Statement of Basis

Tier I Operating Permit No. T1-2017.0014
Project ID 61855
– and –
Tier I Operating Permit No. T1-2017.0015
Project ID 61858

Ada County Landfill
Boise, Idaho

Facility ID 001-00195

Final

November 8, 2017
Morrie Lewis
Permit Writer

The purpose of this Statement of Basis is to set forth the legal and factual basis for the Tier I operating permit terms and conditions, including references to the applicable statutory or regulatory provisions for the terms and conditions, as required by IDAPA 58.01.01.362.
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APPENDIX A - EMISSION INVENTORIES
1. ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

ACLFL  Ada County Landfill landfill operations
ASTM   American Society for Testing and Materials
CAAA   Clean Air Act
CAM    Compliance Assurance Monitoring
CEMS   continuous emission monitoring systems
CFR    Code of Federal Regulations
CI     compression ignition
CMS    continuous monitoring systems
CO     carbon monoxide
CO₂E   carbon dioxide equivalent emissions
COMS   continuous opacity monitoring systems
DEQ    Department of Environmental Quality
EPA    U.S. Environmental Protection Agency
GHG    greenhouse gases
gr    grains (1 lb = 7,000 grains)
H₂S    hydrogen sulfide
HAP    hazardous air pollutants
HHC    Hidden Hollow Cell
HHE    Hidden Hollow Energy, LLC
hp     horsepower
hr/yr   hours per consecutive 12-calendar-month period
ICE    internal combustion engines
IDAPA  a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr  pounds per hour
LFG    landfill gas
MACT   Maximum Achievable Control Technology
MMBtu  million British thermal units
MMscf  million standard cubic feet
MRRR   Monitoring, Recordkeeping and Reporting Requirements
MSW    municipal solid waste
NESHAP National Emission Standards for Hazardous Air Pollutants
NMOC   nonmethane organic compounds
NO₂     nitrogen dioxide
NOₓ     nitrogen oxides
NRC    North Ravine Cell
NSPS   New Source Performance Standards
O₂     oxygen
O&M    operation and maintenance
PM     particulate matter
PM₂.₅  particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM₁₀   particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm    parts per million
PSD    Prevention of Significant Deterioration
PTC    permit to construct
PTE    potential to emit
RICE   reciprocating internal combustion engines
Rules  Rules for the Control of Air Pollution in Idaho
2. INTRODUCTION AND APPLICABILITY

Ada County Landfill (ACLIF) generates landfill gas and is located at 10300 North Seaman Gulch Road. The facility is classified as a major facility, as defined by IDAPA 58.01.01.008.10.c, because it emits or has the potential to emit SO₂ and CO above the major source threshold of 100 tons-per-year. The facility is also classified as a major facility, as defined by Subsection 008.10.a, because it emits or has the potential to emit formaldehyde above the major source thresholds of 10 tons-per-year for any single HAP and 25 tons-per-year for any combination of HAP.

IDAPA 58.01.01.362 requires that as part of its review of the Tier I application, DEQ shall prepare a technical memorandum (i.e. statement of basis) that sets forth the legal and factual basis for the Tier I operating permit terms and conditions including reference to the applicable statutory provisions. This document provides the basis for the Tier I operating permit for ACLIF.

The format of this Statement of Basis follows that of the permit with the exception of the facility's information discussed first followed by the scope, the applicable requirements and permit shield, and finally the general provisions.

The format of this Statement of Basis follows that of the permit. The Tier I operating permit is organized into sections. They are as follows:

ACLIF Operations - T1-2017.0014

Section 1 – Acronyms, Units, and Chemical Nomenclature

The acronyms, units, and chemical nomenclature used in the permit are defined in this section.

Section 2 – Permit Scope

The scope describes this permitting action.

Section 3 - Facility-Wide Conditions

The Facility-wide Conditions section contains the applicable requirements (permit conditions) that apply facility-wide. Where required, monitoring, recordkeeping and reporting requirements (MRRR) sufficient to assure compliance with a permit condition follows the permit condition.

Sections 4 through 5 – Hidden Hollow Cell and North Ravine Cell and Emergency Engines

The emissions unit-specific sections of the permit contain the applicable requirements that specifically apply to each regulated emissions unit. Some requirements that apply to an emissions unit (e.g. opacity limits) may be contained in the Facility-Wide Conditions section. As with the facility-wide conditions, monitoring, recordkeeping and reporting requirements sufficient to assure compliance with an applicable requirement follows the applicable requirement.

Section 6 – Insignificant Activities

This section contains a list of units or activities that are insignificant on the basis of size or production rate. Units and activities listed in this section must be listed in the permit application. The regulatory
citation for units and activities that are insignificant on the basis of size or production rate is IDAPA 58.01.01.317.01.b.

Section 7 - General Provisions

The final section of the permit contains standard terms and conditions that apply to all major facilities subject to IDAPA 58.01.01.300. This section is the same for all Tier I facilities. The General Provisions have been reviewed by EPA and contain all terms and conditions required by IDAPA 58.01.01 et al as well as requirements from other air quality laws, rules and regulations. Each general provision has been paraphrased so it is more easily understood by the general public; however, there is no intent to alter the effect of the requirement. Should there be a discrepancy between a paraphrased general provision in this statement of basis and a rule or permit, the rule or permit shall govern.

HHE Operations - T1-2017.0015

Section 1 – Acronyms, Units, and Chemical Nomenclature

The acronyms, units, and chemical nomenclature used in the permit are defined in this section.

Section 2 - Permit Scope

The scope describes this permitting action.

Section 3 - Facility-Wide Conditions

The Facility-wide Conditions section contains the applicable requirements (permit conditions) that apply facility-wide. Where required, monitoring, recordkeeping and reporting requirements (MRRR) sufficient to assure compliance with a permit condition follows the permit condition.

Section 4 – Landfill Gas Engines

The emissions unit-specific sections of the permit contain the applicable requirements that specifically apply to each regulated emissions unit. Some requirements that apply to an emissions unit (e.g. opacity limits) may be contained in the Facility-Wide Conditions section. As with the facility-wide conditions, monitoring, recordkeeping and reporting requirements sufficient to assure compliance with an applicable requirement follows the applicable requirement.

Section 5 – General Provisions

The final section of the permit contains standard terms and conditions that apply to all major facilities subject to IDAPA 58.01.01.300. This section is the same for all Tier I facilities. The General Provisions have been reviewed by EPA and contain all terms and conditions required by IDAPA 58.01.01 et al as well as requirements from other air quality laws, rules and regulations. Each general provision has been paraphrased so it is more easily understood by the general public; however, there is no intent to alter the effect of the requirement. Should there be a discrepancy between a paraphrased general provision in this statement of basis and a rule or permit, the rule or permit shall govern.
3. FACILITY INFORMATION

3.1 Facility Description

ACLF is a municipal solid waste landfill located at 10300 Seaman’s Gulch Road, roughly 6.5 miles northwest of downtown Boise. The property consists of approximately 2,650 acres. The landfill is owned and operated by Ada County.

ACLF consists of two active cells - Hidden Hollow Cell (HHC) and the North Ravine Cell (NRC). The HHC encompasses an area of approximately 110 acres with estimated design capacity of 14 million cubic yards and is anticipated to be closed in 2017. The NRC, approximately 260 acres, was designed to have a final capacity of 70 million cubic yards and an active life of 90 years based on the anticipated growth patterns and LANDGEM modeling. The NRC has been accepting waste since 2007.

ACLF generates landfill gas (LFG). This gas is a byproduct of the decomposition of organic material in the landfill. It is typically a mixture of approximately 50% methane, 50% carbon dioxide, and trace amounts of other gases including nonmethane organic compounds (NMOC). Within the NMOC are some hazardous air pollutants (HAP) and toxic air pollutants (TAP). Hydrogen sulfide gas is also found in the landfill gas. Landfills may continue to generate gas for 10 to 20 years, or longer, after waste disposal has ceased.

The extracted LFG is drawn to the flare system by two exhausting (vacuum blowers). Condensate is captured ahead of the exhausting and pumped to the leachate collection ponds. The exhausting blow the LFG into the flares. The NMOC and methane are combusted by the enclosed flares at temperatures between 1,400 – 1,800 degrees Fahrenheit (°F).

ACLF is subject to the Code of Federal Regulations (CFR) 40 CFR 60 Subpart WWW, which requires municipal landfills to collect and control the gases emitted from the decomposition process. In April 2004, the LFG collection system began to collect gases from the 46 acres of HHC. The flares can be operated individually with permitted flow rates of 2,320 standard cubic feet per minute (scfm) and 2,379 scfm for Flare 1 and Flare 2, respectively or together with a combined flow up to 4,699 scfm.

Hidden Hollow Energy LLC (HHE) currently operates two landfill gas-to-energy units utilizing LFG from the ACLF as fuel for two internal combustion engines that drive 1.6-megawatt (MW) generators. On April 15, 2015, two additional LFG Caterpillar G3520C engines were permitted but have not commenced construction to date.

In 2014, the hydrogen sulfide (H₂S) scrubber treatment system began operating to treat the LFG prior to combustion activities in the LFG engines and the flares. The system operates at a pressure drop of 8 inches water column at a maximum flow rate of 4,699 scfm of LFG. The treatment system is designed to result in an outlet concentration of 600 parts per million (ppm) H₂S.

The following stationary air emission units and fugitive dust emissions are regulated by this Tier I Operating Permit renewal:

ACLF Operations

- HHC and NRC -> H₂S Scrubber (control), LFG Flare 1 and LFG Flare 2 (control)
- Emergency Engine 1 – uncontrolled
- Emergency Engine 2 – uncontrolled
- Paved and unpaved roads – fugitive dust
- Landfill equipment – fugitive dust
- Storage piles – fugitive dust
HHE Operations
- LFG Engine 1 $\rightarrow$ H$_2$S Scrubber (control)
- LFG Engine 2 $\rightarrow$ H$_2$S Scrubber (control)
- LFG Engine 3 (not installed – permitted only) $\rightarrow$ H$_2$S Scrubber (control)
- LFG Engine 4 (not installed – permitted only) $\rightarrow$ H$_2$S Scrubber (control)

3.2 Facility Permitting History

Tier I Operating Permit History - Previous 5-year permit term October 19, 2012 to November 8, 2017

The following information is the permitting history of this Tier I facility during the previous five-year permit term which was from October 19, 2012 to November 8, 2017. This information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

<table>
<thead>
<tr>
<th>Issue Date</th>
<th>Location</th>
<th>Project Number</th>
<th>Project</th>
<th>Status</th>
<th>History Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 25, 2015</td>
<td>ACLF</td>
<td>T1-2011.0128 PROJ 61500</td>
<td>Administrative amendment to permit ACLF operations separately from HHE.</td>
<td>S</td>
<td>Superseded T1-2011.0128 PROJ 60939.</td>
</tr>
<tr>
<td>April 15, 2015</td>
<td>ACLF/HHE</td>
<td>P-2009.0001 PROJ 61360</td>
<td>Revision to consolidate ACLF and HHE operations into single facility, install H2S scrubber, increase LFG flow, add one engine to replace two wood chipper engines, and add two LFG engines.</td>
<td>A</td>
<td>Revised P-2009.0098 PROJ 60803 and P-2009.0001 PROJ 60972.</td>
</tr>
</tbody>
</table>

Underlying Permit History - Includes every underlying permit issued to this facility

The following information is the comprehensive permitting history of all underlying applicable permits issued to this Tier I facility. This information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).
<table>
<thead>
<tr>
<th>Issue Date</th>
<th>Location</th>
<th>Project Number</th>
<th>Project Description</th>
<th>Status</th>
<th>History Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PROJ 61855</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>PROJ 61858</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 25, 2015</td>
<td>ACLF</td>
<td>T1-2011.0128</td>
<td>Administrative amendment to permit ACLF operations separately from HHE.</td>
<td>S</td>
<td>Superseded T1-2011.0128 PROJ 60939.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PROJ 61500</td>
<td></td>
<td></td>
<td>Superseded by T1-2017.0014 PROJ 61855.</td>
</tr>
<tr>
<td>June 25, 2015</td>
<td>HHE</td>
<td>T1-2015.0014</td>
<td>Administrative amendment to permit HHE operations separately from ACLF.</td>
<td>S</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PROJ 61501</td>
<td></td>
<td></td>
<td>Initial permit.</td>
</tr>
<tr>
<td>April 15, 2015</td>
<td>ACLF/HHE</td>
<td>P-2009.0001</td>
<td>Revision to consolidate ACLF and HHE operations into single facility, install H₂S</td>
<td>A</td>
<td>Revised P-2009.0098 PROJ 60803 and P-2009.0001 PROJ 60972.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PROJ 61360</td>
<td>scrubber, increase LFG flow, add one engine to replace two wood chipper engines, and</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>add two LFG engines.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PROJ 60939</td>
<td></td>
<td></td>
<td>Superseded by T1-2011.0128 PROJ 61500.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PROJ 60972</td>
<td></td>
<td></td>
<td>Revised by P-2009.0001 PROJ 61360.</td>
</tr>
<tr>
<td>June 19, 2012</td>
<td>HHE</td>
<td>P-2009.0098</td>
<td>Revision to limit CO emissions, install H₂S scrubber, and incorporate NESHAP Subpart</td>
<td>S</td>
<td>Revised P-2009.0098 (PROJ 0098).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PROJ 60803</td>
<td>ZZZZ requirements.</td>
<td></td>
<td>Revised by P-2009.0001 PROJ 61360.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(PROJ 0098)</td>
<td></td>
<td></td>
<td>Revised by P-2009.0098 PROJ 60803.</td>
</tr>
<tr>
<td>September 28, 2009</td>
<td>ACLF</td>
<td>T1-2009.0009</td>
<td>Administrative amendment to incorporate LFG flare flow revision.</td>
<td>S</td>
<td>Superseded T1-060050.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Superseded by T1-2011.0128 PROJ 60939.</td>
</tr>
<tr>
<td>July 24, 2009</td>
<td>ACLF</td>
<td>P-2009.0001</td>
<td>Revision to increase LFG flare flows for Flare 1 and Flare 2.</td>
<td>S</td>
<td>Revised P-050056.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Revised by P-2009.0001 PROJ 60972.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(PROJ 0190)</td>
<td></td>
<td></td>
<td>Revised by P-2009.0098 (PROJ 0098).</td>
</tr>
<tr>
<td>April 13, 2007</td>
<td>ACLF</td>
<td>T1-060050</td>
<td>Initial T1 as required by IDAPA 58.01.01.859.</td>
<td>S</td>
<td>Initial permit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Superseded by T1-2009.0009.</td>
</tr>
<tr>
<td>May 18, 2006</td>
<td>ACLF</td>
<td>P-050056</td>
<td>Revision to add North Ravine Cell and require LFG flare control equipment.</td>
<td>S</td>
<td>Revised P-040004.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Revised by P-2009.0001.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Revised by P-2008.0190 (PROJ 0190).</td>
</tr>
<tr>
<td>June 15, 2004</td>
<td>ACLF</td>
<td>P-040004</td>
<td>Initial PTC two LFG flames and operate an existing wood chipper, power screen, and two</td>
<td>S</td>
<td>Initial permit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>diesel-fired generator engines.</td>
<td></td>
<td>Revised by P-050056.</td>
</tr>
</tbody>
</table>
4. APPLICATION SCOPE AND APPLICATION CHRONOLOGY

4.1 Application Scope

T1-2017.0014 PROJ 61855 is the renewal of Ada County Landfill’s Tier I operating permit for landfill operations (ACLF).

T1-2017.0015 PROJ 61858 is the renewal of Ada County Landfill’s Tier I operating permit for Hidden Hollow waste-to-energy operations (HHE).

Ada County Landfill’s landfill operations (ACLF) and waste-to-energy operations (HHE) are considered a single Tier I major facility. The Tier I permit has been issued in two sections as described above for each of these operations.

4.2 Application Chronology

March 3, 2017  DEQ received an application for renewal of both T1-2011.0128 PROJ 61500 and T1-2015.0014 PROJ 61501 permits.

May 1, 2017  DEQ determined that the application was incomplete.

May 22, 2017  DEQ made available the draft permits and statements of basis for peer and regional office review.

May 23 and June 7, 2017  DEQ received supplemental information from the applicant, including a request for extension of the construction deadline for Engines #3 and #4 required by PTC No. P-2009.0001 PROJ 61360.

June 21, 2017  DEQ determined that the applications were complete.

July 13, 2017  DEQ approved extension of the construction deadline for Engines #3 and #4.

July 21, 2017  DEQ made available the draft permits and statements of basis for applicant review.

August 15 – September 14, 2017  DEQ provided a public comment period on the proposed actions. Copies of current O&M manuals, Surface Monitoring Design Plan, SSM Plans, Manufacturer’s Emission-Related Maintenance Plans, the Fugitive Dust Plan, and the Collection & Control System Design Plan were included for public review.

September 19, 2017  DEQ provided the proposed permits and statements of basis for EPA review.

November 8, 2017  DEQ issued the final permits and statements of basis.
5. EMISSIONS UNITS, OPERATION DESCRIPTIONS, AND EMISSION INVENTORIES

This section lists the emissions units, describes the operations, and provides the emissions inventory for this facility. The information presented was provided by the applicant in its permit application. Also listed in this section are the insignificant activities based on size or production rate.

5.1 ACLF Operations (T1-2017.0014) – Hidden Hollow Cell (HHC) and North Ravine Cell (NRC)

Table 5.1 lists the emissions units and control devices associated with HHC and NRC.

<table>
<thead>
<tr>
<th>Emissions Unit ID No.</th>
<th>Emissions Unit Description</th>
<th>Control Device (if applicable)</th>
<th>Emission Point ID No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hidden Hollow Cell (HHC) and North Ravine Cell (NRC)</td>
<td>Municipal solid waste landfill HHC: ~110 acres Design capacity of 16 million cubic yards Anticipated closure: ~2020 NRC: ~260 acres Design capacity of 70 million cubic yards Anticipated closure: ~2097</td>
<td>Flare 1</td>
<td>Manufacturer: John Zink Model: Enclosed ZTOF flare Permitted flowrate: 2320 scfm or 4699 scfm when running concurrently with Flare 2 Maximum heat release: 65.5 MMBtu/hr Operating temperature range: 1400 to 1800 °F Height: 40 feet Diameter: 12 feet</td>
</tr>
<tr>
<td>H₂S Scrubber Treatment System</td>
<td></td>
<td>Flare 2</td>
<td>Manufacturer: John Zink Model: Enclosed ZTOF flare Permitted flowrate: 2379 scfm or 4699 when running concurrently with Flare 1 Maximum heat release: 65.5 MMBtu/hr Operating temperature range: 1400 to 1800 °F Height: 40 feet Diameter: 12 feet</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H₂S Scrubber Treatment System</td>
</tr>
</tbody>
</table>

The HHC encompasses an area of approximately 110 acres with a design capacity of 16 million cubic yards and is anticipated to be closed in 2020. The NRC encompasses an area of approximately 260 acres, has a design capacity of 70 million cubic yards and an active life of approximately 90 years. The NRC began accepting municipal solid waste in 2007.

The ACLF operates six stationary emissions units: two enclosed flares and four diesel engines. The flares are used as emission control devices to destroy NMOCS at temperatures between 1,400 to 1,800 degrees Fahrenheit. Landfill gas is drawn through as gas collection system under vacuum to the flare control system. Thermocouple sensors in the flare stacks continuously monitor operations. In the event the flame goes out, the integrated control system will shut down the flares.

Hidden Hollow Energy, LLC (HHE) currently utilizes LFG to operate two generators to produce electrical energy with plans to bring two more generators on-line. HHE operations have been consolidated with ACLF into a single facility.
5.2 **ACLF Operations (T1-2017.0014) – Emergency Engines**

Table 5.2 lists the emissions units and control devices associated with emergency engines.

<table>
<thead>
<tr>
<th>Emissions Unit ID No.</th>
<th>Emissions Unit Description</th>
<th>Control Device (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Engine #1</td>
<td>44 hp Detroit diesel fired</td>
<td>None</td>
</tr>
<tr>
<td>Emergency Engine #2</td>
<td>80 hp John Deere diesel fired</td>
<td>None</td>
</tr>
</tbody>
</table>

Two emergency backup engines are located at the facility. Emergency Engine #1 is located at the Household Hazardous Waste Facility (44-HP Detroit Diesel) and Emergency Engine #2 is located at the Scale House (80-HP John Deere). Both are used to provide backup power during power outages.

5.3 **HHE Operations (T1-2017.0015) – Landfill Gas Engines**

Table 5.3 lists the emissions units and control devices associated with Landfill Gas Engines.

<table>
<thead>
<tr>
<th>Emissions Unit ID No.</th>
<th>Emissions Unit Description</th>
<th>Control Device (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPG Engines #1 - #4</td>
<td>Internal Stationary Spark Combustion Engine</td>
<td>H2S Scrubber Treatment System</td>
</tr>
<tr>
<td></td>
<td>Manufacturer: Caterpillar</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Model: 3520C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Capacity: 1.6 MW, 2233 bhp</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fuel: Landfill gas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fuel consumption: 600 scfm</td>
<td></td>
</tr>
</tbody>
</table>

Hidden Hollow Energy, LLC (HHE) currently utilizes LFG to operate two generators to produce electrical energy with plans to bring two more generators on-line. HHE operations have been consolidated with ACLF into a single facility.

5.4 **Insignificant Emissions Units Based on Size or Production Rate**

This section contains a list of units or activities that are insignificant on the basis of size or production rate. Units and activities listed in this section must be listed in the permit application. Table 5.4 lists the units and activities which have been determined to be insignificant on the basis of size or production rate. The regulatory authority for emissions units and activities that are insignificant on the basis of size or production rate is IDAPA 58.01.01.317.01.b.

<table>
<thead>
<tr>
<th>Emissions Unit / Activity</th>
<th>Regulatory Authority / Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid fuel tanks ≤ 10,000 gallons</td>
<td>317.01.b.i.3</td>
</tr>
<tr>
<td>Welding using less than 1 ton of rod per day</td>
<td>317.01.b.i.9</td>
</tr>
<tr>
<td>Combustion source, space and hot water heaters &lt; 5 MMBtu/hr</td>
<td>317.01.b.i.9 and 18</td>
</tr>
</tbody>
</table>

5.5 **Non-applicable Requirements for Which a Permit Shield is Requested**

This section of the permit lists the regulations for which the facility has requested, and DEQ proposes to grant, a permit shield pursuant to IDAPA 58.01.01.325. The facility has not request a permit shield.

5.6 **Emissions Inventory**

Table 5.5 summarizes the emissions inventory for this major facility. All values are expressed in units of tons-per-year and represent the facility’s potential to emit. Potential to emit is defined as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hour of operation or on the type or amount of
material combusted, stored or processed shall be treated as part of its design if the limitation or the effect it would have on emission is state or federally enforceable.

Listed below Table 5.5 are the references for the emission factors used to estimate the emissions. The documentation provided by the applicant for the emissions inventory and emission factors is provided as Appendix B of this statement of basis.

<table>
<thead>
<tr>
<th>Location</th>
<th>Source Description</th>
<th>PM$_{10}$ T/yr</th>
<th>PM$_{2.5}$ T/yr</th>
<th>NO$_x$ T/yr</th>
<th>SO$_2$ T/yr</th>
<th>CO T/yr</th>
<th>VOC T/yr</th>
<th>HAP T/yr</th>
<th>GHG CO$_2$e T/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACLF</td>
<td>Flare 1</td>
<td>6.93</td>
<td>6.93</td>
<td>13.20</td>
<td>61.23</td>
<td>3.32</td>
<td>20.24</td>
<td>2.20</td>
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<tr>
<td></td>
<td>Flare 2</td>
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<td>0.00</td>
<td>0.00</td>
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<td>Emergency Engine #1</td>
<td>0.03</td>
<td>0.03</td>
<td>0.46</td>
<td>0.0002</td>
<td>0.10</td>
<td>0.04</td>
<td>0.013</td>
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<tr>
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<td>Emergency Engine #2</td>
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<td>0.71</td>
<td>0.0003</td>
<td>0.15</td>
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<td>Fugitive Sources</td>
<td>64.16</td>
<td>8.28</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>HHE</td>
<td>LFG Engine #1</td>
<td>3.42</td>
<td>3.42</td>
<td>10.77</td>
<td>15.99</td>
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<td>3.46</td>
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<td>10.77</td>
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<td>64.69</td>
<td>3.46</td>
<td>10.36</td>
<td></td>
</tr>
<tr>
<td></td>
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<td>3.42</td>
<td>10.77</td>
<td>15.99</td>
<td>64.69</td>
<td>3.46</td>
<td>10.36</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LFG Engine #4</td>
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<td>3.42</td>
<td>10.77</td>
<td>15.99</td>
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<td>10.36</td>
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</tr>
<tr>
<td></td>
<td><strong>Total Emissions</strong></td>
<td><strong>84.85</strong></td>
<td><strong>28.97</strong></td>
<td><strong>57.45</strong></td>
<td><strong>125.19</strong></td>
<td><strong>262.33</strong></td>
<td><strong>34.18</strong></td>
<td><strong>43.66</strong></td>
<td><strong>644.00</strong></td>
</tr>
</tbody>
</table>

The documentation provided by the applicant for the emissions inventory and emission factors can be found in the application for PTC No. P-2009.0001 PROJ 61360, and the application for this renewal.

6. **EMISSION LIMITS AND MRRR**

This section contains the applicable requirements for this T1 facility.

This section is divided into the following subsections.

- Facility-Wide Conditions;
- Hidden Hollow Cell (HHC) and North Ravine Cell (NRC) Emissions Limits (T1-2017.0014 only);
- Emergency Engines #1 and #2 Emissions Limits (T1-2017.0014 only);
- Landfill Gas Engines #1 – 4 (T1-2017.0015 only);
- Tier I Operating Permit General Provisions.

**MRRR**

Monitoring, recordkeeping and reporting requirements (MRRR) are the means with which compliance with an applicable requirement is demonstrated. In this section, the applicable requirement (permit condition) is provided first followed by the MRRR. Should an applicable requirement not include sufficient MRRR to satisfy IDAPA 58.01.01.322.06, 07, and 08, then the permit must establish adequate monitoring, recordkeeping and reporting sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit (i.e. gap filling). In addition to the specific MRRR provided for each applicable requirement, generally applicable facility-wide conditions and general provisions may also be provided, such as performance testing, reporting, and certification requirements.

The legal and factual basis for each permit condition is provided for in this document. If a permit condition was changed due to facility draft comments or public comments, an explanation of the changes is provided.
State Enforceability

An applicable requirement that is not required by the federal CAA and has not been approved by EPA as a SIP-approved requirement is identified as a "State-only" requirement and is enforceable only under state law. State-only requirements are not enforceable by the EPA or citizens under the CAA. State-only requirements are identified in the permit within the citation of the legal authority for the permit condition.

Federal Enforceability

Unless identified as “State-only,” all applicable requirements, including MRRR, are state and federally enforceable. It should be noted that while a violation of a MRRR is a violation of the permit, it is not necessarily a violation of the underlying applicable requirement (e.g. emissions limit).

To minimize the length of this document, the following permit conditions and MRRR have been paraphrased. Refer to the permit for the complete requirements.

6.1 Facility-Wide Conditions

Permit Condition 3.2 - Fugitive Dust

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

[IDA PA 58.01.01.650-651, 3/30/07]

MRRR (Permit Conditions 3.2 through 3.5)

- Monitor and maintain records of the frequency and the methods used to control fugitive dust emissions;
- Maintain records of all fugitive dust complaints received and the corrective action taken in response to the complaint;
- Conduct facility-wide inspections of all sources of fugitive emissions. If any of the sources of fugitive dust are not being reasonably controlled, corrective action is required.

[IDA PA 58.01.01.322.06, 07, 08, 4/5/2000]

Permit Condition 3.6 - Odors

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.

[IDA PA 58.01.01.775-776 (State-only), 5/1/94]

MRRR (Permit Condition 3.7)

- Maintain records of all odor complaints received and the corrective action taken in response to the complaint;
- Take appropriate corrective action if the complaint has merit, and log the date and corrective action taken.

[IDA PA 58.01.01.322.06, 07 (State only), 5/1/94]

Permit Condition 3.8 - Visible Emissions

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.

[IDA PA 58.01.01.625, 5/8/09]

MRRR (Permit Condition 3.9 through 3.10)

- Conduct facility-wide inspections of all emissions units subject to the visible emissions standards (or rely on continuous opacity monitoring);
• If visible emissions are observed, take appropriate corrective action and/or perform a Method 9 opacity test;
• Maintain records of the results of each visible emissions inspection.

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

**Permit Conditions 3.11 through 3.15 - Excess Emissions**

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 and the regulations of IDAPA 58.01.01.130-136.

**MRRR (Permit Conditions 3.12 through 3.15)**

Monitoring, recordkeeping and reporting requirements for excess emissions are provided in Sections 131 through 136.

• Take appropriate action to correct, reduce, and minimize emissions from excess emissions events;
• Prohibit excess emissions during any DEQ Atmospheric Stagnation Advisory or Wood Stove Curtailment Advisory;
• Notify DEQ of each excess emissions event as soon as possible, including information regarding upset, breakdown, or safety events.
• Submit a report for each excess emissions event to DEQ;
• Maintain records of each excess emissions event.

**Permit Condition 3.16 - Sulfur Content Limits**

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, \( \text{SO}_2 \) 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]

**MRRR - (Permit Condition 3.17)**

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

[IDAPA 58.01.01.322.06, 5/1/94]

**Permit Condition 3.18 - Open Burning**

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]

**MRRR**

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.
 Permit Condition 3.19 - Asbestos

The permittee shall comply with all applicable requirements of 40 CFR 61, Subpart M—“National Emission Standard for Asbestos.”

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

 Permit Condition 3.20 - Accidental Release Prevention

An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, shall comply with the requirements of the Chemical Accident Prevention Provisions at 40 CFR 68 no later than the latest of the following dates:

• Three years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR 68.130.

• The date on which a regulated substance is first present above a threshold quantity in a process.

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

 Permit Condition 3.21 - Recycling and Emissions Reductions

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.

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

 Permit Condition 3.22 through 3.23- NSPS/NESHAP General Provisions

This facility is subject to NSPS Subparts A, WWW, IIII and NESHAP Subparts A, AAAA, ZZZZ, and is therefore required to comply with applicable General Provisions.

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

 Permit Condition 3.24 - Monitoring and Recordkeeping

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]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Conditions 3.25 through 3.28 - Performance Testing

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

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

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

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

MRRR (Permit Conditions 3.27 through 3.28)

The permittee shall submit compliance test report(s) to DEQ following testing.

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

Permit Condition 3.29 - Reports and Certifications

This permit condition establishes generally applicable MRRR for submittal of reports, certifications, and notifications to DEQ and/or EPA as specified.

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

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.30 - Incorporation of Federal Requirements by Reference

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.

[IDAPA 58.01.01.107, 4/7/11]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.
ACLF Hidden Hollow Cell (HHC) and North Ravine Cell (NRC) Emission Limits and MRRR (T1-2017.0014)

Permit Condition 4.2

This permit condition incorporates H₂S concentration limits for landfill gas from P-2009.0001 PROJ 61360 to limit SO₂ emissions from combustion.

MRRR (Permit Conditions 4.5 through 4.9)

The permittee shall install, maintain, and operate a scrubber treatment system, continuously analyze H₂S concentrations, and monitor gas flow and temperature to assure compliance with the H₂S concentration limit.

Permit Condition 4.3

This permit condition incorporates PM emission limits in accordance with IDAPA 58.01.01.786.

MRRR

No specific monitoring is required for this condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 4.4

This permit condition incorporates the requirements of the Air Pollution Emergency Rule in accordance with IDAPA 58.01.01.550-562.

MRRR

No specific monitoring is required for this condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Conditions 4.10 through 4.36 (including MRRR)

These permit conditions incorporate the emission limits, monitoring, recordkeeping, reporting, and testing requirements of NSPS Subpart WWW applicable to landfill operations.

Permit Conditions 4.37 through 4.49 (including MRRR)

These permit conditions incorporate the emission limits, monitoring, recordkeeping, reporting, and testing requirements of NESHAP Subpart AAAA applicable to landfill operations.

Permit Condition 4.50 - Incorporation of Federal Requirements by Reference

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.

[IDAPA 58.01.01.107, 4/7/11]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry if this requirement was met during the reporting period.

6.2 Emergency Engines Emission Limits and MRRR(T1-2017.0014)

Permit Condition 5.2

This permit condition incorporates engine operating limits from P-2009.0001 PROJ 61360.
MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 5.3

This permit condition incorporates diesel fuel sulfur content limits from P-2009.0001 PROJ 61360.

MRRR - (Permit Condition 5.4)

The permittee shall maintain purchase records to show the sulfur content of the fuel as-delivered to the facility.

Permit Conditions 5.5 through 5.20 (including MRRR)

These permit conditions incorporate the emission limits, monitoring, recordkeeping, reporting, and testing requirements of NESHAP Subpart ZZZZ applicable to the emergency generator engines.

Permit Conditions 5.21 through 5.28 (including MRRR)

These permit conditions incorporate the emission limits, monitoring, recordkeeping, reporting, and testing requirements of NSPS Subpart IIII applicable to the emergency generator engines.

Permit Condition 5.29 - Incorporation of Federal Requirements by Reference

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.

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

6.3 HHE Landfill Gas Engines Emission Limits and MRRR (T1-2017.0015)

Permit Condition 4.2

This permit condition incorporates H₂S concentration limits for landfill gas from P-2009.0001 PROJ 61360 to limit SO₂ emissions from combustion.

MRRR (Permit Conditions 4.3 through 4.5)

The permittee shall burn only LFG with compliant H₂S concentrations, and operate and maintain the LFG engines consistent with manufacturer’s recommendations.

Permit Conditions 4.6 through 4.13 (including MRRR)

These permit conditions incorporate the emission limits, monitoring, recordkeeping, reporting, and testing requirements of NESHAP Subpart ZZZZ applicable to the emergency generator engines.

Permit Conditions 4.14 through 4.23 (including MRRR)

These permit conditions incorporate the emission limits, monitoring, recordkeeping, reporting, and testing requirements of NSPS Subpart JJJJ applicable to the emergency generator engines.

Permit Condition 4.24 - Incorporation of Federal Requirements by Reference

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.
MRRR
No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

6.4 Insignificant Emissions Units Based on Size or Production Rate
This permit condition contains a list of insignificant activities as requested by the applicant, on the basis of size or production rate in accordance with IDAPA 58.01.01.317.01.b.

6.5 General Provisions
Unless expressly stated, there are no MRRR for the general provisions.

General Compliance, Duty to Comply
The permittee must comply with the terms and conditions of the permit.

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

General Compliance, Need to Halt or Reduce Activity Not a Defense
The permittee cannot use the fact that it would have been necessary to halt or reduce an activity as a defense in an enforcement action.

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

General Compliance, Duty to Supplement or Correct Application
The permittee must promptly submit such supplementary facts or corrected information upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application. The permittee must also provide information as necessary to address any new requirements that become applicable after the date a complete application has been filed but prior to the release of a draft permit.

[IDAPA 58.01.01.315.01, 5/1/94; 40 CFR 70.5(b)]

Reopening, Additional Requirements, Material Mistakes, Etc.
This term lists the instances when the permit must be reopened and revised, including times when additional requirements become applicable, when the permit contains mistakes, or when revision or revocation is necessary to assure compliance with applicable requirements.

[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)]

Reopening, Permitting Actions
This term discusses modification, revocation, reopening, and/or reissuance of the permit for cause. If the permittee files a request to modify, revoke, reissue, or terminate the permit, the request does not stay any permit condition, nor does notification of planned changes or anticipated noncompliance.

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

Property Rights
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
The permittee must furnish, within a reasonable time to DEQ, any information, including records required by the permit, that is requested 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)]
Information Requests, Confidential Business Information

Upon request, the permittee must 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

If any provision of the permit is held to be invalid, all unaffected provisions of the permit will remain in effect and enforceable.

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

Changes Requiring Permit Revision or Notice

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 must 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), and 70.7(d), (e)]

Changes that are not addressed or prohibited by the Tier I operating permit require a Tier I operating permit revision if such changes are subject to any requirement under Title IV of the CAA, 42 U.S.C. Section 7651 through 7651c, or are modifications under Title I of the CAA, 42 U.S.C. Section 7401 through 7515. Administrative amendments (IDAPA 58.01.01.381), minor permit modifications (IDAPA 58.01.01.383), and significant permit modifications (IDAPA 58.01.01.382) require a revision to the Tier I operating permit. IDAPA 58.01.01.502(b)(10) changes are authorized in accordance with IDAPA 58.01.01.384. Off permit changes and required notice are authorized in accordance with IDAPA 58.01.01.385.

[IDAPA 58.01.01.381-385, 7/1/02; IDAPA 58.01.01.209.05, 4/11/06; 40 CFR 70.4(b)(14) and (15)]

Federal and State Enforceability

All permit conditions are federally enforceable unless specified in the permit as a state or local only requirement. State and local only requirements are not required under the CAA and are not enforceable by EPA or by citizens.

[IDAPA 58.01.01.322.15.j, 5/1/94; IDAPA 58.01.01.322.15.k, 3/23/98; Idaho Code §39-108; 40 CFR 70.6(b)(1), (2)]

Inspection and Entry

Upon presentation of credentials, the facility 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
The permittee must continue to comply with all applicable requirements and must comply with new requirements 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
The owner or operator of a Tier I source shall pay annual registration fees to DEQ in accordance with IDAPA 58.01.01.387 through IDAPA 58.01.01.397.
[IDAPA 58.01.01.387, 4/2/03; 40 CFR 70.6(a)(7)]

Certification
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
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 owner or operator is encouraged to submit a renewal application nine months prior to the date of expiration.
[IDAPA 58.01.01.313.03, 4/5/00; 40 CFR 70.5(a)(1)(iii)]

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
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 an owner or operator of a source 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.
Compliance Schedule and Progress Reports

- 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.

Periodic Compliance Certification

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

- Compliance certifications for all emissions units shall be submitted annually unless otherwise specified;

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

False Statements

The permittee may not 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.

No Tampering

The permittee may not render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

Semiannual Monitoring Reports.

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 as specified.

Reporting Deviations and Excess Emissions

Each and every applicable requirement, including MRRR, is subject to prompt deviation reporting. Deviations due to excess emissions must be reported in accordance Sections 130-136. All instances of deviation from Tier I operating permit requirements must be included in the deviation reports. The reports must describe the probable cause of the deviation and any corrective action or preventative measures taken. Deviation reports must be submitted at least every six months unless the permit specifies a different time period as required by IDAPA 58.01.01.322.08.c. Examples of deviations include, but are not limited to, the following:

- Any situation in which an emissions unit fails to meet a permit term or condition
- Emission control device does not meet a required operating condition
- Observations or collected data that demonstrate noncompliance with an emissions standard
- Failure to comply with a permit term that requires a report

[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, Emissions Trading

No permit revision will 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

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)]

7. REGULATORY REVIEW

7.1 Attainment Designation (40 CFR 81.313)

The facility is located in Ada County which is designated as attainment or unclassifiable for PM$_{10}$, PM$_{2.5}$, CO, NO$_{2}$, SO$_{4}$, and Ozone. Reference 40 CFR 81.313.

7.2 Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

The facility is required to obtain a Title V Operating Permit in accordance with permitting requirements in IDAPA 58.01.01.859 – Standards of Performance for Municipal Solid Waste Landfills that Commenced Construction, Reconstruction or Modification on or after May 30, 1991, and 40 CFR 60 Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills. The facility also has the potential to emit greater than 100 tons per year for CO and SO$_{2}$ and 10 tons per year for formaldehyde and 25 tons per year for all HAP combined.

7.3 PSD Classification (40 CFR 52.21)

The combined operations of both ACLF and HHE have a potential to emit that exceeds 250 tons per year of CO. Therefore, any future permit modifications will be evaluated for major modification subject to PSD requirements.

7.4 NSPS Applicability (40 CFR 60)

ACLF landfill operations are subject to New Source Performance Standards (NSPS) of 40 CFR 60, Subpart WWW. Regulatory applicability of Subpart WWW was evaluated in P-2009.0001 PROJ 61360. One of the emergency IC engines is subject to 40 CFR 60, Subpart III. Regulatory applicability of Subpart III was evaluated in P-2009.0001 PROJ 61360.

Two of the HHE landfill gas-fired engines are subject to 40 CFR 60, Subpart JJII. Regulatory applicability of Subpart JJII was evaluated in P-2009.0001 PROJ 61360.

7.5 NESHAP Applicability (40 CFR 61)

The facility is not an affected source subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR 61.

7.6 MACT Applicability (40 CFR 63)

ACLF landfill operations are subject to Maximum Available Control Technology (MACT) standards 40 CFR 63, Subpart AAAA. Regulatory applicability of Subpart AAAA was evaluated in P-2009.0001 PROJ 61360. Both of the emergency IC engines are subject to 40 CFR 63, Subpart ZZZZ. Regulatory
applicability of Subpart ZZZZ was evaluated in P-2009.0001 PROJ 61360.

HHE LFG-fired engines are subject to 40 CFR 63, Subpart ZZZZ. Regulatory applicability of Subpart ZZZZ was evaluated in P-2009.0001 PROJ 61360.

7.7 CAM Applicability (40 CFR 64)

ACLF flares are not subject to compliance assurance monitoring (CAM) in 40 CFR 64 and IDAPA 58.01.01.107.

With respect to NMOC emission limits and add-on control equipment (flares), emission limitations or standards proposed after November 15, 1990 and pursuant to Clean Air Act (CAA) Section 111 or 112 are exempt from CAM in accordance with 40 CFR 64.2(b)(1)(i). NSPS Subpart WWW was promulgated on March 1996 under the authority of CAA Section 111 for New Source Performance Standards (NSPS).

With respect to H₂S emission limits (surrogate limit for SO₂ emissions) and add-control equipment (H₂S scrubber treatment system), the flares and landfill gas engines are exempt per 40 CFR 64.2(b)(1)(vi) and meeting the requirements of 40 CFR 64.3(d), because a federally-enforceable permit condition requires a continuous hydrogen sulfide (H₂S) monitor as a continuous compliance demonstration method. (100% of H₂S combusted was assumed converted to SO₂.)

7.8 Acid Rain Permit (40 CFR 72-75)

The facility is not an affected source subject to the Acid Rain Permit program in 40 CFR 72-75.

8. PUBLIC COMMENT

As required by IDAPA 58.01.01.364, a comment period was made available to the public. During this time, comments were not submitted in response to DEQ’s proposed action. Refer to the Application Chronology section for a listing of relevant dates.

9. EPA REVIEW OF PROPOSED PERMIT

As required by IDAPA 58.01.01.366, DEQ provided the proposed permit to EPA Region 10 for review and comment via e-mail, and no comments were received. Refer to the Application Chronology section for a listing of relevant dates.
Appendix A - Emission Inventories
### Table 6. Actual Emission Estimates Summary

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PM$_{2.5}$</th>
<th>PM$_{10}$</th>
<th>NO$_x$</th>
<th>SO$_2$</th>
<th>CO</th>
<th>VOC</th>
<th>HAPs</th>
<th>CO$_2$e</th>
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<tr>
<td></td>
<td>lb/hr</td>
<td>ton/yr</td>
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<td>ton/yr</td>
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<td><strong>62.06</strong></td>
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</table>

**Notes:**
- CO = carbon monoxide
- CO$_2$e = carbon dioxide equivalent
- HAPs = hazardous air pollutants
- lb/hr = pounds per hour
- NO$_x$ = nitrogen oxides
- PM$_{10}$ = particulate matter smaller than 10 microns
- PM$_{2.5}$ = particulate matter less than 2.5 microns
- SO$_2$ = sulfur dioxide
- ton/yr = tons per year
- VOC = volatile organic compounds
## Table 7. Potential Emission Estimates Summary

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PM$_{2.5}$</th>
<th>PM$_{10}$</th>
<th>NO$_X$</th>
<th>SO$_2$</th>
<th>CO</th>
<th>VOC</th>
<th>HAPs</th>
<th>CO$_{2e}$</th>
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<tr>
<td></td>
<td>lb/hr</td>
<td>ton/yr</td>
<td>lb/hr</td>
<td>ton/yr</td>
<td>lb/hr</td>
<td>ton/yr</td>
<td>lb/hr</td>
<td>ton/yr</td>
</tr>
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<td>FLARE 1</td>
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<td>0.00</td>
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<td>0.00</td>
</tr>
<tr>
<td>Emergency Engine #1</td>
<td>0.13</td>
<td>0.03</td>
<td>0.13</td>
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<td>1.85</td>
<td>0.46</td>
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<td>Emergency Engine #2</td>
<td>0.20</td>
<td>0.05</td>
<td>0.20</td>
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<td>0.71</td>
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<tr>
<td>LFG Engine 1</td>
<td>0.78</td>
<td>3.42</td>
<td>0.78</td>
<td>3.42</td>
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<td>10.77</td>
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<td>LFG Engine 4</td>
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<tr>
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<tr>
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<td>1.40</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>44.71</strong></td>
<td><strong>86.71</strong></td>
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<td><strong>57.45</strong></td>
<td><strong>28.58</strong></td>
<td><strong>125.19</strong></td>
</tr>
</tbody>
</table>

Notes:
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- ton/yr = tons per year
- VOC = volatile organic compounds
Non-Methane Organic Compound (NMOC) Mass Emission Rate

\[ M_{\text{NMOC}} = 2 \cdot L_0 \cdot R \cdot (e^{k \cdot t} - e^{k \cdot t}) \cdot (C_{\text{NMOC}}) \cdot (3.6 \times 10^{-9}) \]

NSPS Subpart WWW: 40 CFR 60.754(a)(1)(ii)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>Description</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>( M_{\text{NMOC}} )</td>
<td>30.7</td>
<td>Mass emission rate of NMOC (Mg/yr)</td>
<td>Calculated</td>
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<tr>
<td>( L_0 )</td>
<td>100</td>
<td>Methane generation potential (m³ CH₄/ Mg refuse)</td>
<td>EPA AP-42, Section 2.4.4, page 2.4-4 (11/98)</td>
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<tr>
<td>( R )</td>
<td>244,529</td>
<td>Average annual refuse acceptance rate (Mg/yr)¹</td>
<td>EPA AP-42, Section 2.4.4, page 2.4-4, areas with less than 25 inches/year precipitation (11/98)</td>
</tr>
<tr>
<td>( k )</td>
<td>0.02</td>
<td>Methane generation constant (yr⁻¹)</td>
<td>Waste first placed 1973</td>
</tr>
<tr>
<td>( t )</td>
<td>40</td>
<td>Age of landfill (time since initial refuse placement), (yrs)</td>
<td>August 2012 test²</td>
</tr>
<tr>
<td>( C_{\text{NMOC}} )</td>
<td>316.3</td>
<td>Concentration of NMOC, parts per million by volume as hexane</td>
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<tr>
<td>( c )</td>
<td>0</td>
<td>Time since landfill closure (yrs); c = 0 for active landfills</td>
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<tr>
<td>3.6 \times 10^{-9}</td>
<td>Conversion factor, per 40 CFR 60.754(a)(1)(ii)</td>
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</table>

Footnote:
¹ Average annual refuse acceptance rate for the Ada County Landfill is calculated from 2006 to 2010.
² NMOC test reported 1,700 ppmv CH₄(methane) \( \rightarrow x \) ppmv C₆H₁₄(hexane); \( x = 316.3 \) ppmv C₆H₁₄
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<tr>
<th>Pollutant</th>
<th>CAS</th>
<th>LFG Engines (2 Engines)</th>
<th>Flares</th>
<th>EGEN #1</th>
<th>EGEN #2</th>
<th>Total</th>
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<td>3.10E-04</td>
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<td>9.01E-07</td>
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**HAP Totals** 21.9

1 Based on 2,400 scfm landfill gas going to the four LFG engines (worst case)
2 Based on 2,299 scfm landfill gas going to the Flares (worst case)
# New Facility Wide Total GHG Emissions

<table>
<thead>
<tr>
<th>Source</th>
<th>CO₂</th>
<th>N₂O</th>
<th>CH₄</th>
<th>CO₂e</th>
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<tbody>
<tr>
<td></td>
<td>(metric tons/yr)</td>
<td>(ton/yr)</td>
<td>(metric tons/yr)</td>
<td>(ton/yr)</td>
</tr>
<tr>
<td>Emergency Engine #1</td>
<td>1</td>
<td>1</td>
<td>5.29E-06</td>
<td>5.83E-06</td>
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<td>1</td>
<td>7.28E-06</td>
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<td>Biogenic</td>
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<td></td>
<td></td>
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<tr>
<td>LFG Engine (4x) and Flares¹</td>
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<td></td>
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<td>1,200 to LFG Engines</td>
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<td>0.35</td>
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<tr>
<td>2,000 to Flares</td>
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<td>0.61</td>
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<td>3.12</td>
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<tr>
<td>Total</td>
<td>0.88</td>
<td>0.97</td>
<td>4.46</td>
<td>4.92</td>
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</table>

| Facility Wide Total | 2    | 2    | 0.88  | 0.97 | 4.46  | 4.92 | 375 | 413 |

Note: Regarding 40 CFR 52.21, the US EPA has deferred CO₂ biogenic emissions for three years for stationary sources including: CO₂ emissions from the biogenic emissions from the decomposition of solid waste, and CO₂ emissions from sources burning LFG from the decomposition of solid waste.

¹ Does not make a difference how the collected LFG is combusted, GHG emissions are the same for LFG engines or flares.
## Facility Wide HAPs (2,400 scfm to LFG Engines, 2,299 scfm LFG to Flare 1)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>CAS</th>
<th>LFG Engines¹ (4 Engines) (ton/yr)</th>
<th>Flares² (ton/yr)</th>
<th>EGEN #1 (ton/yr)</th>
<th>EGEN #2 (ton/yr)</th>
<th>Total (ton/yr)</th>
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</thead>
<tbody>
<tr>
<td>1,1,1-Trichloroethane</td>
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<td>8.84E-02</td>
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<td>1,1-Dichloroethane</td>
<td>75-34-3</td>
<td>1.04E-01</td>
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<td>1.10E-01</td>
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<td>1,1-Dichloroethene</td>
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<td>8.77E-03</td>
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<td>1,2-Dichloroethane</td>
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<td>1.82E-02</td>
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<td>1.90E-02</td>
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<td>1,2-Dichloropropane</td>
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<td>1.37E-05</td>
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</tbody>
</table>

1. Based on 2,400 scfm landfill gas going to the four LFG engines (worst case)
2. Based on 2,299 scfm landfill gas going to the Flares (worst case)
### New Facility Wide Total GHG Emissions

<table>
<thead>
<tr>
<th>Source</th>
<th>$\text{CO}_2$ (metric tons/yr)</th>
<th>$\text{CO}_2$ (ton/yr)</th>
<th>$\text{N}_2\text{O}$ (metric tons/yr)</th>
<th>$\text{N}_2\text{O}$ (ton/yr)</th>
<th>$\text{CH}_4$ (metric tons/yr)</th>
<th>$\text{CH}_4$ (ton/yr)</th>
<th>$\text{CO}_2\text{e}$ (metric tons/yr)</th>
<th>$\text{CO}_2\text{e}$ (ton/yr)</th>
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<td>15</td>
<td>17</td>
<td>1.24E-04</td>
<td>1.37E-04</td>
<td>6.21E-04</td>
<td>6.85E-04</td>
<td>15.4</td>
<td>16.9</td>
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<tr>
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<td>24</td>
<td>26</td>
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<td>2.11E-04</td>
<td>9.58E-04</td>
<td>1.06E-03</td>
<td>23.7</td>
<td>26.1</td>
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<tr>
<td>Biogenic</td>
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<td></td>
<td></td>
<td></td>
<td>25,391</td>
<td>25,391</td>
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<tr>
<td>LFG Engine (4x) and Flares $^1$</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>3.60</td>
<td>273</td>
<td>301</td>
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<tr>
<td>2,299 to Flares</td>
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<td>0.71</td>
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<td>3.58</td>
<td>272</td>
<td>300</td>
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<td>1.41</td>
<td>6.52</td>
<td>7.19</td>
<td>545</td>
<td>601</td>
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<td><strong>43</strong></td>
<td><strong>1.28</strong></td>
<td><strong>1.42</strong></td>
<td><strong>6.52</strong></td>
<td><strong>7.19</strong></td>
<td><strong>584</strong></td>
<td><strong>644</strong></td>
</tr>
</tbody>
</table>

$^1$ Does not make a difference how the collected LFG is combusted, GHG emissions are the same for LFG engines or flares.

**NOTE:** Regarding 40 CFR 52.21, the US EPA has deferred CO2 biogenic emissions for three years for stationary sources including; CO2 emissions from the biogenic emissions from the decomposition of solid waste, and CO2 emissions from sources burning LFG from the decomposition of solid waste.