STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502
www.deq.idaho.gov

C.L. "Butch" Otter, Governor
John H. Tippets, Director

August 24, 2018

Georgia Hanigan, Chairman Board of County Commissioners
Clay Peak Municipal Solid Waste Landfill
2560 Idaho State Highway 52
Payette, ID 83661

RE: Facility ID No. 075-00009, Clay Peak Municipal Solid Waste Landfill, Payette
Final Permit Letter

Dear Ms. Hanigan:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2008.0078 Project 61969 to Clay Peak Municipal Solid Waste Landfill located at 2560 Idaho State Highway 52 in Payette County for the addition of six landfill gas flares at Cell No. 2. This PTC is issued in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho) and is based on the certified information provided in your PTC application received December 8, 2017.

This permit is effective immediately and replaces PTC No. P-2008.0078 issued on February 27, 2004 and revised on December 16, 2008. This permit does not release Clay Peak Municipal Solid Waste Landfill from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

In accordance with IDAPA 58.01.01.313.01.b, Clay Peak Municipal Solid Waste Landfill shall submit a complete application to DEQ for an initial Tier I operating permit within 12 months of becoming a Tier I source or commencing operation.

Pursuant to the Construction and Operation Notification General Provision of your permit, it is required that construction and operation notification be provided. Please provide this information as listed to DEQ's Boise Regional Office, 1445 N. Orchard, Boise, ID 83706-2239, Fax (208) 373-0287.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Tom Krinke, Air Quality Compliance Officer, at (208) 373-0419 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends that the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

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

Sincerely,

Mike Simon
Stationary Source Program Manager
Air Quality Division

MS\ML

Permit No. P-2008.0078 Project 61969

Enclosures

Air Quality

PERMIT TO CONSTRUCT

Permittee	Clay Peak Municipal Solid Waste Landfill
Permit Number	P-2008.0078
Project ID	61969
Facility ID	075-00009
Facility Location	2560 Highway ID-52 Payette, Idaho

Permit Authority

This permit (a) is issued according to the "Rules for the Control of Air Pollution in Idaho" (Rules), IDAPA 58.01.01.200–228; (b) pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200–228.

Date Issued August 24, 2018

Morrie Lewis, Permit Writer

Mike Simon, Stationary Source Manager

Contents

1 Permit Scope....3
2 Landfill Gas Flares....5
3 General Provisions....7

1 Permit Scope

Purpose

1.1 This is a modified permit to construct (PTC) six landfill gas flares for the Cell No. 2 expansion at Clay Peak Municipal Solid Waste Landfill (Clay Peak).

1.2 Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right-hand margin.

1.3 This PTC replaces Permit to Construct No. P-2008.0078, issued on February 27, 2004 and revised on December 16, 2008.

Regulated Sources

1.4 Table 1.1 lists all sources of regulated emissions in this permit.

Table 1.1 Regulated Sources

Source	Control Equipment
Municipal Waste Landfill – Cell No. 1 Design capacity: 1.07 megagrams (1.2 million tons) Status: Closed 2010	NW 1.1 Landfill Gas Flare Manufacturer: Landfill Services Corp. Model: CF-5 Heat input capacity: 2.16 MMBtu/hr and 33 cfm Fuel: LFG Installation Date: 2001
	NW 1.2 Landfill Gas Flare Manufacturer: Landfill Services Corp. Model: CF-5 Heat input capacity: 2.16 MMBtu/hr and 33 cfm Fuel: LFG Installation Date: 2004
	NE 1.1 Landfill Gas Flare Manufacturer: Landfill Services Corp. Model: CF-5 Heat input capacity: 2.16 MMBtu/hr and 33 cfm Fuel: LFG Installation Date: 2001
	NE 1.2 Landfill Gas Flare Manufacturer: Landfill Services Corp. Model: CF-5 Heat input capacity: 2.16 MMBtu/hr and 33 cfm Fuel: LFG Manufacture Date: 2005
	SW 1.1 Landfill Gas Flare Manufacturer: Landfill Services Corp. Model: CF-5 Heat input capacity: 2.16 MMBtu/hr and 33 cfm Fuel: LFG Manufacture Date: 2007

Table 1.1 (continued)

Source	Control Equipment
Municipal Waste Landfill – Cell No. 1 Design capacity: 1.07 megagrams (1.2 million tons) Status: Closed 2010	SE 1.1 Landfill Gas Flare Manufacturer: Landfill Services Corp. Model: CF-5 Heat input capacity: 2.16 MMBtu/hr and 33 cfm Fuel: LFG Manufacture Date: 2007
	SE 1.2 Landfill Gas Flare Manufacturer: Landfill Services Corp. Model: CF-5 Heat input capacity: 2.16 MMBtu/hr and 33 cfm Fuel: LFG Manufacture Date: 2008
Municipal Waste Landfill – Cell No. 2 Design capacity: 2.0 megagrams (2.2 million tons) Status: Active	NW 2.1 Landfill Gas Flare Manufacturer: Landfill Services Corp. Model: CF-5 Heat input capacity: 2.16 MMBtu/hr and 33 cfm Fuel: LFG Installation Date: 2018
	NW 2.2 Landfill Gas Flare Manufacturer: Landfill Services Corp. Model: CF-5 Heat input capacity: 2.16 MMBtu/hr and 33 cfm Fuel: LFG Installation Date: 2019
	NW 2.3 Landfill Gas Flare Manufacturer: Landfill Services Corp. Model: CF-5 Heat input capacity: 2.16 MMBtu/hr and 33 cfm Fuel: LFG Installation Date: 2020
	NE 2.1 Landfill Gas Flare Manufacturer: Landfill Services Corp. Model: CF-5 Heat input capacity: 2.16 MMBtu/hr and 33 cfm Fuel: LFG Installation Date: 2018
	NE 2.2 Landfill Gas Flare Manufacturer: Landfill Services Corp. Model: CF-5 Heat input capacity: 2.16 MMBtu/hr and 33 cfm Fuel: LFG Installation Date: 2019
	NE 2.3 Landfill Gas Flare Manufacturer: Landfill Services Corp. Model: CF-5 Heat input capacity: 2.16 MMBtu/hr and 33 cfm Fuel: LFG Installation Date: 2020

[August 24, 2018]

2 Landfill Gas Flares

2.1 Process Description

Flares are used at Clay Peak to combust landfill gas. Flares are connected to passively-fed gas collection systems that consist of perforated PVC pipes running directly into the landfill.

Seven flares are located at Cell No. 1. Cell No. 1 reached its waste acceptance capacity at nearly one million tons and was closed in 2010, requiring construction of Cell No. 2. Six flares will be operated at Cell No.2.

Each flare has a solar panel that charges a battery pack. The batteries are used to power an arc which continuously fires at the discharge of the flare. This system ensures that the flares continuously combust the collected landfill gas. The landfill gas flow rates are variable. When there is a sufficient gas flow rate, the arc ignites the gas within the flare.

The landfill gas is composed of approximately 55% methane (CH_4), 40 % carbon dioxide (CO_2), 5% nitrogen (N_2), and a small amount of non-methane organic compounds (NMOC). Within the NMOC are some hazardous air pollutants (HAP) and toxic air pollutants (TAP). A trace amount of hydrogen sulfide (H_2S) gas is also found in the landfill gas.

[August 24, 2018]

2.2 Control Device Descriptions

Particulate matter emissions from the flares are uncontrolled. The NMOC and methane are combusted by the flares at a temperature between 900–1,300 °F. The combusted gases have a residence time of 0.6 seconds at low flow and 0.3 seconds at high flow, and the flares achieve a destruction efficiency of greater than 98%.

[August 24, 2018]

Emission Limits

2.3 Odors

No person shall allow, suffer, cause, or permit the emissions of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution in accordance with IDAPA 58.01.01.775-776.

Operating Requirements

2.4 O&M Manual

The permittee shall maintain an Operations and Maintenance (O&M) manual for the landfill gas flares which describes the procedures that will be followed to comply with the operation and maintenance General Compliance Provision (Permit Condition 3.2) and the manufacturer specifications for the flares. This manual shall remain onsite at all times and shall be made available to DEQ representatives upon request.

Monitoring and Recordkeeping Requirements

2.5 Visible Emissions Monitoring

The permittee shall conduct a quarterly inspection of visible emissions from each of the flares during daylight hours and under normal operating conditions to demonstrate compliance with opacity limits. The inspection shall consist of a see/no see evaluation of each flare for visible emissions. If any visible emissions are present from any flare, the permittee shall either take appropriate corrective action as expeditiously as practicable, or 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% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in accordance with IDAPA 58.01.01.130-136.

The permittee shall maintain records of the results of each visible emissions 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.

2.6 Odor Complaints

The permittee shall maintain records of all odor complaints received to demonstrate compliance with odor limits. 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.

2.7 NSPS 40 CFR 60 Subpart WWW

The permittee shall comply with the applicable requirements of 40 CFR 60, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills, in accordance with IDAPA 58.01.01.859.03 and Subpart WWW.

[August 24, 2018]

2.8 NESHAP 40 CFR 63 Subpart AAAA

The permittee shall comply with the applicable requirements of 40 CFR 63, Subpart AAAA – National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills, in accordance with Subpart AAAA.

[August 24, 2018]

Incorporation of Federal Requirements by Reference

2.9 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 60, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills
- National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP) 40 CFR 63, Subpart AAAA – National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

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.

[August 24, 2018]

3 General Provisions

General Compliance

3.1 The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the "Rules for the Control of Air Pollution in Idaho." The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the "Rules for the Control of Air Pollution in Idaho," and the Environmental Protection and Health Act (Idaho Code §39-101, et seq.)

[Idaho Code §39-101, et seq.]

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

[IDAPA 58.01.01.211, 5/1/94]

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

[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

3.4 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 an emissions source is located, 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]

Construction and Operation Notification

3.5 This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.

[IDAPA 58.01.01.211.02, 5/1/94]

3.6 The permittee shall furnish DEQ written notifications as follows:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;
- A notification of the date of any suspension of construction, if such suspension lasts for one year or more; and

- A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.01, 5/1/94]

- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date.

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

3.7 If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

3.8 All performance 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, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

3.9 Within 60 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00 and 4/11/15]

Monitoring and Recordkeeping

3.10 The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Monitoring records 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 58.01.01.211, 5/1/94]

Excess Emissions

3.11 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions due to start-up, shut-down, scheduled maintenance, safety measures, upsets, and breakdowns.

[IDAPA 58.01.01.130–136, 4/5/00]

Certification

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

[IDAPA 58.01.01.123, 5/1/94]

False Statements

3.13 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]

Tampering

3.14 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]

Transferability

3.15 This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

3.16 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 58.01.01.211, 5/1/94]