synthetic cover: The owner or operator shall develop acceptable pressure limits in the design plan;
- For 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 DEQ.

[40 CFR 60.753(b)]

3.19 In accordance with 40 CFR 60.753(c) the permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55°C (131°F) and with an oxygen level less than 5%. The permittee 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.

[40 CFR 60.753(c)]

3.20 Unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i) (**PC 3.4**) the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:

- The span shall be set so that the regulatory limit is between 20% and 50% of the span;
- A data recorder is not required;
- Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
- A calibration error check is not required;
- The allowable sample bias, zero drift, and calibration drift are $\pm 10\%$.

[40 CFR 60.753(c)(2)]

3.21 In accordance with 40 CFR 60.753(d) the permittee shall operate the collection system so that the methane concentration is less than 500 ppm above background at the surface of the landfill. To determine if this level is exceeded, the permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter (100-foot) intervals at 4 inches above ground, and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The permittee 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.

[40 CFR 60.753(d)]

- 3.22 In accordance with 40 CFR 60.753(e) the permittee shall operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.752(b)(2)(iii) (PC 3.5). 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 one hour; and

[40 CFR 60.753(e)]

- 3.23 In accordance with 40 CFR 60.753(f) the permittee shall operate the control or treatment system at all times when the collected gas is routed to the system.

[40 CFR 60.753(f)]

- 3.24 In accordance with 40 CFR 60.753(g) if monitoring demonstrates that the operational requirements in 40 CFR 60.753 (b), (c) or (d) (PC 3.18, 19, 20 or 21) are not met, corrective action shall be taken by the permittee as specified in 40 CFR 60.755 (a)(3) through (5) (PC 3.33 through 3.34) or 40 CFR 60.755 (c) (PC 3.37) of this subpart. If corrective actions are taken as specified in 40 CFR 60.755 (PC 3.29-39), the monitored exceedance is not a violation of the operational requirements in this section.

[40 CFR 60.753(g)]

Testing Procedures

- 3.25 Within 60 days after achieving the maximum production rate at which the source will operate, but not later than 180 days after the initial startup, the permittee shall conduct an initial performance test to measure the non methane organic carbon (NMOC) emissions from the landfill gas flare stack in accordance with 40 CFR 60.8 and 40 CFR 60.

[PTC No. P-020100, 3/24/03; 40 CFR 60.8]

3.26 **NSPS 40 CFR 60.754 Test Methods and Procedure**

In accordance with 40 CFR 60.754 (a)(1) the permittee shall calculate the NMOC emission rate using the equation in paragraph (a)(1)(i) of this section. The values to be used in the equation are 0.05 per year for k, 170 cubic meters per megagram for L_o , and 4,000 ppm by volume as hexane for the C_{NMOC} . For landfills located in geographical areas with a thirty-year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the k value to be used is 0.02 per year.

[40 CFR 60.754 (a)(1)]

- In accordance with 40 CFR 60.754(a)(1)(i) the following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

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

Where:

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

k = methane generation rate constant, 0.05 year⁻¹

L_o = methane generation potential, 170 cubic meters per megagram solid waste

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

T_i = age of the i^{th} section, years

C_{NMOC} = concentration of NMOC, 4000 parts per million by volume as hexane

3.6×10^{-9} = conversion factor

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

[40 CFR 60.754(a)(1)(i)]

- 3.27 In accordance with 40 CFR 60.754(b) after the installation of a collection and control system in compliance with 40 CFR 60.755 (PC 3.29-39), the permittee shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in 40 CFR 60.752(b)(2)(v) (PC 3.9), using the following equation:

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

Where,

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

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

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

- The flow rate of landfill gas, Q_{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 40 CFR 60.
- The average NMOC concentration, C_{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 40 CFR 60. If using Method 18 of appendix A of 40 CFR 60, 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 permittee shall divide the NMOC concentration from Method 25C of appendix A of 40 CFR 60 by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

[40 CFR 60.754(b)]

- 3.28 In accordance with 40 CFR 60.754(d) the performance test required in 40 CFR 60.752(b)(2)(iii)(B) (PC 3.6), Method 25, 25C, or Method 18 of Appendix A of 40 CFR 60 must be used to determine compliance with the 98 weight-percent efficiency or the 20 ppmv outlet concentration level. Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to three 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 40 CFR 60, 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:

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

Where,

$NMOC_{in}$ = mass of NMOC entering control device

$NMOC_{out}$ = mass of NMOC exiting control device

[40 CFR 60.754(d)]

3.29 40 CFR 60.755 Compliance Provisions

In accordance with 40 CFR 60.755(a) the following methods, as specified in 40 CFR 60.755(a)(2) through (a)(6) (PC 3.32-3.35) of this section shall be used to determine whether the gas collection system is in compliance with the requirements in compliance with 40 CFR 60.752(b)(2)(ii).

[40 CFR 60.755(a)]

3.30 In accordance with 40 CFR 60.755(a)(1)(ii) for the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(1), the following equation 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 DEQ. 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.

- In accordance with 40 CFR 60.755(a)(1)(ii) for sites with known year-to-year solid waste acceptance rate:

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

Where,

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

k = methane generation rate constant, year⁻¹

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

M_i = mass of solid waste in the i th section, megagrams

t_i = age of the i th section, years

[40 CFR 60.755(a)(1)(ii)]

3.31 In accordance with 40 CFR 60.755(a)(1)(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 equation 40 CFR 60.755(a)(1)(ii) (PC 3.30) of this section. 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 equation in 40 CFR 60.755(a)(1)(ii) (PC 3.30) 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.

[40 CFR 60.755(a)(1)(iii)]

- 3.32 In accordance with 40 CFR 60.755(a) (2) for the purposes of determining sufficient density of gas collectors for compliance with 40 CFR 60.752(b) (2)(ii)(A)(2) the permittee shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to DEQ, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.
- [40 CFR 60.755(a)(2)]
- 3.33 In accordance with 40.CFR 60.755(a)(3) for the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR 60.752(b) (2)(ii)(A)(3), the permittee 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 five calendar days, except for the three conditions allowed 40 CFR 60.753(b) (PC 3.18). 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 DEQ for approval.
- [40 CFR 60.755(a)(3)]
- 3.34 In accordance with 40.CFR 60.755(a)(5) for the purpose of identifying whether excess air infiltration into the landfill is occurring, the permittee shall monitor each well monthly for temperature and nitrogen or oxygen as provided in 40 CFR 60.753(c) (PC 3.19-20). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within five 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 DEQ for approval.
- [40 CFR 60.755(a)(5)]
- 3.35 In accordance with 40.CFR 60.755(a)(6) a permittee seeking to demonstrate compliance 40 CFR 60.752(b) (2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in 40 CFR 60.759 (PC 3.58-63) shall provide information satisfactory to DEQ as specified in 40 CFR 60.752(b) (2)(i)(C) (PC 3.4) demonstrating that off-site migration is being controlled.
- [40 CFR 60.755(a)(6)]
- 3.36 In accordance with 40.CFR 60.755(b) for purposes of compliance with 40 CFR 60.753(a) the permittee of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in 40 CFR 60.752(b) (2)(i) (PC 3.4). 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 5 years or more if active.
- [40 CFR 60.755(b)]
- 3.37 In accordance with 40 CFR 60.755(c) the following procedures shall be used for compliance with the surface methane operational standard, as provided in 40 CFR 60.753(d) (PC 3.21).
- [40 CFR 60.755(c)]

- In accordance with 40 CFR 60.755(c)(1) after installation of the collection system, the permittee 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) (PC 3.38).

[40 CFR 60.755(c)(1)]

- In accordance with 40 CFR 60.755(c)(2) the permittee shall determine the background concentration by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters (100 feet) from the perimeter wells.

[40 CFR 60.755(c)(2)]

- In accordance with 40 CFR 60.755(c)(3) the permittee shall perform surface emission monitoring in accordance with section 4.3.1 of Method 21 of Appendix A of 40 CFR 60, except that the probe inlet shall be placed within five to 10 centimeters (two to four inches) of the ground. Monitoring shall be performed during typical meteorological conditions.

[40 CFR 60.755(c)(3)]

- In accordance with 40 CFR 60.755(c)(4) the permittee shall for any reading of 500 ppm or more above background at any location record as a monitored exceedance and the actions specified in the following 40 CFR 60.755(c)(4)(i) through 40 CFR 60.755(c)(4)(v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 60.753(d).

[40 CFR 60.755(c)(4)]

- In accordance with 40 CFR 60.755(c)(4)(i) the location of each monitored exceedance shall be marked and the location recorded.

[40 CFR 60.755(c)(4)(i)]

- In accordance with 40 CFR 60.755(c)(4)(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.

[40 CFR 60.755(c)(4)(ii)]

- In accordance with 40 CFR 60.755(c)(4)(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.

[40 CFR 60.755(c)(4)(iii)]

- In accordance with 40 CFR 60.755(c)(4)(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 one month from the initial exceedance. If the one-month re-

monitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring period. If the one-month re-monitoring shows an exceedance, the actions specified in 40 CFR 60.755(c)(4)(iii) or (v) shall be taken.

[40 CFR 60.755(c)(4)(iv)]

- In accordance with 40 CFR 60.755(c)(4)(v) for any location where monitored methane concentration equals or exceeds 500 ppm above background three times within a quarterly period, a new well or other collection device 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 DEQ for approval.

[40 CFR 60.755(c)(4)(v)]

- In accordance with 40 CFR 60.755(c)(5) the permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[40 CFR 60.755(c)(5)]

3.38 In accordance with 40 CFR 60.755(d) the permittee to demonstrate compliance with the provisions in 40 CFR 60.755(c) (**PC 3.37**) shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

[40 CFR 60.755(d)]

- The portable analyzer shall meet the instrument specifications provided in Section 3 of Method 21 of Appendix A of 40 CFR 60, except that "methane" shall replace all references to VOC.

[40 CFR 60.755(d)(1)]

- The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air.

[40 CFR 60.755(d)(2)]

- To meet the performance evaluation requirements in section 3.1.3 of Method 21 of Appendix A of 40 CFR 60, the instrument evaluation procedures of section 4.4 of Method 21 of Appendix A of 40 CFR 60 shall be used.

[40 CFR 60.755(d)(3)]

- The calibration procedures provided in Section 4.2 of Method 21 of Appendix A of 40 CFR 60 shall be followed immediately before commencing a surface monitoring survey.

[40 CFR 60.755(d)(4)]

3.39 In accordance with 40 CFR 60.755(e) the provisions 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.

[40 CFR 60.755(e)]

Monitoring and Recordkeeping Requirements

3.40 The permittee shall install a sampling port at each wellhead and measure the gauge pressure in the gas collection header on a monthly basis to determine compliance with Permit Condition 3.4 of this permit

[PTC No. P-020100, 3/24/03]

3.41 The permittee shall install, calibrate, maintain; and operate according to manufacturer specifications a temperature monitoring device equipped with a continuous recorder and having an accuracy of ± 46.7 °F of the combustion temperature to determine compliance with Permit Conditions 3.13 and 3.14.

[PTC No. P-020100, 3/24/03; PTC No. P-990122, 12/13/99]

3.42 40 CFR 60.756 Monitoring of Operations

In accordance with 40 CFR 60.756(a) the permittee to demonstrate compliance with 40 CFR 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

[40 CFR 60.756(a)]

- Measure the gauge pressure in the gas collection header on a monthly basis as provided in 40 CFR 60.755(a)(3) (PC 3.33)and

[40 CFR 60.756(a)(1)]

- Monitor oxygen or nitrogen concentration in the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5) (PC 3.34)and

[40 CFR 60.756(a)(2)]

- Monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5) (PC 3.34).

[40 CFR 60.756(a)(3)]

3.43 In accordance with 40 CFR 60.756(b) the permittee to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) (PC 3.5) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.

[40 CFR 60.756(b)]

- A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius or ± 0.5 degrees Celsius, whichever is greater.

[40 CFR 60.756(b)(1)]

- A device that records flow to the control device. The permittee shall

[40 CFR 60.756(b)(2)]

- Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes.

[40 CFR 60.756(b)(2)(i)]

3.44 In accordance with 40 CFR 60.756(f) the permittee to demonstrate compliance with 40 CFR 60.755(c) (PC 3.37) shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR 60.755(d) (PC 3.38). Any closed landfill that

has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

[40 CFR 60.756(f)]

3.45 **40 CFR 60.758 Recordkeeping Requirements**

In accordance with 40 CFR 60.758(a) the permittee shall keep for at least five years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(b) (PC 3.4) 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 four hours. Either paper copy or electronic formats are acceptable.

[40 CFR 60.758(a)]

3.46 In accordance with 40 CFR 60.758(b) the permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in 40CFR 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 five years. Records of the control device vendor specifications shall be maintained until removal.

[40 CFR 60.758(b)]

- Where an permittee subject to the provisions of this subpart seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(ii):

[40 CFR 60.758(b)(1)]

- The maximum expected gas generation flow rate as calculated in 40 CFR 60.755(a)(1) (PC 3.30). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by DEQ.

[40 CFR 60.758(b)(1)(i)]

- The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 60.759(a)(1) (PC 3.39) .

[40 CFR 60.758(b)(1)(ii)]

- Where an permittee subject to the provisions of this subpart seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) (PC 3.5) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts:

[40 CFR 60.758(b)(2)]

- The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.

[40 CFR 60.758(b)(2)(i)]

- The percent reduction of NMOC determined as specified in 40 CFR 60.752(b)(2)(iii)(B) (PC 3.5) achieved by the control device.

[40 CFR 60.758(b)(2)(ii)]

3.47 In accordance with 40 CFR 60.758(c) the permittee shall keep for five years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in

40 CFR 60.756 (PC 3.42-44) 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.

[40 CFR 60.758(c)]

- The following constitute exceedances that shall be recorded and reported under 40 CFR 60.757(f) (PC 3.56):

[40 CFR 60.758(c)(1)]

- For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all three-hour periods of operation during which the average combustion temperature was more than 28°C below the average combustion temperature during the most recent performance test at which compliance with 40CFR 60.752(b)(2)(iii) (PC 3.5) was determined.

[40 CFR 60.758(c)(1)(i)]

- The permittee 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 (PC 3.42).

[40 CFR 60.758(c)(2)]

3.48 In accordance with 40 CFR 60.758(d) the permittee 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.

[40 CFR 60.758(d)]

- The permittee shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 40 CFR 60.755(b) (PC 3.37).
- The permittee 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 40 CFR 60.759(a)(3)(i) (PC 3.61) as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii) (PC 3.61).

[40 CFR 60.758(d)(2)]

3.49 In accordance with 40 CFR 60.758(e) the permittee shall keep for at least five years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.752(b)(2)(i)(B) (PC 3.4), the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

[40 CFR 60.758(e)]

Reporting Requirements

3.50 The permittee shall submit a test protocol for each performance test required in Permit Condition 3.25 of this permit to the Department for approval at least 30 days prior to each test date. Each performance test report, including the required process data, shall be submitted to the DEQ within 30 days of the date on which the performance test is conducted.

[PTC No. P-020100, 3/24/03]

3.51 The permittee shall submit a quarterly report to DEQ of all instances when the average hourly temperature was less than 1,500 degrees Fahrenheit in accordance with Permit Condition 3.47.

[PTC No. P-990122, 12/13/99]

3.52 All documents, including but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, and compliance certifications submitted to DEQ shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the documents(s) are true, accurate, and complete.

[PTC No. P-990122, 12/13/99; PTC No. P-020100, 3/24/03]

3.53 **40 CFR 60.757 Reporting Requirements**

The permittee subject to the requirements of this subpart is exempted from the requirements of 40 CFR 60.757(b)(1) and (b)(2) (PC 3.4), after the installation of a collection and control system in compliance with 40 CFR 60.752(b)(2) (PC 3.4), during such time as the collection and control system is in operation and in compliance with 40 CFR 60.753 (PC 3.17) and 40 CFR 60.755 (PC 3.29).

[40 CFR 60.757(b(3))]

3.54 In accordance with 40 CFR 60.757(d) the permittee shall submit a closure report to DEQ within 30 days of waste acceptance cessation. DEQ may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 60.258.60. If a closure report has been submitted to DEQ, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).

[40 CFR 60.757(d)]

3.55 In accordance with 40 CFR 60.757(e) the permittee shall submit an equipment removal report to DEQ 30 days prior to removal or cessation of operation of the control equipment.

[40 CFR 60.757(e)]

- The equipment removal report shall contain all of the following items:

[40 CFR 60.757(e)(1)]

- A copy of the closure report submitted in accordance with 40 CFR 60.757(d) (PC 3.54) of this section;

[40 CFR 60.757(e)(1)(i)]

- A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and

[40 CFR 60.757(e)(1)(ii)]

- 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.

[40 CFR 60.757(e)(1)(iii)]

- DEQ may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(v) (PC 3.9) have been met.

[40 CFR 60.757(e)(2)]

3.56 In accordance with 40 CFR 60.757(f) the permittee to demonstrate compliance with 40 CFR 60.752(b)(2) (**PC 3.4**) using an active collection system designed in accordance with 40 CFR 60.752(b)(2)(ii) shall submit to DEQ annual reports of the recorded information in 40 CFR 60.757(f)(1) through 40 CFR 60.757(f)(6) (**PC 3.56**). 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 40 CFR 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 60.758(c) (**PC 3.47**).

[40 CFR 60.757(f)]

- Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d) (**PC 3.42 and PC 3. 43**).
- [40 CFR 60.757(f)(1)]
- Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of by pass flow as specified .under 40 CFR 60.756.
- [40 CFR 60.757(f)(2)]
- Description and duration of all periods when the control device was not operating for a period exceeding one hour and length of time the control device was not operating.
- [40 CFR 60.757(f)(3)]
- All periods when the collection system was not operating in excess of five days.
- [40 CFR 60.757(f)(4)]
- The location of each exceedance of the 500 ppm methane concentration as provided in 40 CFR 60.753(d) (**PC 3.21**)and the concentration recorded at each location for which an exceedance was recorded in the previous month.
- [40 CFR 60.757(f)(5)]
- The date of installation and the location of each well or collection system expansion added pursuant to 40 CFR 60.757(a)(3), (b), (**PC 3.53**)and (c)(4) of 40 CFR 60.755(**PC 3.37**).

[40 CFR 60.757(f)(6)]

3.57 In accordance with 40 CFR 60.757(g) the permittee to demonstrate compliance 40 CFR 60.752(b)(2)(iii) (**PC 3.5**)shall include the following information with the initial performance test report required under 40 CFR60.8:

[40 CFR 60.757(g)]

- 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;
- [40 CFR 60.757(g)(1)]
- 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;

[40 CFR 60.757(g)(2)]

- 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;
[40 CFR 60.757(g)(3)]
- 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
[40 CFR 60.757(g)(4)]
- 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
[40 CFR 60.757(g)(5)]
- The provisions for the control of off-site migration.
[40 CFR 60.757(g)(6)]

3.58 40 CFR 60.759 Specification of Active Collection Systems

In accordance with 40 CFR 60.759(a) the permittee to demonstrate compliance with 40 CFR 60.752(b)(2)(i) (PC 3.4) 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 DEQ as provided in 40 CFR 60.752(b)(2)(i)(C) and (D) (PC 3.4):
[40 CFR 60.759(a)]

3.59 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.
[40 CFR 60.759(a)(1)]

3.60 The sufficient density of gas collection devices determined in 40 CFR 60.759(a)(1) (PC 3.59) 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.
[40 CFR 60.759(a)(2)]

3.61 The placement of gas collection devices determined in 40 CFR 60.759(a)(1) (PC 3.59) shall control all gas producing areas, except as provided by 40 CFR 60.759(a)(3)(i) (PC 3.61) and (a)(3)(ii) (PC 3.61).
[40 CFR 60.759(a)(3)]

- Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under 40 CFR 60.758(d) (PC 3.48). 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 DEQ upon request.
[40 CFR 60.759(a)(3)(i)]

- 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 DEQ 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:

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

Where,

Q_i = NMOC emission rate from the i th section, megagrams per year

k = methane generation rate constant, year⁻¹

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

M_i = mass of the degradable solid waste in the i th section, megagram

t_i = age of the solid waste in the i th section, years

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

3.6×10^{-9} = conversion factor

[40 CFR 60.759(a)(3)(ii)]

- 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 40 CFR 60.754(a)(1) (PC 3.26) 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) (PC 3.61).

[40 CFR 60.759(a)(3)(iii)]

3.62 In accordance with 40 CFR 60.759(b) the permittee to demonstrate compliance with 40 CFR 60.752(b)(2)(i)(A) (PC 3.4) shall construct the gas collection devices using the following equipment or procedures:

[40 CFR 60.759(b)]

- 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.

[40 CFR 60.759(b)(1)]

- 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.

[40 CFR 60.759(b)(2)]

- 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.

[40 CFR 60.759(b)(3)]

3.63 In accordance with 40 CFR 60.759(c) the permittee to demonstrate compliance with 40 CFR 60.752(b)(2)(i)(A) (**PC 3.4**) shall convey the landfill gas to a control system in compliance with 40 CFR 60.752(b)(2)(iii) (**PC 3.5**) 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:

[40 CFR 60.759(c)]

- 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) (**PC 3.63**) shall be used.

[40 CFR 60.759(c)(1)]

- For new collection systems, the maximum flow rate shall be in accordance with 40 CFR 60.759(c)(2) (**PC 3.63**).

[40 CFR 60.759(c)(2)]

3.64 **40 CFR 63 Subpart AAAA Requirements - National Emission Standards for Hazardous Air Pollutants : Municipal Solid Waste Landfills**

In accordance with 40 CFR 63.1935(a) the permittee is subject to Subpart AAAA and shall meet the requirements of 40 CFR 60 Subpart WWW. The permittee shall meet the startup, shutdown and malfunction (SSM) requirements of the general provisions of subpart AAA and shall demonstrate compliance with the operating conditions by parameter monitoring results that are in specific ranges.

You are subject to this subpart if you meet the criteria in paragraph (a) or (b) of this section.

(a) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section:

- (1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A.
- (2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A.
- (3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as

calculated according to §60.754(a) of the MSW landfills new source performance standards in 40 CFR Part 60, subpart WWW, the federal plan, or an EPA approved and effective State or tribal plan that applies to your landfill.

[40 CFR 63.1935]

3.65 What is the affected source of this subpart?

In accordance with 40 CFR 63.1940(a) the permittee (affected source) shall include the entire facility in a contiguous geographic space where household waste is placed in or on land.

[40 CFR 63.1940]

3.66 When do I have to comply with this subpart?

In accordance with 40 CFR 63.1945(f) the permittee shall demonstrate compliance as an existing affected source and as an area source by meeting the criteria of 40 CFR 63.1935(a)(3) (PC 3.64) and the requirements of 40 CFR 63.1955(b)(PC 3.68) and 40 CFR 63.1960 through 63.1980 by the date the permittee is required to install a collection and control system by 40 CFR 60.752(b)(2) (PC 3.4) of subpart WWW.

[40 CFR 63.1945]

3.67 When am I no longer required to comply with this subpart?

In accordance with 40 CFR 63.1950(a)(1) the permittee shall no longer be required to demonstrate compliance with subpart AAAA when the permittee is no longer required to apply controls as specified in 40 CFR 60.752(b)(2)(v) (PC 3.9) of subpart WWW.

[40 CFR 63.1950]

3.68 What requirements must I meet?

In accordance with 40 CFR 63.1955(b) (PC 3.68) the permittee shall as required by 40 CFR 60.752(b)(2) (PC 3.4) of subpart WWW install a collection and control system. The permittee shall comply with the requirements of 40 CFR 63.1960 (PC 3.69) through 63.1985 (PC 3.73) and the general provisions specified in Table 1 of subpart AAAA (PC 2.21).

[40 CFR 63.1955]

3.69 How is compliance determined?

In accordance with 40 CFR 63.1960 the permittee shall demonstrate compliance as determined for 40 CFR 60 subpart WWW, including the performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. The permittee shall use continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) (PC 3.43) of subpart WWW to demonstrate compliance with the operating conditions for control systems. The permittee shall develop a written startup, shutdown, maintenance (SSM) plan according to the provisions in 40 CFR 63.6(e)(3) (PC 2.21). A copy of the SSM plan shall be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.

[40 CFR 63.1960]

3.70 What is a deviation?

A deviation is defined in 40 CFR 63.1990 (PC 3.74). For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in 40 CFR 63.1965(a) through (c).

A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) (PC 3.47) are exceeded.

[40 CFR 63.1965 (a)]

A deviation occurs when one hour or more of the hours during the three-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.

[40 CFR 63.1965 (b)]

A deviation occurs when a SSM plan is not developed, implemented, or maintained on site.

[40 CFR 63.1965 (c)]

3.71 How do I calculate the 3-hour block average used to determine compliance?

In accordance with 40 CFR 63.1975 the permittee shall calculate the 3-block averages in the same way as calculated in 40 CFR 60 subpart WWW, except the data collected during the event listed below are not to be included in any average computed under this subpart:

- Monitoring systems breakdowns, repairs, calibration checks, and zero (low level) and high level adjustments
- Startups
- Shutdowns
- Malfunctions

[40 CFR 63.1975]

3.72 What records and reports must I keep and submit?

In accordance with 40 CFR 63.1980(a) the permittee shall keep records and reports as specified in 40 CFR 60, subpart WWW, except the permittee must submit the annual report described in 40 CFR 60.757(f) (PC 3.56) every 6 months.

[40 CFR 63.1980(a)]

3.73 In accordance with 40 CFR 63.1980(b) the permittee shall keep records and reports as specified in the general provisions of 40 CFR part 60 and part 63 as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.

[40 CFR 63.1980(b)]

3.74 What definitions apply to this subpart?

Closed landfill means a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under 40 CFR 60.7(a)(4). Once a notification of modification has been filed, and additional solid waste is placed in the landfill is no longer closed.

[40 CFR 60.751]

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emissions limitation (including any operating limit) or work practice standard;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

- (3) Fails to meet any emission limitation, (including any operating limit), or work practice standard in this subpart during SSM, regardless of whether or not such failure is permitted by this subpart.

[40 CFR 63.1990]

Municipal solid waste landfill or MSW landfill means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. A municipal solid waste landfill may also receive other types of RCRA Subtitle D wastes (see §257.2 of this chapter) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of a municipal solid waste landfill may be separated by access roads. A municipal solid waste landfill may be publicly or privately owned. A municipal solid waste landfill may be a new municipal solid waste landfill, an existing municipal solid waste landfill, or a lateral expansion.

[40 CFR 63.1990]

4. INSIGNIFICANT ACTIVITIES

Activities and emission units identified as insignificant under IDAPA 58.01.01.317.01(b) are listed to qualify for a permit shield.

Table 4.1 INSIGNIFICANT ACTIVITIES

Description	Insignificant Activities IDAPA 58.01.01.317.01(b)(I) Citation
Generators, 10 kW (3), diesel, approx. 18.5-hp each	317.01.b.i.(30)
Wacker pumps (3), each powered by 16-hp gasoline engine	317.01.b.i.(30)
Leachate evaporator (1,800 gal capacity, 350 gal/hr evaporation rate), landfill gas fired	317.01.b.i.(30)

There are no monitoring, recordkeeping, or reporting requirements for insignificant emission units or activities beyond those required in the Facility-Wide Permit Conditions.

5. TIER I OPERATING PERMIT GENERAL PROVISIONS

General Compliance

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.
[IDAPA 58.01.01.322.15.a, 5/1/94; 40 CFR 70.6(a)(6)(i)]
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)]
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.

Reopening

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)]

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

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

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)]

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

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.

[IDAPA 58.01.01.322.15.h, 5/1/94; 40 CFR 70.6(a)(5)]

Changes Requiring Permit Revision or Notice

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;

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 CAA, 42 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, 7/1/02; IDAPA 58.01.01.209.05, 4/11/06;
40 CFR 70.4(b)(14) and (15)]

Federal and State Enforceability

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) and (2)]

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

14. Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:
- a. 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;
 - b. Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d. 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.

[Idaho Code §39-108; IDAPA 58.01.01.322.15.l, 5/1/94; 40 CFR 70.6(c)(2)]

New Requirements During Permit Term

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

16. The owner or operator of a Tier I source 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

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.
[IDAPA 58.01.01.322.15.o, 5/1/94; 40 CFR 70.6(a)(3)(iii)(A); 40 CFR 70.5(d)]

Renewal

18. a. The owner or operator of a Tier I source 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 owner or operator 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)]
- b. 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

19. 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:
- a. 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.
- b. 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).
- c. Nothing in this permit shall alter or affect the following:
- i. Any administrative authority or judicial remedy available to prevent or terminate emergencies or imminent and substantial dangers;
 - ii. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - iii. The applicable requirements of the acid rain program, consistent with 42 U.S.C. Section 7651(g)(a); and

- iv. 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, 325.01, 5/1/94; IDAPA 58.01.01.325.02, 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

20.
 - a. For each applicable requirement for which the source is not in compliance, the permittee shall comply with the compliance schedule incorporated in this permit.
 - b. 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.
 - c. 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.
 - d. 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

21. The permittee shall submit compliance certifications during the term of the permit for each emissions unit to DEQ and the EPA as follows:
 - a. The compliance certifications for all emissions units shall be submitted annually from July 1 to June 30 or more frequently if specified by the underlying applicable requirement or elsewhere in this permit by DEQ.
 - b. 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;
 - c. The compliance certification shall be in an itemized form providing the following information (provided that the identification of applicable information may cross-reference the permit or previous reports as applicable):
 - i. The identification of each term or condition of the Tier I operating permit that is the basis of the certification;
 - ii. The identification of the method(s) or other means used by the owner or operator 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;
 - iii. 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

- iv. Such information as the Department may require to determine the compliance status of the emissions unit.
- d. All original compliance certifications shall be submitted to DEQ and a copy of all compliance certifications shall be submitted to the EPA.

[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

- 22. 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.
[IDAPA 58.01.01.125, 3/23/98]

No Tampering

- 23. 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.
[IDAPA 58.01.01.126, 3/23/98]

Semiannual Monitoring Reports

- 24. 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 July 1 to December 31 and January 1 to June 30. 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.
[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

- 25. 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

- 26. 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

- 27. 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)]