



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. Tippetts, Director

November 17, 2017

William L. Beck, President
Southfield Dairy Biorefinery
1090 Saffex Rose Avenue
Henderson, NV 89052

RE: Facility ID No. 047-00039, Southfield Dairy Biorefinery, Wendell
Final Permit Letter

Dear Mr. Beck:

The Department of Environmental Quality (DEQ) is issuing initial Permit to Construct (PTC) No. P-2017.0035 Project 61903 to Southfield Dairy Biorefinery located near Wendell for a dairy and agricultural waste digester methane production facility. 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 June 5, 2017.

This permit is effective immediately. This permit does not release Southfield Dairy Biorefinery from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

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 Twin Falls Regional Office 650 Addison Avenue West, Suite 110, 83301, Fax (208) 736-2194.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Twin Falls Regional Manager Bobby Dye, at (208) 737-3889 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 Tom Burnham at (208) 373-0477 or tom.burnham@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in black ink that reads "Mike Simon".

Mike Simon
Stationary Source Program Manager
Air Quality Division

MS\tb
Permit No. P-2017.0035 PROJ 61903
Enclosures

Air Quality

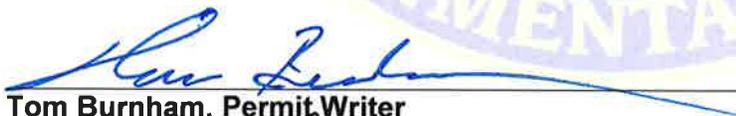
PERMIT TO CONSTRUCT

Permittee Southfield Dairy Biorefinery
Permit Number P-2017.0035
Project ID 61903
Facility ID 047-00039
Facility Location Intersection of E 3200 S and S 1700 E
Gooding County, ID 83355

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 November 17, 2017



Tom Burnham, Permit Writer



Mike Simon, Stationary Source Manager

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1 Permit Scope

Purpose

1.1 This is the initial permit to construct (PTC) for a facility that will digest dairy and other agricultural wastes to produce Renewable Natural Gas (RNG) as well as beneficial solid and liquid byproducts.

Regulated Sources

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

Table 1.1 Regulated Sources

Permit Section	Source	Control Equipment
2	<u>Desulfurization 7A:</u> Manufacturer: DMT Clear Gas Solutions Model: SulfurexBR Capacity: 6300 scfm total for both units Exhaust: 125 scfm, < 5 ppmv H ₂ S	None
	<u>Desulfurization 7B:</u> Manufacturer: DMT Clear Gas Solutions Model: SulfurexBR Capacity: 6300 scfm total for both units Exhaust: 125 scfm, < 5 ppmv H ₂ S	None
	<u>Methane Separation:</u> Manufacturer: DMT Clear Gas Solutions Model: CarbonexMS Capacity: 3,689 scfm RNG Exhaust: 2,611 scfm	None
3	<u>Plant Boiler 1</u> Manufacturer: Cleaver-Brooks Model: FLX700-800 Heat input rating: 6.39 MMBtu/hr Fuel: Natural Gas	None
	<u>Plant Boiler 2</u> Manufacturer: Cleaver-Brooks Model: FLX700-800 Heat input rating: 6.39 MMBtu/hr Fuel: Natural Gas	None
4	<u>Generator Engine 1</u> Manufacturer: GE Model: JMS 420 GS-N.L. Rating: 1,966 bhp at elevation of 3432 ft. 100 % Peak Load: 1429 kW at elevation of 3432 ft. Fuel: Natural Gas	<u>Oxidation Catalyst:</u> Exhaust Temperatures: 550° F, minimum, at inlet 1350° F, maximum, at outlet
	<u>Generator Engine 2</u> Manufacturer: GE Model: JMS 420 GS-N.L. Rating: 1,966 bhp at elevation of 3432 ft. 100 % Peak Load: 1429 kW at elevation of 3432 ft. Fuel: Natural Gas	<u>Oxidation Catalyst:</u> Exhaust Temperatures: 550° F, minimum, at inlet 1350° F, maximum, at outlet
	<u>Generator Engine 3</u> Manufacturer: GE Model: JMS 420 GS-N.L. Rating: 1,966 bhp at elevation of 3432 ft. 100 % Peak Load: 1429 kW at elevation of 3432 ft. Fuel: Natural Gas	<u>Oxidation Catalyst:</u> Exhaust Temperatures: 550° F, minimum, at inlet 1350° F, maximum, at outlet
5	<u>Enclosed Safety Flare</u> Manufacturer: ZEECO Model: BEF 13-50 Pilot Fuel: Natural Gas	None

2 Digester and Biogas Processing System (BPS)

2.1 Process Description

Cow manure and other agricultural biomass will be delivered to the facility by truck or pipeline and deposited into a receiving pit. It will then be transferred to an equalization pit where it will be mixed to produce a homogeneous raw feedstock. The mixed manure will be batch processed through an anaerobic digester system. In the first stage of the system, the raw material will be heated to 100°F in the first chamber of a series of sealed, underground vessels. The biomass will then move to a second chamber where methanogenic bacteria present in the cow manure will continue the anaerobic digestion process for approximately 22 days.

2.2 Control Device Descriptions

The digestion reaction will produce raw biogas that will be collected and processed in two parallel trains that will contain compressors, scrubbers, air strippers, membrane filters, and polishing tanks. Product gas will be approximately 97.5 percent methane. Processed exhaust gas will contain primarily CO₂, nitrogen, and oxygen, along with up to 5 ppm hydrogen sulfide.

Table 2.1 Biogas Processing System Emission Control

Emissions Unit/Process	Control Equipment	Emissions Point
<u>Desulfurization 7A:</u> Manufacturer: DMT Clear Gas Solutions Model: SulfurexBR Capacity: 6300 scfm total for both units Exhaust: 125 scfm, < 5 ppmv H ₂ S	None	Exhaust 7A
<u>Desulfurization 7B:</u> Manufacturer: DMT Clear Gas Solutions Model: SulfurexBR Capacity: 6300 scfm total for both units Exhaust: 125 scfm, < 5 ppmv H ₂ S	None	Exhaust 7B
<u>Methane Separation:</u> Manufacturer: DMT Clear Gas Solutions Model: CarbonexMS Capacity: 3,689 scfm produced biomethane gas Exhaust: 2,611 scfm	None	Exhaust 8

Emission Limits

2.3 Odors

The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids into the atmosphere of such nature and duration and under such conditions as would be injurious to human health or welfare, to animal or plant life, or to property, or to interfere unreasonably with the enjoyment of life or property in accordance with IDAPA 58.01.01.776.

2.4 Biogas Processing System H₂S Exhaust

Biogas Processing System emissions shall not exceed 5 parts per million by volume (ppmv) H₂S.

Operating Requirements

2.5 Throughput Limits

RNG produced by the BPS shall not exceed 7.23 million standard cubic feet per day (MMscf/day).

Monitoring and Recordkeeping Requirements

2.6 O& M Manual

Within 60 days of permit issuance, the permittee shall have developed an Operations and Maintenance (O&M) manual for the Biogas Processing System which describes the procedures that will be followed to comply with the General Provisions of this permit and the manufacturer specifications for the Biogas Processing System. The manual shall be a permittee developed document independent of the manufacturer supplied operating manual but may include summaries of procedures included in the manufacturer supplied operating manual.

Unless DEQ approves alternatives, the manual shall include the manufacturer's recommended minimum and maximum values for each of the following operating parameters:

- inlet and outlet process flowrates
- desulfurization scrubbing media pH
- desulfurization scrubber media flowrate, and
- H₂S concentration entering the methane separation system

2.7 Odor Complaints

The permittee shall maintain records of all odor complaints received to demonstrate compliance with Odors Permit Condition. 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.

2.8 Periodic H₂S Monitoring

Within 60 days of the initial startup of the BPS the permittee shall measure and record H₂S emissions from the desulfurization units at least twice daily and calculate average daily measurement values to determine compliance with Condition 2.4. Records of this information shall be maintained on site and be made available to DEQ representatives upon request and in accordance with the Recordkeeping General Provision.

The permittee may use a hydrogen sulfide continuous emission monitoring systems (CEMS) or a hand-held hydrogen sulfide monitor to determine H₂S concentration in the BPS exhaust gas. In either case, the permittee must prepare and follow a documented monitoring procedure that the DEQ has approved.

If a CEMS is used to demonstrate continuous compliance with Condition 2.4, the permittee shall create and obtain DEQ approval for a CEMS quality manual which shall address:

- Installation specifications
- Calibration procedures (i.e. zero and span checks)

A monitoring procedure for a hand-held monitor shall address:

- Sampling procedures including details regarding monitoring ports
- Calibration procedures
- Details of how the H₂S concentrations will be calculated in units of ppm if the hand-held monitor does not automatically generate readings in ppm.

2.9 If a hand-held H₂S monitoring device is used it shall have a certified accuracy of plus or minus 3% and shall be calibrated, maintained, and replaced in accordance with manufacturer specifications. The permittee shall maintain on-site documentation of the manufacturer's specifications for the hand-held monitor including documentation of the accuracy of the device and calibration and replacement recommendations.

2.10 RNG Flow Rate Monitoring

Unless an alternative monitoring and recordkeeping method is approved by DEQ, the permittee shall comply with the following requirements to determine the quantity of RNG produced by the BPS.

- The permittee shall install, calibrate, maintain, and operate RNG flow meters that shall be placed at each outlet of the BPS. The RNG flow meters shall be installed, operated, and maintained in accordance with the O&M manual and the manufacturer specifications.
- Calibration of the RNG flow meters shall be performed and recorded in accordance with the O&M manual.
- The permittee shall monitor and record the total RNG flow rate on a daily basis, in units of MMscf/day. Records of this information shall be maintained in accordance with Recordkeeping General Provision.

3 Plant Boilers

3.1 Process Description

Two 6.394 million British thermal units per hour (MMBtu/hr) natural gas-fired backup boilers will provide additional heat as needed to maintain process temperatures.

3.2 Control Device Descriptions

Table 3.1 Plant Boilers Description

Emissions Units / Processes	Control Devices	Emission Points
<u>Plant Boiler 1</u> Manufacturer: Cleaver-Brooks Model: FLX700-800 Manufacture Date: 2017 Heat input rating: 6.39 MMBtu/hr Fuel: Natural Gas	None	Exhaust 1
<u>Plant Boiler 2</u> Manufacturer: Cleaver-Brooks Model: FLX700-800 Manufacture Date: 2017 Heat input rating: 6.39 MMBtu/hr Fuel: Natural Gas	None	Exhaust 2

3.3 Opacity Limit

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

Operating Requirements

3.4 Combustion Gas

The boilers shall combust pipeline quality natural gas exclusively.

4 Generator Engines

4.1 Process Description

Three on-site generators, powered by three 1,966 (brake horse power) bhp natural gas-fired, spark ignition, lean burn RICE, will provide electrical power to the facility. Only two will operate simultaneously; the third engine-generator set will be held in reserve to be used when one of the other two is unavailable. Heat recovered from the engines will be used to create hot water for process heating.

4.2 Control Device Descriptions

Each generator engine is equipped with an oxidation catalyst that operates between 550° F and 1250° F at inlet and below 1350° F at outlet.

Table 4.1 Generator Engines Description

Emissions Units / Processes	Control Devices	Emission Points
Generator Engine 1 Manufacturer: GE Model: JMS 420 GS-N.L Rating: 1,966 bhp at elevation Peak Load: 1429 kW at elevation Fuel: Natural Gas	<u>Oxidation Catalyst:</u> Exhaust Temperatures: 550° F, minimum, at inlet 1350° F, maximum, at outlet	Exhaust 3
Generator Engine 2 Manufacturer: GE Model: JMS 420 GS-N.L Rating: 1,966 bhp at elevation Peak Load: 1429 kW at elevation Fuel: Natural Gas	<u>Oxidation Catalyst:</u> Exhaust Temperatures: 550° F, minimum, at inlet 1350° F, maximum, at outlet	Exhaust 4
Generator Engine 3 Manufacturer: GE Model: JMS 420 GS-N.L Rating: 1,966 bhp at elevation Peak Load: 1429 kW at elevation Fuel: Natural Gas	<u>Oxidation Catalyst:</u> Exhaust Temperatures: 550° F, minimum, at inlet 1350° F, maximum, at outlet	Exhaust 5

Emission Limits

4.3 Criteria Pollutants

Emissions from the generator engines stacks shall not exceed any corresponding emissions rate limits listed in Table 4.2.

Table 4.2 Generator Engines Emissions Limits¹

Source	NO _x		VOC		CO	
	lb/hr ³	T/yr ⁴	lb/day ³	T/yr ⁴	lb/hr ³	T/yr ^{4,5}
Generator Engine 1	4.33	19.0	3.03	13.3	8.67	38.0
Generator Engine 2	4.33	19.0	3.03	13.3	8.67	38.0
Generator Engine 3	4.33	19.0	3.03	13.3	8.67	38.0

- 1) In absence of any other credible evidence, compliance is assured by complying with this permit's operating, monitoring and record keeping requirements.
- 2) Particulate matter with and aerodynamic diameter less than or equal to a nominal ten (10) micrometers including condensable particulate as defined in IDAPA 58.01.01.006.
- 3) As determined by source test methods prescribed by IDAPA 58.01.01.157.
- 4) Tons per consecutive 12-calendar month period.
- 5) Permit Condition 4.4 allows only two engines to run simultaneously to limit CO to minor source levels.

Operating Requirements

4.4 Simultaneous Generator Engine operation

The permittee shall limit simultaneous operation of the engines to no more than two at any time.

4.5 Combustion Gas

The generator engines shall combust pipeline quality natural gas exclusively.

4.6 Oxidation Catalyst Temperature

The oxidation catalyst temperature shall be maintained between 550° F and 1250° F at the inlet and below 1350° F at the outlet.

Monitoring Requirements

4.7 Operating Requirements Monitoring

- The permittee shall demonstrate compliance with the operating conditions by keeping records of engine usage, fuel usage, and oxidation catalyst inlet and outlet temperatures on a daily basis.
- The permittee shall maintain the records for at least five years, and making them available for inspection by the Department.

40 CFR 60 Subpart JJJJ Requirements

4.8 40 CFR 60, Subpart JJJJ – Emission Standards for Owners and Operators of Stationary Spark Ignition Internal Combustion Engines

In accordance with 40 CFR 60.4233(e) and Table 1 of 40 CFR 60, Subpart JJJJ, the permittee shall comply with the following emission standards for IC engines firing on natural gas:

Table 4.3 40 CFR 60, SUBPART JJJJ, TABLE 1 SUMMARY

Engine Type and Fuel	Maximum Engine Horsepower (bhp)	Manufacture Date	Emission Standards ^a					
			g/bhp-hr			ppmvd at 15% O ₂		
			NO _x	CO	VOC ²	NO _x	CO	VOC ^b
Non-Emergency SI Natural Gas and Non-Emergency SI Lean Burn LPG (except lean burn 500≤HP<1,350)	≥500	7/1/2010	1.0	2.0	0.7	82	270	60

- Owners and operators of stationary non-certified spark ignited IC engines may choose to comply with the emission standards in units of either g/bhp-hr or ppmvd at 15% O₂.
- When calculating emissions of volatile organic compounds, emission of formaldehyde should not be included.

4.9 40 CFR 60, Subpart JJJJ – Emissions Standards for Owners and Operators of Stationary Spark Ignition Internal Combustion Engines

Owners and operators must operate and maintain the engines that achieve these standards over the life of the engine in accordance with 40 CFR 60.4234.

4.10 40 CFR 60, Subpart JJJJ – Compliance Requirements for Owners and Operators of Stationary Spark Ignition Internal Combustion Engines

The permittee shall comply with the compliance requirements for owners and operators per 40 CFR 60.4243 as follows:

- Keep a maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engines in a manner consistent with good air pollution practices for minimizing emissions in accordance with 40 CFR 60.4243(b)(2)(ii).
- Conduct a performance test within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup and conduct subsequent performance testing every 8,760 hours of each IC engine's operation or every 3 years, whichever comes first, in accordance with 40 CFR 60.4243(b)(2)(ii).

4.11 40 CFR 60, Subpart JJJJ – Testing Requirements for Owners and Operators of Stationary Spark Ignition Internal Combustion Engines

The permittee shall comply with all applicable performance test requirements of 40 CFR 60.4244 as follows:

- Performance tests shall be conducted within 10% of 1,966 bhp mechanical output (or the highest achievable) load in accordance with 40 CFR 60.4244(a).
- Performance tests shall not be conducted during periods of start-up, shut down, or malfunction in accordance with 40 CFR 60.4244(b).
- Three separate test runs shall be conducted within 10% of 100 percent peak (or the highest achievable) load and last at least one hour in accordance with 40 CFR 60.4244(c).
- Compliance with the NO_x, CO, and VOC standards of 40 CFR 60.4234 shall be demonstrated in accordance with the calculations provided in 40 CFR 60.4244(d) through 40 CFR 60.4244(f) and 40 CFR 60, Subpart JJJJ, Table 3.

4.12 40 CFR 60, Subpart JJJJ – Notification, Reports, and Recordkeeping Requirements for Owners and Operations of Stationary Spark Ignition Internal Combustion Engines

The permittee shall comply with all applicable standards for notification, reports, and records per 40 CFR 60.4245 as follows:

- Submit all notifications and all supporting documentation to the addressees provided in the Subpart A Table and in accordance with 40 CFR 60.4245(a)(1).
- Keep records of maintenance conducted on the engines in accordance with 40 CFR 60.4245(a)(2).
- If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90 and 1048 in accordance with 40 CFR 60.4245(a)(3).
- Submit an initial notification to the addressees provided in the Subpart A Table in accordance with 40 CFR 60.4245(c). The notification shall contain the following information:
 - Name and address of the owner or operator
 - The address of the affected sources
 - Engine information including make, model, engine family, serial number, model year, maximum engine brake horsepower, and engine displacement
 - Emission control equipment
 - Fuel used

- Submit results of the performance tests within 60 days after the performance test was conducted in accordance with 40 CFR 60.4245(d). Results shall be sent to the addressees provided in the Subpart A Table.

4.13 NSPS 40 CFR 60, Subpart A – General Provisions

Generally applicable requirements of Subpart A of the New Source Performance Standards (NSPS, 40 CFR 60) are summarized in the Subpart A Table. These summaries are provided to aid the permittee in understanding the general requirements and to highlight the notification and record keeping requirements of 40 CFR 60 for affected facilities. These summaries do not relieve the permittee from the responsibility to comply with all applicable requirements of the CFR, and they are not intended to be a comprehensive listing of all requirements that may apply.

Table 4 NSPS SUBPART A (40 CFR 60.1) SUMMARY OF GENERAL PROVISIONS FOR AFFECTED FACILITIES

Section	Section Title	Summary of Section			
60.4	Address	<p align="center"><u>All notifications and reports shall be submitted to:</u></p> <table border="0"> <tr> <td>Director Air and Waste US EPA 1200 Sixth Avenue Seattle, WA 98101</td> <td align="center">And</td> <td>Department of Environmental Quality Twin Falls Regional Office 1363 Fillmore Street Twin Falls, ID 83301</td> </tr> </table>	Director Air and Waste US EPA 1200 Sixth Avenue Seattle, WA 98101	And	Department of Environmental Quality Twin Falls Regional Office 1363 Fillmore Street Twin Falls, ID 83301
Director Air and Waste US EPA 1200 Sixth Avenue Seattle, WA 98101	And	Department of Environmental Quality Twin Falls Regional Office 1363 Fillmore Street Twin Falls, ID 83301			
60.7(b),(c)(d) and (f)	Notification and Record Keeping	<ul style="list-style-type: none"> • Notification of construction postmarked no later than 30 days of such date. • Notification of startup postmarked within 15 days of such date. • Notification of physical or operational change that may increase emissions postmarked 60 days before the change is made. • Maintain records of the occurrence and duration of any: startup, shutdown or malfunction of the affected source; malfunction of air pollution control device; and any period when a continuous monitoring system or monitoring device is inoperative. • For affected units with continuous monitoring device requirements, report excess emissions and monitoring system performance semiannually, postmarked by January 30th and July 30th (in the format required by NSPS). • Maintain in a permanent form records suitable for inspection all measurements, system testing, performance measurements, calibration checks, adjustments and maintenance performed. Records shall be maintained for a period of two years from the date the record is required to be generated by the applicable regulation. 			
60.11(a),(b),(c), (d) and (g)	Compliance with Standards and Maintenance Requirements	<ul style="list-style-type: none"> • Other than opacity standards, where performance tests are required compliance with standards is determined by methods and procedures established by 40 CFR 60.8. • Compliance with opacity standards shall be determined by Method 9 of Appendix A. The owner or operator may elect to use COM measurements in lieu of Method 9, provided notification is made at least 30 days before the performance test. • At all times, including periods of startup, shutdown, and malfunction to the extent practicable, the operator shall maintain and operate any affected facility and air pollution control equipment consistent with good air pollution control practices. • For the purposes of determining compliance with standards, any creditable evidence may be used if the appropriate performance or compliance test procedure has been performed. 			
60.12	Circumvention	No owner or operator shall build, erect, install, or use any article or method, including dilution, to conceal an emission which would otherwise constitute a violation.			

4.14 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. Documents include, but are not limited to:

Standards of Performance for New Stationary Sources (NSPS), 40 CFR Part 60, Subpart JJJJ and NSPS 40 CFR 60.1, Subpart A – General Provisions

For permit conditions referencing or cited in accordance with any document incorporated by reference, 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.

5 Enclosed Safety Flare

5.1 Process Description

The facility will include an enclosed emergency flare. A continuous pilot flame will allow the flare to operate intermittently and infrequently as needed to combust raw biogas in the rare case of an emergency malfunction. The flare will also be available to treat a small slipstream of treated biomethane during times when the gas fails to meet specifications and requires additional treatment.

5.2 Control Device Descriptions

There is no control device on the flare. It is an enclosed flare with a 50 foot Stack and 13 foot diameter.

Operating Requirements

5.3 Raw and off-spec gas prohibited

Raw or off-spec gas shall not be emitted without combustion through the flare.

5.4 Pilot Flame and Alarm System on Flare

The flare shall be operated with a pilot flame present at all times. The permittee shall install an alarm system on the flare to notify operating personnel in case of a flare or pilot flame-out. The flare or pilot shall be re-ignited as expeditiously as practicable.

5.5 Off-spec Gas Combustion Limit

Off-spec gas combustion shall not exceed 15,060 standard cubic feet (scf) per hour, 45,180 scf per day, or 1,209,000 scf annually.

Monitoring and Recordkeeping Requirement

5.6 Monitoring and Recordkeeping Requirement

- The permittee shall maintain records onsite of the date, time, and amount of off-spec biogas flaring.
- The permittee shall keep records of off-spec gas flaring maintaining those records for at least five years, and making them available for inspection by the Department.
- Raw gas combustion shall be reported as upset condition in accordance with Permit Condition 6.11 and IDAPA 58.01.01.130–136.

6 General Provisions

General Compliance

- 6.1 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.]
- 6.2 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]
- 6.3 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

- 6.4 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

- 6.5 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]
- 6.6 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

6.7 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.

6.8 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.

6.9 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

6.10 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

- 6.11 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

- 6.12 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

- 6.13 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

- 6.14 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

- 6.15 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

- 6.16 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]