

Air Quality
TIER I OPERATING PERMIT

Permittee **Milner Butte Landfill**

Permit Number **T1-2011.0076**

Project ID **60806**

Facility ID **031-00046**

Facility Location **1050 West 400 South**
Burley, ID 83318

Permit Authority

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

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

Date Issued **DRAFT XX, 2011**

Date Expires

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1. ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

ASTM	American Society for Testing and Materials
Btu/hr	British thermal units per hour
CAA	Clean Air Act
CEMS	continuous emission monitoring systems
CFR	Code of Federal Regulations
CMS	continuous monitoring systems
COMS	continuous opacity monitoring systems
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
gr/dscf	grains (1 lb = 7,000 grains) per dry standard cubic foot
HAP	hazardous air pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NSPS	New Source Performance Standards
O ₂	oxygen
PM	particulate matter
ppm	parts per million
ppmv	parts per million by volume
PTC	permit to construct
<i>Rules</i>	<i>Rules for the Control of Air Pollution in Idaho</i>
scfm	standard cubic feet per minute
SO ₂	sulfur dioxide
T1	Tier I operating permit
U.S.C.	United States Code
VOC	volatile organic compound

2. PERMIT SCOPE

Purpose

2.1 This Tier I operating permit establishes facility-wide requirements in accordance with the Idaho State Implementation Plan control strategy and the Rules.

This is the initial permit for a landfill flare.

This Tier I permit incorporates Permit to Construct No. P-2011.0054, issued **DATE**.

Regulated Sources

Table 1 REGULATED SOURCES

Sources	Control Equipment
Landfill Max. Capacity: 19,400,000 cubic yards Date of Construction: 1993	Flare Manufacturer: Perennial Energy, Inc. Model No.: FL114-32-E

3. FACILITY-WIDE CONDITIONS

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

Table 3.1 APPLICABLE REQUIREMENTS SUMMARY

Permit Conditions	Parameter	Limit / Standard Summary	Applicable Requirements Reference	Monitoring, Recordkeeping, and Reporting Requirements
3.2–3.5	Fugitive <i>Dust</i>	Reasonable control	IDAPA 58.01.01.650–651	3.3–3.5, 3.19, 3.23
3.6–3.7	Odors	Reasonable control	IDAPA 58.01.01.775–776	3.7, 3.19
3.8–3.10	Visible Emissions	20% opacity for no more than 3 minutes in any 60-minute period	IDAPA 58.01.01.625	3.9–3.11, 3.19, 3.23
3.11–3.15	Excess Emissions	Compliance with IDAPA 58.01.01.130-136	IDAPA 58.01.01.130–136	3.11–3.15, 3.19, 3.23
3.16	PM	<u>Natural gas only</u> 0.015 gr/dscf at 3% O ₂ <u>Fuel oil only</u> 0.05 gr/dscf at 3% O ₂	IDAPA 58.01.01.676–677	(see Landfill Flare Section)
3.17–3.18	Sulfur Content	ASTM grade No. 1 fuel oil ≤ 0.3% by weight ASTM grade No. 2 fuel oil ≤ 0.5% by weight	IDAPA 58.01.01.725	3.18, 3.19, 3.23
3.20–3.22	Testing	Compliance testing	IDAPA 58.01.01.157	3.20–3.22, 3.19, 3.23
3.19	Monitoring and Recordkeeping	Maintenance of required records	IDAPA 58.01.01.322.06	3.19
3.23	Reports and Certifications	Submittal of required reports, notifications, and certifications	IDAPA 58.01.01.322.08	3.23
3.24	Open Burning	Compliance with IDAPA 58.01.01.600-623	IDAPA 58.01.01.600–623	3.24, 3.19, 3.23
3.25	Asbestos	Compliance with 40 CFR 61, Subpart M	40 CFR 61, Subpart M	3.25, 3.19, 3.23
3.26	Accidental Release Prevention	Compliance with 40 CFR 68	40 CFR 68	3.26, 3.19, 3.23
Error! Reference source not found.	Recycling and Emissions Reductions	Compliance with 40 CFR 82, Subpart F	40 CFR 82, Subpart F	Error! Reference source not found., 3.19, 3.23
3.28–3.30	NSPS/NESHAP General Provisions	Compliance with 40 CFR 60, Subpart A	IDAPA 58.01.01.107.03	3.28–3.30, 3.19, 3.23
3.31	Incorporation of Federal Requirements by Reference	Compliance with applicable federal requirements referenced	IDAPA 58.01.01.107	3.31, 3.19, 3.23

Fugitive Dust

3.2 All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.

[IDAPA 58.01.01.650-651, 3/30/07]

3.3 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]

3.4 The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.
[IDAPA 58.01.01.322.06, 07, 5/1/94]

3.5 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

3.6 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]

3.7 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

3.8 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]

3.9 The permittee shall conduct a monthly facility-wide inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions. Sources that are monitored using a continuous opacity monitoring system (COMS) are not required to comply with this permit condition. The inspection shall consist of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emission, the permittee shall either:

- a) take appropriate corrective action as expeditiously as practicable to eliminate the visible emissions. Within 24 hours of the initial see/no see evaluation and after the corrective action, the permittee shall conduct a see/no see evaluation of the emissions point in question. If the visible emissions are not eliminated, the permittee shall comply with b).

or

- b) perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20%, as measured using Method 9, for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective actions and report the period or periods as an excess emission in the annual compliance certification and in accordance with IDAPA 58.01.01.130-136.

[IDAPA 58.01.01.322.06, 5/1/94]

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

[IDAPA 58.01.01.322.07, 5/1/94]

Excess Emissions

Excess Emissions - General

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

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

[IDAPA 58.01.01.132, 4/5/00]

Excess Emissions - Startup, Shutdown, Scheduled Maintenance

- 3.12** In all cases where startup, shutdown, or scheduled maintenance of any equipment or emission unit is expected to result or results in an excess emissions event, the permittee shall demonstrate compliance with IDAPA 58.01.01.133.01(a) through (d), including, but not limited to, the following:
- Prohibiting any scheduled startup, shutdown, or maintenance resulting in excess emissions shall occur during any period in which an Atmospheric Stagnation Advisory or a Wood Stove Curtailment Advisory has been declared by DEQ.
 - Notifying DEQ of the excess emissions event as soon as reasonably possible, but no later than two hours prior to, the start of the event, unless the permittee demonstrates to DEQ's satisfaction that a shorter advance notice was necessary.
 - Reporting and recording the information required pursuant to the excess emissions reporting and recordkeeping requirements (Permit Conditions 3.14 and 3.15) and IDAPA 58.01.01.135 and 136 for each excess emissions event due to startup, shutdown, or scheduled maintenance.

[IDAPA 58.01.01.133, 4/11/06]

Excess Emissions - Upset, Breakdown, or Safety Measures

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

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

[IDAPA 58.01.01.134, 4/11/06]

Excess Emissions – Reporting and Recordkeeping

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

[IDAPA 58.01.01.135, 4/11/06]

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

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

[IDAPA 58.01.01.136, 4/5/00]

Fuel Burning Equipment

3.16 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, or 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid.

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

Sulfur Content

3.17 The permittee shall not sell, distribute, use, or make available for use any of the following:

- 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.
- Coal containing greater than 1.0% sulfur by weight.

DEQ may approve an exemption from these fuel sulfur content requirements (IDAPA 58.01.01.725.01 725.04) if the permittee demonstrates that, through control measures or other means, SO₂ emissions are equal to or less than those resulting from the combustion of fuels complying with these limitations.

[IDAPA 58.01.01.725, 3/29/10]

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

[IDAPA 58.01.01.322.07, 5/1/94]

Monitoring and Recordkeeping

3.19 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 58.01.01.322.06, 07, 5/1/94]

Performance Testing

3.20 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.

3.21 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

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

3.22 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.

3.23 The proposed test date(s), test date rescheduling notice(s), compliance test report, and all other correspondence shall be sent to the DEQ address specified in the reports and certifications facility-wide condition (Permit Condition 3.24).

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

Reports and Certifications

3.24 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
Twin Falls Regional Office
1363 Fillmore
Twin Falls, ID 83301
Phone: (208) 736-2190 Fax: (208) 736-2194

The periodic compliance certification required in the general provisions (General Provision 15.22) 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, 4/5/00]

Open Burning

3.25 The permittee shall comply with the Rules for Control of Open Burning, IDAPA 58.01.01.600-623.

[IDAPA 58.01.01.600-623, 5/08/09]

Asbestos

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

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

3.27 A permittee 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

3.28 **40 CFR Part 82 - Protection of Stratospheric Ozone**

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

[40 CFR 82, Subpart F]

NSPS/NESHAP General Provisions

3.29 **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 in Table 3.2.

Table 3.2 NSPS 40 CFR 60, SUBPART A - SUMMARY OF GENERAL PROVISIONS

Section	Subject	Summary of Section Requirements
60.4	Address	<ul style="list-style-type: none"> All requests, reports, applications, submittals, and other communications associated with 40 CFR 60, Subparts shall be submitted to: Twin Falls Regional Office Department of Environmental Quality 1363 Fillmore Twin Falls, ID 83301
60.7(a),(b), and (f)	Notification and Recordkeeping	<ul style="list-style-type: none"> Notification shall be furnished of commencement of construction postmarked no later than 30 days of such date. Notification shall be furnished of initial startup postmarked within 15 days of such date. Notification shall be furnished of any physical or operational change that may increase emissions postmarked 60 days before the change is made. Records shall be maintained of the occurrence and duration of any startup, shutdown or malfunction; any malfunction of the air pollution control equipment; or any periods during which a CMS or monitoring device is inoperative. Records shall be maintained, in a permanent form suitable for inspection, of all measurements, performance testing measurements, calibration checks, adjustments and maintenance performed, and other required information. Records shall be maintained for a period of two years following the date of such measurements, maintenance, reports, and records.
60.7(a),(c), (d), (e), and (f)	Notification and Recordkeeping (CMS)	<ul style="list-style-type: none"> Notification shall be furnished of the date upon which demonstration of the CMS performance commences. Excess emissions and monitoring systems performance report shall be submitted semiannually, postmarked by January 30th and July 30th. Reports shall contain the information and be in the format specified in 40 CFR 60.7(c) and (d). Records of CEMS subhourly measurements shall be maintained in accordance with the requirements of 40 CFR 60.7(f).
60.8	Performance Tests	<ul style="list-style-type: none"> At least 30 days prior notice of any performance test shall be provided to afford the opportunity to have an observer to be present. Within 60 days of achieving the maximum production rate, but not later 180 days after initial startup, performance test(s) shall be conducted and a written report of the results of such test(s) furnished. Performance testing facilities shall be provided as follows: Sampling ports adequate for test methods applicable to such facility. Safe sampling platform(s). Safe access to sampling platform(s). Utilities for sampling and testing equipment. Performance tests shall be conducted and data reduced in accordance with 40 CFR 60.8(b), (c), and (f).
60.11(a), (d), (f), and (g)	Compliance with Standards and Maintenance Requirements	<ul style="list-style-type: none"> When performance tests are required, compliance with standards is determined by methods and procedures established by 40 CFR 60.8. 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.
60.12	Circumvention	<ul style="list-style-type: none"> 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.
60.13	Monitoring Requirements (CMS)	<ul style="list-style-type: none"> All CMS and monitoring devices shall be installed and operational prior to conducting performance tests required by 40 CFR 60.8. A performance evaluation of the COMS or CEMS shall be conducted before or during any performance test and a written report of the results of the performance evaluation furnished. Reporting requirements include submitting performance evaluations reports within 60 days of the evaluations required by this section, and submitting results of the performance evaluations for the COM within 10 days before a performance test, if using a COM to determine compliance with opacity during a performance test instead of Method 9.

		<ul style="list-style-type: none"> The zero and span calibration drifts must be checked at least once daily and adjusted in accordance with the requirements in 40 CFR 60.13(d). The zero and upscale (span) calibration drifts of a COMS must be automatically, intrinsic to the opacity monitor, checked at least once daily. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all CMS shall be in continuous operation and shall meet minimum frequency of operation requirements as specified in 40 CFR 60.13(e). All CMS or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. CMS shall be located and installed in accordance with the requirements in 40 CFR 60.13(f) and (g). Data shall be reduced and computed in accordance with the procedures in 40 CFR 60.13(h), (i), and (j).
60.14	Modification	<ul 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	<ul style="list-style-type: none"> 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]

3.30 NESHAP 40 CFR 61, Subpart A - General Provisions

The permittee shall comply with the requirements of 40 CFR 61, Subpart A - General Provisions. A summary of applicable requirements for affected facilities is provided in Table 3.3.

Table 3.3 NESHAP 40 CFR 61, SUBPART A - SUMMARY OF GENERAL PROVISIONS

Section	Subject	Summary of Section Requirements
61.04	Addresses	<ul style="list-style-type: none"> <u>All requests, reports, applications, submittals, and other communications associated with 40 CFR 61, Subparts shall be submitted to:</u> <div style="display: flex; justify-content: space-between;"> <div style="text-align: left;"> <p>Director Air and Waste US EPA 1200 Sixth Avenue Seattle, WA 98101</p> </div> <div style="text-align: center;">and</div> <div style="text-align: right;"> <p>Twin Falls Regional Office Department of Environmental Quality 1363 Fillmore Twin Falls, ID 83301</p> </div> </div>
61.05	Prohibited Activities	<ul style="list-style-type: none"> No permittee shall construct or modify any stationary source subject to a standard without first obtaining written approval in accordance with 40 CFR 61.05.
61.07	Application for approval of construction or modification	<ul style="list-style-type: none"> The permittee shall submit an application for approval of the construction of any new source or modification of any existing source in accordance with 40 CFR 61.07. The application shall be submitted before the construction or modification is planned to commence.
61.09	Notification of startup	<ul style="list-style-type: none"> The permittee shall furnish written notification of the anticipated date of initial startup of each source not more than 60 days nor less than 30 days before that date, and notification of the actual date of initial startup of each source within 15 days after that date.
61.10	Source reporting	<ul style="list-style-type: none"> Any change in the information provided in accordance with 40 CFR 61.07(b) shall be provided within 30 days after the change.
61.12	Compliance with standards and maintenance requirements	<ul style="list-style-type: none"> Compliance with numerical emission limits shall be determined in accordance with emission tests established in 40 CFR 61.13 or as otherwise specified. The permittee of each stationary source shall maintain and operate the source, including associated equipment for air pollution control, 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 had been performed.

61.13	Emission tests	<ul style="list-style-type: none"> • If required to do emission testing, the permittee shall test emissions from the source within 90 days after the effective date or within 90 days after initial startup, in accordance with the requirements of 40 CFR 61.13. • The permittee shall provide notification of the emission test at least 30 days before the emission test to allow the opportunity to have an observer present during the test. • The permittee shall provide emission testing facilities and shall conduct each emission test in accordance with the requirements of 40 CFR 61.13(d) and (e). • The permittee shall report the determinations of the emission test by a registered letter sent before the close of business on the 31st day following the completion of the emission test in accordance with the procedures in 40 CFR 61.13(f). • The permittee shall retain at the source and make available upon request for inspection, for a minimum of 2 years, records of emission test results and other data needed to determine emissions.
61.15	Modification	<ul style="list-style-type: none"> • A physical or operational change to a stationary source which results in an increase in the emission rate to the atmosphere of a hazardous pollutant to which a standard applies shall be considered a modification, and upon modification an existing source shall become a new source in accordance with the requirements and exemptions in 40 CFR 61.15.
61.19	Circumvention	<ul style="list-style-type: none"> • No permittee shall build, erect, install or use any article machine, equipment, process, or method, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard.

[40 CFR 61, Subpart A]

3.31 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 3.4.

Table 3.4 NESHAP 40 CFR 63, SUBPART A - SUMMARY OF GENERAL PROVISIONS

Section	Subject	Summary of Section Requirements
63.13	Addresses	<ul style="list-style-type: none"> • <u>All requests, reports, applications, submittals, and other communications associated with 40 CFR 63, Subparts shall be submitted to:</u> Director Air and Waste Twin Falls Regional Office US EPA Department of Environmental Quality 1200 Sixth Avenue and 1363 Fillmore Seattle, WA 98101 Twin Falls, ID 83301
63.4(a)	Prohibited Activities	<ul style="list-style-type: none"> • No permittee must operate any affected source in violation of the requirements of 40 CFR 63 in accordance with 40 CFR 63.4(a). No permittee subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.
63.4(b)	Circumvention/ Fragmentation	<ul style="list-style-type: none"> • No permittee shall build, erect, install or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. • Fragmentation which divides ownership of an operation, within the same facility among various owners where there is no real change in control, will not affect applicability in accordance with 40 CFR 63.4(c).
63.6(b) and (c)	Compliance Dates	<ul style="list-style-type: none"> • The permittee of any new or reconstructed source must comply with the relevant standard as specified in 40 CFR 63.6(b). The permittee of a source that has an initial startup before the effective date of a relevant standard must comply not later than the standard's effective date in accordance with 40 CFR 63.6(b)(1). The permittee of a source that has an initial startup after the effective date of a relevant standard must comply upon startup of the source in accordance with 40 CFR 63.6(b)(2). • The permittee of any existing sources must comply with the relevant standard by the compliance date established in the applicable subpart or as specified in 40 CFR 63.6(c). The permittee of an area source that increases its emissions of hazardous air pollutants such that the source becomes a major source shall be subject to relevant standards for existing sources in accordance with 40 CFR 63.6(c)(5).
63.6(e) and (f)	Compliance with Standards and Maintenance	<ul style="list-style-type: none"> • At all times, including periods of startup, shutdown, and malfunction, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions in accordance with 40 CFR 63.6(e).

	Requirements (Non-Opacity)	<ul style="list-style-type: none"> • The permittee of an affected source must develop a written startup, shutdown, and malfunction plan and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard in accordance with 40 CFR 63.6(e). The permittee must maintain the current plan at the affected source and must make the plan available upon request. If the plan fails to address or inadequately addresses a malfunction, the permittee must revise the plan within 45 days after the event • The permittee must record and report actions taken during a startup, shutdown, or malfunction in accordance with the requirements in 40 CFR 63.6(e). The permittee shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the plan in the semiannual startup, shutdown, and malfunction report. • Non-opacity emission standards shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified, in accordance with 40 CFR 63.6(f).
63.7	Performance Testing Requirements	<ul style="list-style-type: none"> • If required to do performance testing, the permittee must perform such tests within 180 days of the compliance date in accordance with 40 CFR 63.7(a). • The permittee must notify in writing of the intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow review of the site-specific test plan and to have an observer present during the test in accordance with 40 CFR 63.7(b). • Before conducting a required performance test, the permittee shall develop and, if requested, shall submit a site-specific test plan for approval in accordance with 40 CFR 63.7(c). The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. • If required to do performance testing, the permittee shall provide performance testing facilities in accordance with 40 CFR 63.7(d): <ul style="list-style-type: none"> Sampling ports adequate for test methods applicable to such source. Safe sampling platform(s); Safe access to sampling platform(s); Utilities for sampling and testing equipment; and Any other facilities deemed necessary for safe and adequate testing of a source. • Performance tests shall be conducted and data reduced in accordance with 40 CFR 63.7(e) and (f). • The permittee shall report the results of the performance test before the close of business on the 60th day following the completion of the test, unless specified or approved otherwise in accordance with 40 CFR 63.7(g).
63.9	Notification Requirements	<ul style="list-style-type: none"> • The permittee of an affected source that has an initial startup before the effective date of a relevant standard shall notify in writing that the source is subject to the relevant standard, in accordance with 40 CFR 63.9(b)(2). The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard), shall provide the following information: <ul style="list-style-type: none"> The name and address of the permittee; The address (i.e., physical location) of the affected source; An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date; A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; and A statement of whether the affected source is a major source or an area source. • The permittee of a new or reconstructed major affected source for which an application for approval of construction or reconstruction is required must provide the following information in writing in accordance with 40 CFR 63.9(b)(4): <ul style="list-style-type: none"> A notification of intention to construct a new major-emitting affected source, reconstruct a major-emitting affected source, or reconstruct a major source such that the source becomes a major-emitting affected source; A notification of the actual date of startup of the source delivered or postmarked within 15 calendar days after that date. • The permittee of a new or reconstructed affected source for which an application for approval of construction or reconstruction is not required must provide the following information in writing in accordance with 40 CFR 63.9(b)(5): <ul style="list-style-type: none"> A notification of intention to construct a new affected source, reconstruct an affected source, or reconstruct

		<p>a source such that the source becomes an affected source, and</p> <p>A notification of the actual date of startup of the source delivered or postmarked within 15 calendar days after that date.</p> <p>Unless the permittee has requested and received prior permission, the notification must include the information required in the application for approval of construction or reconstruction as specified in 40 CFR 63.5(d)(1).</p> <ul style="list-style-type: none"> • The permittee shall notify in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the opportunity to review and approve the site-specific test plan required by 40 CFR 63.7(c), and to have an observer present during the test. • The permittee of an affected source shall notify in writing of the anticipated date for conducting the opacity or visible emission observations in accordance with 40 CFR 63.9(f), if such observations are required. • Each time a notification of compliance status is required under this part, the permittee of such source shall submit a notification of compliance status in accordance with 40 CFR 63.9(h)(2)(i). The notification shall list: <ul style="list-style-type: none"> The methods that were used to determine compliance; The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted; The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods; The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard; If the relevant standard applies to both major and area sources, an analysis demonstrating whether the affected source is a major source (using the emissions data generated for this notification); A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and A statement by the permittee of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements. • The notification must be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard unless otherwise specified in accordance with 40 CFR 63.9(h)(2)(ii). If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with a standard, the notification shall be sent before close of business on the 30th day following the completion of the observations. • Each time a notification of compliance status is required under this part, the permittee of such source shall submit the notification of compliance status following completion of the relevant compliance demonstration activity specified. • If an permittee submits estimates or preliminary information in an application in place of the actual emissions data or control efficiencies, the permittee shall submit the actual emissions data and other correct information as soon as available but no later than with the initial notification of compliance status required in this section in accordance with 40 CFR 63.9(h)(5). • Any change in the information already provided under this section shall be provided in writing within 15 calendar days after the change in accordance with 40 CFR 63.9(j).
63.10	Recordkeeping and Reporting Requirements	<ul style="list-style-type: none"> • The permittee shall maintain files of all required information recorded in a form suitable and readily available for expeditious inspection and review in accordance with 40 CFR 63.10(b)(1). The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. • The permittee shall maintain relevant records of the following in accordance with 40 CFR 63.10(b)(2); <ul style="list-style-type: none"> The occurrence and duration of each startup or shutdown when the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards; The occurrence and duration of each malfunction of operation or the required air pollution control and monitoring equipment; All required maintenance performed on the air pollution control and monitoring equipment; Actions taken during periods of startup or shutdown when the source exceeded applicable emission limitations in a relevant standard and when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan; or

		<p>Actions taken during periods of malfunction when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan;</p> <p>All information necessary, including actions taken, to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see 40 CFR 63.6(e)(3)) when all actions taken during periods of startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);</p> <p>Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);</p> <p>All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);</p> <p>All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;</p> <p>All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;</p> <p>All CMS calibration checks;</p> <p>All adjustments and maintenance performed on CMS;</p> <p>All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted such permission under 40 CFR 63.8(f)(6); and</p> <p>All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.</p> <ul style="list-style-type: none"> • If an permittee determines that his or her stationary source that emits one or more HAP, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to a relevant standard because of limitations on the source's potential to emit or an exclusion, the permittee must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first in accordance with 40 CFR 63.10(b).
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[40 CFR 63, Subpart A]

Incorporation of Federal Requirements by Reference

3.32 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 (NESHAP), 40 CFR Part 61
- National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP), 40 CFR Part 63

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

[IDAPA 58.01.01.107, 4/7/11]

4. LANDFILL FLARE

Summary Description

4.1 Process Description

The Milner Butte Landfill (MBL), owned and operated by Southern Idaho Regional Solid Waste District (SISW), is located approximately 13 miles west of Burley, Idaho, and 25 miles east of Twin Falls, Idaho. The MBL is located in Western Cassia County approximately 13 miles west of the Burley, Idaho, and 25 miles east of Twin Falls, Idaho. The site lies near the East slope of Milner Butte and occupies 640 acres. The site began accepting waste in 1994 and currently consists of four existing contiguous solid waste disposal units (cells) occupying approximately 58 acres. The landfill has a current overall permitted capacity of 140 acres and accepts mixed municipal solid waste from seven counties in southern Idaho.

Based upon an estimated annual increase of 1.5 percent in waste acceptance rates for the landfill for year 2011 and onward, and the total maximum permitted waste capacity of the landfill (19,400,000 cubic yards), it is estimated that the final maximum permitted capacity will be reached by 2060.

The existing Gas Collection and Control System (GCCS) was constructed during 2009 and is currently being evaluated for system performance and well coverage. To increase coverage, five (5) vertical extraction wells were installed in May 2010 and connected to the system on June 5, 2010. The GCCS consists of a header piping network, vertical gas extraction wells, horizontal gas collectors, condensate collection, connections to the existing Leachate Collection and Recovery System (LCRS), and a blower/flare station.

The blower/flare station is equipped with two blowers and a single enclosed flare. A second blower is used in the event of a breakdown or subsequent maintenance to the primary blower. The blowers are manufactured by Houston Service Industries (HSI) and are rated at 30 horsepower (HP) each. The flare was manufactured by Perennial Energy and has a maximum rating of 1,500 standard cubic feet per minute (scfm) at 50% methane. The flare is equipped with:

- Continuous temperature and flow recorder
- Flow meter
- UV flame scanner to monitor for flame failure
- Automated shut-off (isolation valve) to close off the gas supply to the flare and avoid venting to atmosphere
- Flame arrestor

The process description is provided for informational purposes only and does not represent an enforceable permit condition.

[Draft PTC P-2011.0054, month/day/year]

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

Table 4.1 EMISSIONS UNITS AND CONTROL DEVICES

Emissions Units / Processes	Control Devices
Landfill Max. Capacity: 19,400,000 cubic yards Date of Construction: 1993	Flare Manufacturer: Perennial Energy, Inc. Model No.: FL114-32-E

[Draft PTC P-2011.0054, month/day/year]

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

Table 4.2 APPLICABLE REQUIREMENTS SUMMARY

Permit Conditions	Parameter	Limit / Standard Summary	Applicable Requirements Reference	Operating, Monitoring, and Recordkeeping Requirements
4.4	Hydrogen Sulfide	Not to exceed 785 ppmv	PTC P-2011.0054	4.18, 4.19, 4.20, and 4.22
4.5	Control device	Shall be operated	PTC P-2011.0054	4.15
4.6	Operational standards	Various	PTC P-2011.0054	3.19 and 4.9
4.7	Asbestos covering	Cover asbestos every 24 hours	PTC P-2011.0054	4.17

Emission Limits

4.4 Hydrogen Sulfide Limit

The hydrogen sulfide concentration in the landfill gas being burned in the flare shall not exceed 785 ppmv.

[Draft PTC P-2011.0054, month/day/year]

Operating Requirements

4.5 Subpart WWW Control Device Operational Parameter

In accordance with 40 CFR 60.752 (2)(iii)(B)(2), the control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in 40 CFR 60.756, which was incorporated as Permit Condition 4.15.

[Draft PTC P-2011.0054, month/day/year]

4.6 Subpart WWW Operational standards for collection and control systems

In accordance with 40 CFR 60.753, the permittee shall:

(a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the municipal solid waste (MSW) landfill in which solid waste has been in place for:

- (1) 5 years or more if active; or
- (2) 2 years or more if closed or at final grade;

(b) Operate the collection system with negative pressure at each wellhead except under the following conditions:

(1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR 60.757(f)(1);

(2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan;

(3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator;

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

(1) The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i).

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

- (i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
- (ii) A data recorder is not required;
- (iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
- (iv) A calibration error check is not required;
- (v) The allowable sample bias, zero drift, and calibration drift are ± 10 percent.

(d) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

(e) 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). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour; and

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

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

[Draft PTC P-2011.0054, month/day/year]

4.7 Subpart M Asbestos Covering Requirements

In accordance with 40 CFR 61.154(c), at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:

- (1) Be covered with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, or
- (2) Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

[40 CFR 61.154(c)]

Monitoring and Recordkeeping

4.8 Subpart WWW Gas Collection System Flowrate Monitoring

In accordance with 40 CFR 60.755(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 5 calendar days, except for the three conditions allowed under Permit Condition 4.7 (b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

[Draft PTC P-2011.0054, month/day/year]

4.9 Subpart WWW Well Monitoring

In accordance with 40 CFR 60.755(a)(5), the permittee shall monitor each well monthly for temperature and nitrogen or oxygen as provided in Permit Condition 4.7 (c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

[Draft PTC P-2011.0054, month/day/year]

4.10 Subpart WWW Well Installation

In accordance with 40 CFR 60.755 (b), the permittee shall place each well or design component as specified in the approved design plan as provided in 40 CFR 60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:

- (1) 5 years or more if active; or
- (2) 2 years or more if closed or at final grade.

[Draft PTC P-2011.0054, month/day/year]

4.11 Subpart WWW Surface Methane Monitoring

In accordance with 40 CFR 60.755(c):

- (1) After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 60.755 (d).
- (2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.
- (3) Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of this part, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
- (4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR 60.755(c)(4) (i) through (v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 60.753(d).
 - (i) The location of each monitored exceedance shall be marked and the location recorded.

(ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.

(iii) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in 40 CFR 60.755(c)(4)(v) shall be taken, and no further monitoring of that location is required until the action specified in 40 CFR 60.755(c)(4)(v) has been taken.

(iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in 40 CFR 60.755(c)(4) (ii) or (iii) shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in 40 CFR 60.755(c) (4) (iii) or (v) shall be taken.

(v) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.

(5) The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[Draft PTC P-2011.0054, month/day/year]

4.12 Subpart WWW Methane Monitoring Instrumentation

In accordance with 40 CFR 60.755(d), the permittee shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

(1) The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of 40 CFR 60 appendix A, except that “methane” shall replace all references to VOC.

(2) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

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

(4) The calibration procedures provided in section 4.2 of Method 21 of 40 CFR 60 appendix A shall be followed immediately before commencing a surface monitoring survey.

[Draft PTC P-2011.0054, month/day/year]

4.13 Subpart WWW Exception to Provisions

In accordance with 40 CFR 60.755(e), the provisions of Subpart WWW 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.

[Draft PTC P-2011.0054, month/day/year]

4.14 Subpart WWW Other Monitoring

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

(a) Each owner or operator seeking to comply 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:

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

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

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

(b) Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.

(1) 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. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts.

(2) A device that records flow to or bypass of the control device. The owner or operator shall either:

(i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or

(ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[Draft PTC P-2011.0054, month/day/year]

4.15 Subpart WWW Surface Concentrations of Methane Monitoring

In accordance with 40 CFR 60.756(f), the permittee shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

[Draft PTC P-2011.0054, month/day/year]

4.16 Subpart AAAA SSM Plan

In accordance with 40 CFR 63.1960, the permittee must develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.

In accordance with 40 CFR 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

[40 CFR 63.1960]

4.17 Subpart M Asbestos Recordkeeping Requirements

In accordance with 40 CFR 61.154 (e), (f), and (j), for all asbestos-containing waste material received, the permittee shall:

(1) Maintain waste shipment records, using a form similar to that shown in Figure 4, and include the following information:

(i) The name, address, and telephone number of the waste generator.

- (ii) The name, address, and telephone number of the transporter(s).
 - (iii) The quantity of the asbestos-containing waste material in cubic meters (cubic yards).
 - (iv) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.
 - (v) The date of the receipt.
- (2) As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.
 - (3) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.
 - (4) Retain a copy of all records and reports required by this paragraph for at least 2 years.
- (f) Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.
 - (g) Upon closure, comply with all the provisions of 40 CFR 61.151.
 - (h) Submit to the Administrator, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.
 - (i) Furnish upon request, and make available during normal business hours for inspection by the Administrator, all records required under this section.
 - (j) Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:
 - (1) Scheduled starting and completion dates.
 - (2) Reason for disturbing the waste.
 - (3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.
 - (4) Location of any temporary storage site and the final disposal site.

[40 CFR 61.154(e), (f), and (j)]

4.18 Hydrogen Sulfide (H₂S) Concentration Monitoring

The permittee shall measure the H₂S concentration, in ppmv, of the landfill gas stream prior to being combusted in the flare. The H₂S concentration shall be determined by conducting three separate measurements within five minutes of each other. The three separate measurements shall then be averaged to determine compliance with the Hydrogen Sulfide Limit permit condition.

[Draft PTC P-2011.0054, month/day/year]

4.19 Hydrogen Sulfide (H₂S) Concentration Monitoring Schedule

H₂S concentration monitoring shall occur as follows:

- Beginning the day following permit issuance, the Permittee shall measure the H₂S concentration once per day for five consecutive business days.
- If the measured H₂S concentration demonstrates compliance with the landfill gas stream Hydrogen Sulfide Limit after five consecutive business days. Subsequent H₂S monitoring shall occur once per week for four consecutive weeks.
- If the H₂S concentration demonstrates compliance with the landfill gas stream Hydrogen Sulfide Limit after four consecutive weeks, then subsequent H₂S monitoring shall occur once every two weeks continuing thereafter.
- If the H₂S concentration does not demonstrate compliance during any of the monitoring periods, then H₂S monitoring shall revert back to the daily schedule.

[Draft PTC P-2011.0054, month/day/year]

4.20 Hydrogen Sulfide (H₂S) Concentration Recordkeeping

Records shall include the results of each H₂S measurement and the calculated average of the three separate H₂S measurements used to demonstrate compliance with the H₂S Concentration Limit permit condition.

The hand held H₂S monitor used to measure the H₂S concentration of the landfill gas stream shall have a certified accuracy of plus or minus 10%. The hand held monitor shall be calibrated and maintained in accordance with the manufacturer's specifications.

Records of this information shall be maintained in accordance with the Recordkeeping General Provision.

[Draft PTC P-2011.0054, month/day/year]

4.21 Gas Flow Rate Monitoring

Each time the H₂S concentration is monitored and recorded; the flow rate of the landfill gas used in the engines shall also be monitored and recorded in standard cubic feet per minute (scfm).

Subpart WWW Initial Test Requirement

In accordance with 40 CFR 60.752(b)(2)(iii)(B), the permittee shall, for NMOC, establish the reduction efficiency or parts per million by volume 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).

[Draft PTC P-2011.0054, month/day/year]

Reporting Requirements

4.22 Hydrogen Sulfide (H₂S) Reporting Requirements

H₂S concentration and gas flow rate measurement data shall be submitted to Idaho DEQ each month for H₂S concentration and gas flow rate data collected during the previous month. The initial report shall be submitted on the last day of the month following the month of permit issuance.

[Draft PTC P-2011.0054, month/day/year]

4.23 Subpart WWW Annual Reports

In accordance with 40 CFR 60.757(f), the permittee shall submit to the Administrator annual reports of the recorded information in (f)(1) through (f)(6) of this paragraph.

(1) Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d).

(2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756.

(3) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.

(4) All periods when the collection system was not operating in excess of 5 days.

(5) The location of each exceedance of the 500 parts per million methane concentration as provided in 40 CFR 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.

(6) The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), and (c)(4) of 40 CFR 60.755.

[Draft PTC P-2011.0054, month/day/year]

4.24 Subpart WWW Recordkeeping Requirements

In accordance with 40 CFR 60.758(a), except as provided in 40 CFR 60.752(b)(2)(i)(B), the permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

In accordance with 40 CFR 60.758(b), except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in 40 CFR 60.752(b)(1) and (b)(2) of this section as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

(1) Where an owner or operator subject to the provisions of Subpart WWW seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(ii):

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

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

(2) Where an owner or operator subject to the provisions of Subpart WWW seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) 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:

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

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

[Draft PTC P-2011.0054, month/day/year]

4.25 Subpart WWW Equipment Operating Parameter Recordkeeping Requirements

In accordance with 40 CFR 60.758(c), except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of Subpart WWW shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

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

(i) 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 3-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 40 CFR 60.752(b)(2)(iii) was determined.

[Draft PTC P-2011.0054, month/day/year]

4.26 Subpart WWW Flow Recordkeeping Requirements

In accordance with 40 CFR 60.758(c)(2), each owner or operator subject to the provisions of Subpart WWW shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.

[Draft PTC P-2011.0054, month/day/year]

4.27 Subpart WWW Collection System Recordkeeping Requirements

In accordance with 40 CFR 60.758(d), except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator subject to the provisions of this subpart shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

(1) Each owner or operator subject to the provisions of Subpart WWW 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).

(2) Each owner or operator subject to the provisions of Subpart WWW 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) as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii).

In accordance with 40 CFR 60.758(e), except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator subject to the provisions of Subpart WWW shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

[Draft PTC P-2011.0054, month/day/year]

4.28 Subpart WWW Collection Wells

In accordance with 40 CFR 60.759, (a) the permittee shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Administrator as provided in 40 CFR 60.752(b)(2)(i)(C) and (D):

(1) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility

with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.

(2) The sufficient density of gas collection devices determined in paragraph (a)(1) of this section shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.

(3) The placement of gas collection devices determined in paragraph (a)(1) of this section shall control all gas producing areas, except as provided by paragraphs (a)(3)(i) and (a)(3)(ii) of this section.

(i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under 40 CFR 60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Administrator upon request.

[Draft PTC P-2011.0054, month/day/year]

4.29 Subpart WWW Non Productive Areas

In accordance with 40 CFR 60.759(a)(3)(ii) and (iii), any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Administrator upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

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

where,

Q_i = NMOC emission rate from the i^{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

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) or the alternative values from 40 CFR 60.754(a)(5) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in 40 CFR 60.754 (a)(3)(i).

[Draft PTC P-2011.0054, month/day/year]

4.30 Subpart AAAA Recordkeeping

In accordance with 40 CFR 63.1980, the permittee must submit the annual report described in 40 CFR 60.757(f) every 6 months.

[Draft PTC P-2011.0054, month/day/year]

5. INSIGNIFICANT ACTIVITIES

5.1 Activities and emission units identified as insignificant under IDAPA 58.01.01.317.01 are listed in Table 5.1 to qualify for a permit shield. There are no monitoring, recordkeeping, or reporting requirements for insignificant emission units or activities beyond those required in the facility-wide permit conditions (Section 3).

Table 5.1 INSIGNIFICANT ACTIVITIES

Description	Insignificant Activities IDAPA 58.01.01.317.01.b.i Citation
Diesel storage tanks	3
350,000 BTU/hr Combustion source	6

[IDAPA 58.01.01.317.01(b)(i), 5/3/03]

6. GENERAL PROVISIONS

General Compliance

- 6.1 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)]
- 6.2 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)]
- 6.3 Any permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.
[IDAPA 58.01.01.315.01, 5/1/94; 40 CFR 70.5(b)]

Reopening

- 6.4 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)]
- 6.5 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

- 6.6 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

- 6.7 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)]
- 6.8 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

- 6.9 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

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

Federal and State Enforceability

- 6.12** Unless specifically identified as a "State only" provision, all terms and conditions in this permit, including any terms and conditions designed to limit a source's potential to emit, are enforceable: (i) by DEQ in accordance with state law; and (ii) by the United States or any other person in accordance with federal law.
[IDAPA 58.01.01.322.15.j, 5/1/94; 40 CFR 70.6(b)(1), (2)]
- 6.13** 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

- 6.14** Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:
- Enter upon the permittee's premises where a Tier I source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
 - Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
 - Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.
- [Idaho Code §39-108; IDAPA 58.01.01.322.15.l, 5/1/94; 40 CFR 70.6(c)(2)]

New Applicable Requirements

- 6.15** 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

6.16 The permittee shall pay annual registration fees to DEQ in accordance with IDAPA 58.01.01.387 through IDAPA 58.01.01.397.

[IDAPA 58.01.01.387, 4/2/03; 40 CFR 70.6(a)(7)]

Certification

6.17 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

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

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

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

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

Permit Shield

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

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

[Idaho Code §39-108 and 112; IDAPA 58.01.01.122, 4/5/00;

IDAPA 58.01.01.322.15.m, 5/1/94; IDAPA 58.01.01.325, 3/19/99;

IDAPA 58.01.01.381.04, 382.04, 383.05, 384.03, 385.03, 3/19/99; 40 CFR 70.6(f)]

Compliance Schedule and Progress Reports

6.21 The permittee shall comply with the following:

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

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

Periodic Compliance Certification

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

- The compliance certifications for all emissions units shall be submitted annually from January 1st to December 31st or more frequently if specified by the underlying applicable requirement or elsewhere in this permit by DEQ.
- The initial compliance certification for each emissions unit shall address all of the terms and conditions contained in the Tier I operating permit that are applicable to such emissions unit including emissions limitations, standards, and work practices;
- The compliance certification shall be in an itemized form providing the following information (provided that the identification of applicable information may cross-reference the permit or previous reports as applicable):
 - The identification of each term or condition of the Tier I operating permit that is the basis of the certification;
 - The identification of the method(s) or other means used by the permittee for determining the compliance status with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the methods and means required under Subsections 322.06, 322.07, and 322.08;
 - The status of compliance with the terms and conditions of the Tier I operating permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in Subsection 322.11.c.ii above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and
 - Such information as DEQ may require to determine the compliance status of the emissions unit.
- 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

- 6.23 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

- 6.24 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

- 6.25 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 January 1st to June 30th and July 1st to December 31st. 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

- 6.26 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

- 6.27 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

- 6.28 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)]

Attachment B

TABLE 1.
SUMMARY OF TOXIC AIR CONTAMINANT DATA
LANDFILL GAS CHARACTERIZATION
MILNER BUTTE LANDFILL
BURLEY, IDAHO

CAS	COMPOUNDS		Compound Concentration Found in LFG ² (ppmv)
	TOXIC AIR CONTAMINANTS ¹		
71-55-6	1,1,1-Trichloroethane (methyl chloroform)		0.168
79-34-5	1,1,2,2-Tetrachloroethane		0.070
75-34-3	1,1-Dichloroethane		0.741
75-35-4	1,1-Dichloroethene		0.092
107-06-2	1,2-Dichloroethane		0.120
78-87-5	1,2-Dichloropropane		0.023
107-13-1	Acrylonitrile		0.036
71-43-2	Benzene		0.972
75-15-0	Carbon disulfide (3)		0.320
56-23-5	Carbon tetrachloride		0.007
463-58-1	Carbonyl sulfide (3)		0.183
108-90-7	Chlorobenzene		0.227
75-45-6	Chlorodifluoromethane (Freon 22)		0.355
75-00-3	Chloroethane (ethyl chloride)		0.239
67-66-3	Chloroform		0.021
106-46-7	Dichlorobenzene (1,2; 1,3; and 1,4)		1.607
75-09-2	Dichloromethane (Methylene Chloride)		3.395
100-41-4	Ethylbenzene		6.789
106-93-4	Ethylene Dibromide (Dibromoethane)		0.046
110-54-3	Hexane		2.324
7647-01-0	Hydrochloric acid ³		10.742
7783-06-4	Hydrogen sulfide		23.578
7439-97-6	Mercury ⁴		2.92E-04
74-87-3	Methyl Chloride (Chloromethane)		0.249
78-93-3	Methyl ethyl ketone		10.557
108-10-1	Methyl isobutyl ketone		0.750
127-18-4	Perchloroethylene (tetrachloroethylene)		1.193
108-88-3	Toluene		25.405
79-01-6	Trichloroethylene		0.681
75-01-4	Vinyl chloride		1.077
1330-20-7	Xylenes		16.582
TOTALS	TACs		108.549

NOTES:

- (1) Regulated toxic compounds include hazardous air pollutants (HAPs) defined by the U.S. EPA (Title III of the Clean Air Act)
- (2) Average concentration of compounds found in LFG based on "Waste Industry Air Coalition" (WIAC) Comparison of Recent Landfill Gas Analyses with or AP-42 if WIAC values not available.
- (3) Concentration of HCl is based on concentrations of chlorinated compounds in WIAC.
- (4) Concentration of Mercury based on the Revised EPA AP-42 Section 2.4 Table 2.4-1 (11/98).

NA = Not Analyzed
 ND = Not Detected
 CFCs = Chlorofluorohydrocarbons
 TACs = Toxic Air Contaminants

**TABLE 2.
MAXIMUM POTENTIAL TO EMIT CONTROLLED EMISSIONS FROM LANDFILL GAS (EU 02)
MILNER BUTTE LANDFILL
BURLEY, IDAHO**

CAS	COMPOUNDS ¹	Molecular Weight (g/Mol)	Concentration of Compounds Found In LFG ² (ppmv)	Pollutant Flow Rate to Flare ³ (tons/yr)	Compound-Specific Flare Destruction Efficiency ⁴	Controlled LFG Emissions After Flare Destruction (lbs/hr)	Controlled LFG Emissions After Flare Destruction ⁵ (tons/yr)
HAZARDOUS AIR POLLUTANTS							
71-55-6	1,1,1-Trichloroethane (methyl chloroform)	133.42	0.1680	0.02	98.00%	1.05E-04	4.59E-04
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.0700	0.01	98.00%	5.49E-05	2.41E-04
75-34-3	1,1-Dichloroethane	98.95	0.7410	0.08	98.00%	3.43E-04	1.50E-03
75-35-4	1,1-Dichloroethene	96.94	0.0920	0.01	98.00%	4.17E-05	1.83E-04
107-06-2	1,2-Dichloroethane	98.96	0.1200	0.01	98.00%	5.55E-05	2.43E-04
78-87-5	1,2-Dichloropropane	112.98	0.0230	0.00	98.00%	1.21E-05	5.32E-05
107-13-1	Acrylonitrile	53.06	0.0360	0.00	99.70%	1.34E-06	5.87E-06
71-43-2	Benzene	78.11	0.9720	0.08	99.70%	5.32E-05	2.33E-04
75-15-0	Carbon disulfide (7)	76.13	0.3200	0.02	100.00%	0.00E+00	0.00E+00
56-23-5	Carbon tetrachloride	153.84	0.0070	0.00	98.00%	5.03E-06	2.20E-05
463-58-1	Carbonyl sulfide	60.07	0.1830	0.01	100.00%	0.00E+00	0.00E+00
108-90-7	Chlorobenzene	112.56	0.2270	0.03	98.00%	1.19E-04	5.23E-04
75-45-6	Chlorodifluoromethane (Freon 22)	86.47	0.3550	0.03	98.00%	1.43E-04	6.28E-04
75-00-3	Chloroethane (ethyl chloride)	64.52	0.2390	0.02	98.00%	7.21E-05	3.16E-04
67-66-3	Chloroform	119.39	0.0210	0.00	98.00%	1.17E-05	5.13E-05
106-46-7	Dichlorobenzene	147	1.6070	0.24	98.00%	1.10E-03	4.84E-03
75-09-2	Dichloromethane (methylene chloride)	84.94	3.3950	0.30	98.00%	1.35E-03	5.90E-03
100-41-4	Ethylbenzene	106.16	6.7890	0.74	99.70%	5.05E-04	2.21E-03
106-93-4	Ethylene dibromide	187.88	0.0460	0.01	98.00%	4.04E-05	1.77E-04
110-54-3	Hexane	86.17	2.3240	0.20	99.70%	1.40E-04	6.15E-04
7647-01-0	Hydrochloric acid	36.50	10.7420	0.40	98.00%	9.25E-02	4.05E-01
7783-06-4	Hydrogen sulfide	34.08	23.5780	0.82	100.00%	0.00E+00	0.00E+00
7439-97-6	Mercury (total)	200.61	0.0003	0.00	0.00%	1.37E-05	6.00E-05
74-87-3	Methyl chloride (chloromethane)	50.49	0.2490	0.01	98.00%	5.88E-05	2.57E-04
78-93-3	Methyl ethyl ketone	72.11	10.5570	0.78	99.70%	5.34E-04	2.34E-03
108-10-1	Methyl isobutyl ketone	100.16	0.7500	0.08	99.70%	5.27E-05	2.31E-04
127-18-4	Perchloroethylene (tetrachloroethylene)	165.83	1.1930	0.20	98.00%	9.25E-04	4.05E-03
108-88-3	Toluene	92.13	25.4050	2.40	99.70%	1.64E-03	7.19E-03
79-01-6	Trichloroethylene	131.38	0.6810	0.09	98.00%	4.18E-04	1.83E-03
75-01-4	Vinyl chloride	62.50	1.0770	0.07	98.00%	3.15E-04	1.38E-03
1330-20-7	Xylenes	106.16	16.5820	1.80	99.70%	1.23E-03	5.41E-03
TOTALS				8.47			4.46E-01
Total Non-Methane Organics (NMOCs) as Hexane		86.18	1200	105.86	98.00%	4.83E-01	2.12
Volatile Organic Compounds (VOCs)		86.18	468	41.29	98.00%	1.89E-01	0.83
Criteria Air Pollutants		Molecular Weight (g/Mol)	Concentration of Compound (ppmv)	Emission Factor (lb/MMBtu) ⁶	Emission Factor (lb/hr/scfm methane)	Maximum Emissions from Flare (lbs/hr)	Maximum Emissions from Flare (tons/yr)
Nitrogen oxides (NOx)				0.060		2.70	11.83
Sulfur oxides (as SO ₂) ⁷		64.10	150.00			2.25	9.84
Carbon monoxide (CO)				0.200		9.00	39.42
Particulates (PM10)					0.001	0.75	3.29
TOTAL CRITERIA POLLUTANTS							64.37

NOTES:

- List of hazardous air pollutants (HAPs) regulated by U.S. EPA that are anticipated to be found in LFG as determined from a list in AP-42 Section 2.4
- Average concentration of compounds found in LFG based on "Waste Industry Air Coalition Comparison of Recent Landfill Gas Analyses with Historic AP-42 Values."
- Based on concentrations in Column D and proposed maximum landfill gas flow of flare
- Compound-specific flare destruction efficiencies: 98.0% for VOCs and NMOCs, 98% for Halogenated Species, 99.7% for Non-Halogenated Species, 0% for Mercury (per AP-42 Table 2.4-3)
- Controlled emissions of HAPs, NMOCs, and VOCs after destruction in flare equals uncontrolled emissions x (1- flare destruction efficiency).
- Controlled emissions of NOx, SOx, CO, and PM10 were estimated with the following emission factors: NOx = 0.06 and CO = 0.2 lb/MMBtu (manufacturer's guarantee); PM-10 = 0.001 lb/hr/dscfm (AP-42); and SOx (assume conversion of reduced sulfur @ 150 ppmv to sulfur dioxide).
- Destruction efficiency of reduced sulfur compounds assumed to be 100%; i.e., complete conversion to sulfur dioxide

MODEL VARIABLES

Maximum capacity of flare:

1500 cfm

**TABLE 3.
ACTUAL CONTROLLED EMISSIONS FROM LANDFILL GAS (EU 02)
MILNER BUTTE LANDFILL
BURLEY, IDAHO**

CAS	COMPOUNDS ¹	Molecular Weight (g/Mol)	Concentration of Compounds Found In LFG ² (ppmv)	Pollutant Flow Rate to Flare ³ (tons/yr)	Compound-Specific Flare Destruction Efficiency ⁴	Controlled LFG Emissions After Flare Destruction (lbs/hr)	Controlled LFG Emissions After Flare Destruction ⁵ (tons/yr)
HAZARDOUS AIR POLLUTANTS							
71-55-6	1,1,1-Trichloroethane (methyl chloroform)	133.42	0.1680	0.01	98.00%	2.44E-05	1.07E-04
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.0700	0.00	98.00%	1.28E-05	5.61E-05
75-34-3	1,1-Dichloroethane	98.95	0.7410	0.02	98.00%	8.00E-05	3.50E-04
75-35-4	1,1-Dichloroethene	96.94	0.0920	0.00	98.00%	9.73E-06	4.26E-05
107-06-2	1,2-Dichloroethane	98.96	0.1200	0.00	98.00%	1.30E-05	5.67E-05
78-87-5	1,2-Dichloropropane	112.98	0.0230	0.00	98.00%	2.83E-06	1.24E-05
107-13-1	Acrylonitrile	53.06	0.0360	0.00	99.70%	3.12E-07	1.37E-06
71-43-2	Benzene	78.11	0.9720	0.02	99.70%	1.24E-05	5.44E-05
75-15-0	Carbon disulfide (7)	76.13	0.3200	0.01	100.00%	0.00E+00	0.00E+00
56-23-5	Carbon tetrachloride	153.84	0.0070	0.00	98.00%	1.17E-06	5.14E-06
463-58-1	Carbonyl sulfide	60.07	0.1830	0.00	100.00%	0.00E+00	0.00E+00
108-90-7	Chlorobenzene	112.56	0.2270	0.01	98.00%	2.79E-05	1.22E-04
75-45-6	Chlorodifluoromethane (Freon 22)	86.47	0.3550	0.01	98.00%	3.35E-05	1.47E-04
75-00-3	Chloroethane (ethyl chloride)	64.52	0.2390	0.00	98.00%	1.68E-05	7.37E-05
67-66-3	Chloroform	119.39	0.0210	0.00	98.00%	2.73E-06	1.20E-05
106-46-7	Dichlorobenzene	147	1.6070	0.06	98.00%	2.58E-04	1.13E-03
75-09-2	Dichloromethane (methylene chloride)	84.94	3.3950	0.07	98.00%	3.15E-04	1.38E-03
100-41-4	Ethylbenzene	106.16	6.7890	0.17	99.70%	1.18E-04	5.16E-04
106-93-4	Ethylene dibromide	187.88	0.0460	0.00	98.00%	9.43E-06	4.13E-05
110-54-3	Hexane	86.17	2.3240	0.05	99.70%	3.28E-05	1.43E-04
7647-01-0	Hydrochloric acid	36.50	10.7420	0.09	98.00%	2.16E-02	9.45E-02
7783-06-4	Hydrogen sulfide	34.08	23.5780	0.19	100.00%	0.00E+00	0.00E+00
7439-97-6	Mercury (total)	200.61	0.0003	0.00	0.00%	3.19E-06	1.40E-05
74-87-3	Methyl chloride (chloromethane)	50.49	0.2490	0.00	98.00%	1.37E-05	6.01E-05
78-93-3	Methyl ethyl ketone	72.11	10.5570	0.18	99.70%	1.25E-04	5.45E-04
108-10-1	Methyl isobutyl ketone	100.16	0.7500	0.02	99.70%	1.23E-05	5.38E-05
127-18-4	Perchloroethylene (tetrachloroethylene)	165.83	1.1930	0.05	98.00%	2.16E-04	9.45E-04
108-88-3	Toluene	92.13	25.4050	0.56	99.70%	3.83E-04	1.68E-03
79-01-6	Trichloroethylene	131.38	0.6810	0.02	98.00%	9.76E-05	4.27E-04
75-01-4	Vinyl chloride	62.50	1.0770	0.02	98.00%	7.34E-05	3.22E-04
1330-20-7	Xylenes	106.16	16.5820	0.42	99.70%	2.88E-04	1.26E-03
TOTALS	HAPs			1.98			1.04E-01
Total Non-Methane Organics (NMOs) as Hexane		86.18	1200	24.70	98.00%	1.13E-01	0.49
Volatile Organic Compounds (VOCs)		86.18	468.00	9.63	98.00%	4.40E-02	0.19
Criteria Air Pollutants		Molecular Weight (g/Mol)	Concentration of Compound (ppmv)	Emission Factor (lb/MMBtu) ⁶	Emission Factor (lb/hr/scfm methane)	Estimated Emissions from Flare (lbs/hr)	Estimated Emissions from Flare (tons/yr)
Nitrogen oxides (NOx)				0.060		0.63	2.76
Sulfur oxides (as SO ₂) ⁷		64.10	150.00			0.52	2.30
Carbon monoxide (CO)				0.200		2.10	9.20
Particulates (PM10)					0.001	0.18	0.77
TOTAL CRITERIA POLLUTANTS							15.02

NOTES:

- (1) List of hazardous air pollutants (HAPs) regulated by U.S. EPA that are anticipated to be found in LFG as determined from a list in AP-42 Section 2.4
- (2) Average concentration of compounds found in LFG based on "Waste Industry Air Coalition Comparison of Recent Landfill Gas Analyses with Historic AP-42 Values."
- (3) Based on concentrations in Column D and proposed maximum landfill gas flow of flare
- (4) Compound-specific flare destruction efficiencies: 98.0% for VOCs and NMOs, 98% for Halogenated Species, 99.7% for Non-Halogenated Species, 0% for Mercury (per AP-42 Table 2.4-3)
- (5) Controlled emissions of HAPs, NMOs, and VOCs after destruction in flare equals uncontrolled emissions x (1- flare destruction efficiency).
- (6) Controlled emissions of NOx, SOx, CO, and PM10 were estimated with the following emission factors: NOx = 0.06 and CO = 0.2 lb/MMBtu (manufacturer's guarantee); PM-10 = 0.001 lb/hr/dscfm (AP-42); and SOx (assume conversion of reduced sulfur @ 150 ppmv to sulfur dioxide).
- (7) Destruction efficiency of reduced sulfur compounds assumed to be 100%; i.e., complete conversion to sulfur dioxide

MODEL VARIABLES

Current flare flow rate: 350 cfm
 Current methane content of LFG: 50.0%

**TABLE 4.
LANDFILL GAS NMOC AND VOC EMISSIONS (EU 01)
MILNER BUTTE LANDFILL
BURLEY, IDAHO**

Gas / Pollutant	Total LFG Production^{1, 2} (tons/yr)	LFG Collected by the GCCS³ (tons/yr)	Fugitive LFG³ (tons/yr)	Non-Fugitive LFG⁴ (tons/yr)
NMOC	63.58	47.69	15.90	2.12
VOCs ²	24.80	18.60	6.20	0.83

Gas / Pollutant	Emission Rate¹				
	(Mg/year)	(m3/year)	(av ft3/min)	(ft3/year)	(tons/year)
Total landfill gas	16,782	13,438,221	902.9	474,570,781	18,460.16
NMOC	58	16,126	1.1	569,485	63.58

Notes:

- (1) These emission rates were calculated based on the U.S. EPA LandGEM v3.02 model for 2010.
- (2) VOCs are calculated at 39% of NMOC (by weight) per AP-42 Table 2.4-2. for No or Unknown co-disposal.
- (3) Based on assumed GCCS gas collection efficiency of 75% per AP-42 paragraph 2.4.4.2.
- (4) Emissions after combustion in the flare and release from flare stack.

**TABLE 5.
ACTUAL FUGITIVE DUST EMISSIONS FROM WIND EROSION OF STOCKPLIES (EU 03)
MILNER BUTTE LANDFILL
BURLEY, IDAHO**

Pollutant	Particle Size Multiplier k¹	TSP Emission Factor²	Emission Factor³	Units	Total Exposed Area (acres)	Emissions Amount (tons/yr)
PM30	0.082	0.380	0.380	tons/acre-year	15.8	6.00
PM10	0.016	0.380	0.074	tons/acre-year	15.8	1.17
PM2.5	0.004	0.380	0.019	tons/acre-year	15.8	0.29

Notes:

(1) k values are from AP-42 Table 13.2-1.1.

(2) TSP (i.e., PM30) emission factor is 0.38 from AP-42 Table 11.9-4.

(3) Per AP-42, the emission factors are calculated as: $E_{PMX} = E_{PM30} \times (k_{PMX}) / (k_{PM30})$

**TABLE 7.
ACTUAL FUGITIVE DUST (PM_x) EMISSIONS FROM UNPAVED ROADS FOR REFUSE VEHICLES (EU 05)
MILNER BUTTE LANDFILL
BURLEY, IDAHO**

	Total trips in 2009 ⁴	Vehicle Miles Traveled ¹				Vehicle Weight ⁵ (tons)	PM2.5			PM10			PM30		
		Annually		Daily Average (5 days/wk)			Emission Factor for Unpaved Roads ² (lb/VMT)	Controlled Emission Factor for Unpaved Roads ³ (lb/VMT)	Annual Emissions from Unpaved Roads (tpy)	Emission Factor for Unpaved Roads ² (lb/VMT)	Controlled Emission Factor for Unpaved Roads ³ (lb/VMT)	Annual Emissions from Unpaved Roads (tpy)	Emission Factor for Unpaved Roads ² (lb/VMT)	Controlled Emission Factor for Unpaved Roads ³ (lb/VMT)	Annual Emissions from Unpaved Roads (tpy)
		paved	unpaved	paved	unpaved										
Commercial Refuse Vehicle (full)	6358	1271.6	5086.4	4.9	19.6	23.2	0.328	0.082	0.209	2.140	0.535	1.360	7.926	1.981	5.039
Commercial Refuse Vehicle (empty)	6358	1271.6	5086.4	4.9	19.6	13.5	0.257	0.064	0.164	1.678	0.420	1.067	6.218	1.554	3.953
Refuse Transfer Truck (full)	7300	1460.0	5840.0	5.6	22.5	23.2	0.328	0.082	0.239	2.140	0.535	1.562	7.926	1.981	5.786
Refuse Transfer Truck (empty)	7300	1460.0	5840.0	5.6	22.5	13.5	0.257	0.064	0.188	1.678	0.420	1.225	6.218	1.554	4.539
Self Haul Customer (Small Trucks, other vehicles)	8614	3445.6	0.0	13.3	0.0	2.0	0.109	0.027	0.000	0.710	0.177	0.000	2.629	0.657	0.000
Roll Off	494	197.6	790.4	0.8	3.0	23.2	0.328	0.082	0.032	2.140	0.535	0.211	7.926	1.981	0.783
TOTAL		9106	22643	35.0	87.1				0.832			5.426			20.100

Notes:

(1) From the entrance to the public unloading area = 0.06 miles of paved road (roundtrip) based on road miles calculated by using the site map.
From the entrance to the landfill active area = 0.152 mile of paved road and 0.54 mile of unpaved road (roundtrip).

(2) Emission factor $E = k \cdot (s/12)^a \cdot (W/3)^b$, where k = particle size multiplier =

	0.23 for PM2.5	(AP-42 Table 13.2.2-2)
	1.5 for PM10	(AP-42 Table 13.2.2-2)
	4.9 for PM30	(AP-42 Table 13.2.2-2)
s = surface material silt content (%) =	6.4	(AP-42 Table 13.2.2-1)
W = vehicle weight (tons)		
a =	0.9 for PM2.5	(AP-42 Table 13.2.2-2)
	0.9 for PM10	(AP-42 Table 13.2.2-2)
	0.7 for PM30	(AP-42 Table 13.2.2-2)
b =	0.45 for PM2.5	(AP-42 Table 13.2.2-2)
	0.45 for PM10	(AP-42 Table 13.2.2-2)
	0.45 for PM30	(AP-42 Table 13.2.2-2)

(3) Control efficiency is assumed to be 75% based on AP-42 Figure 13.2.2-2.

(4) Number of trips based on 2009 scale records.

(5) Vehicle Weights based on average 2009 Gross and Tare scale data.

TABLE 8.
SCREENING EMISSIONS LEVELS AND ACCEPTABLE AMBIENT CONCENTRATIONS
NON-CARCINOGENIC AND CARCINOGENIC COMPOUNDS
MILNER BUTTE LANDFILL
BURLEY, IDAHO

CAS	COMPOUNDS	EL (lb/hr)	AAC (24hr avg) (mg/m ³) ³	AAC (Annual avg) (mg/m ³) ⁴	Actual Emissions (lb/hr)	Emissions Over EL	PTE Emissions (lb/hr)	Emissions Over EL
HAZARDOUS AIR POLLUTANTS								
71-55-6	1,1,1-Trichloroethane (methyl chloroform)	127	95.5	-	2.44E-05	No	1.05E-04	No
79-34-5	1,1,2,2-Tetrachloroethane	1.10E-05	-	1.70E-02	1.28E-05	Yes	5.49E-05	Yes
75-34-3	1,1-Dichloroethane	2.50E-04	-	3.80E-02	8.00E-05	No	3.43E-04	Yes
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	1.30E-04	-	2.00E-02	9.73E-06	No	4.17E-05	No
107-06-2	1,2-Dichloroethane	2.50E-04	-	3.80E-02	1.30E-05	No	5.55E-05	No
78-87-5	1,2-Dichloropropane (Propylene dichloride)	23.133	17.35	-	2.83E-06	No	1.21E-05	No
107-13-1	Acrylonitrile	9.80E-05	-	1.50E-02	3.12E-07	No	1.34E-06	No
71-43-2	Benzene	8.00E-04	-	1.20E-01	1.24E-05	No	5.32E-05	No
75-15-0	Carbon disulfide	2	1.5	-	0.00E+00	No	0.00E+00	No
56-23-5	Carbon tetrachloride	4.40E-04	-	6.70E-02	1.17E-06	No	5.03E-06	No
463-58-1	Carbonyl sulfide	0.027	0.02	-	0.00E+00	No	0.00E+00	No
108-90-7	Chlorobenzene	23.3	17.5	-	2.79E-05	No	1.19E-04	No
75-45-6	Chlorodifluoromethane (Freon 22) ¹	-	-	-	3.35E-05	No	1.43E-04	No
75-00-3	Chloroethane (ethyl chloride)	176	132	-	1.68E-05	No	7.21E-05	No
67-66-3	Chloroform	2.80E-04	-	4.30E-02	2.73E-06	No	1.17E-05	No
106-46-7	Dichlorobenzene (1,2; 1,3; and 1,4)	30	22.5	-	2.58E-04	No	1.10E-03	No
75-09-2	Dichloromethane (Methylene chloride)	1.60E-03	-	2.40E-01	3.15E-04	No	1.35E-03	No
100-41-4	Ethylbenzene	29	21.75	-	1.18E-04	No	5.05E-04	No
106-93-4	Ethylene Dibromide (Dibromoethane)	3.00E-05	-	4.50E-03	9.43E-06	No	4.04E-05	Yes
110-54-3	Hexane	12	9	-	3.28E-05	No	1.40E-04	No
7647-01-0	Hydrochloric acid (Hydrogen chloride)	5.00E-02	0.375	-	2.16E-02	No	9.25E-02	Yes
7783-06-4	Hydrogen sulfide	0.933	0.7	-	0.00E+00	No	0.00E+00	No
7439-97-6	Mercury ²	1.00E-03	5.00E-04	-	3.19E-06	No	1.37E-05	No
74-87-3	Methyl Chloride (Chloromethane)	6.867	5.15	-	1.37E-05	No	5.88E-05	No
78-93-3	Methyl ethyl ketone	39.3	29.5	-	1.25E-04	No	5.34E-04	No
108-10-1	Methyl isobutyl ketone	13.7	10.25	-	1.23E-05	No	5.27E-05	No
127-18-4	Perchloroethylene (tetrachloroethylene)	1.30E-02	-	2.1	2.16E-04	No	9.25E-04	No
108-88-3	Toluene	25	18.75	-	3.83E-04	No	1.64E-03	No
79-01-6	Trichloroethylene	17.93	13.45	-	9.76E-05	No	4.18E-04	No
75-01-4	Vinyl chloride	9.40E-04	-	1.40E-01	7.34E-05	No	3.15E-04	No
1330-20-7	Xylenes	29	21.75	-	2.88E-04	No	1.23E-03	No

Notes:

- (1) Neither compound nor CAS number listed in IDAPA 58.01.01.585 - 586.
- (2) Emissions level and acceptable ambient concentrations for Mercury are lowest concentrations listed per IDAPA 58.01.01.585.
- (3) 24-hour average concentrations are for non-carcinogenic substances.
- (4) Annual average concentrations are for carcinogenic substances.

**TABLE 9.
CRITERIA POLLUTANT, PM, AND NMOC EMISSION SUMMARY
MILNER BUTTE LANDFILL
BURLEY, IDAHO**

Criteria Air Pollutants	lbs/hr	tons/year
Volatile Organic Compounds (VOCs)	4.43	7.03
Nitrogen oxides (NO _x)	2.70	11.83
Sulfur oxides (as SO ₂)	2.25	9.84
Carbon monoxide (CO)	9.00	39.42
Particulates (PM ₁₀)	2.35	10.31
TOTAL CRITERIA POLLUTANTS	20.74	78.42

Pollutant	lbs/hr	tons/year
Particulates (PM _{2.5})	0.28	1.23
Particulates (PM ₃₀)	6.46	28.29
Total Non-Methane Organics (NMOCs) as Hexane	4.11	18.01

Note:

All values are potential to emit (PTE) except for particulate emissions, because PTE emissions for particulates cannot be calculated.