



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 N Hilton Street, Boise, ID 83706
(208) 373-0502

Brad Little, Governor
Jess Byrne, Director

November 23, 2021

Royce Davis, Water Renewal Facility Manager
City of Boise – Lander Street WRF
11818 Joplin Road
Boise, ID 83714

RE: Facility ID No. 001-00120, City of Boise – Lander Street WRF, Boise
Final Permit Letter

Dear Mr. Davis:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2021.0023 Project 62631 to City of Boise – Lander Street WRF located at Boise for the initial permit for an existing municipal water renewal 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 May 20, 2021, and the supplemental information provided on June 28, 2021.

This permit is effective immediately. This permit does not release City of Boise – Lander Street WRF 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 Boise Regional Office, 1445 N Orchard St., Boise ID 83706, Fax (208) 373-0287.

In order to fully understand the compliance requirements of this permit, as requested, David Luft, Air Quality Manager, at (208) 373-0201, will schedule a permit handoff meeting to review and discuss the terms and conditions of this permit. Please note that this meeting should be scheduled once the permitted emissions units are operating and some representative records required by the permit have been generated by the facility. 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

Mr. Davis
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contested case, I encourage you to contact Aaron Hoberg at (208) 373-0502 or aaron.hoberg@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mike Simon".

Mike Simon
Stationary Source Bureau Chief
Air Quality Division

MS\ajh

Permit No. P-2021.0023 PROJ 62631

Enclosures

Air Quality

PERMIT TO CONSTRUCT

Permittee City of Boise Lander Street WRF
Permit Number P-2021.0023
Project ID 62631
Facility ID 001-00120
Facility Location 790 Lander Street
Boise, ID 83703

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 23, 2021



Aaron Hoberg, Permit Writer



Mike Simon, Stationary Source Bureau Chief

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1 Permit Scope

Purpose

1.1 This is an initial permit to construct (PTC) for an existing municipal waste water treatment plant.

Regulated Sources

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

Table 1.1 Regulated Sources

Permit Section	Source	Control Equipment
1 ^(a)	<u>15 Natural Gas Heating Units:</u> Manufacturer: Durham-Bush Rating: 0.175 MMBtu/hr Manufacturer: Lennox Rating: 0.03 MMBtu/hr Manufacturer: Lennox Rating: 0.045 MMBtu/hr Manufacturer: Lennox Rating: 0.06 MMBtu/hr Manufacturer: Lennox Rating: 0.075 MMBtu/hr Manufacturer: Modine Rating: 0.175 MMBtu/hr Manufacturer: Sterling (2 units) Rating: 0.03 MMBtu/hr, each Manufacturer: Sterling (2 units) Rating: 0.045 MMBtu/hr, each Manufacturer: Sterling Rating: 0.075 MMBtu/hr Manufacturer: Trane Rating: 0.09 MMBtu/hr Manufacturer: York (2 units) Rating: 0.1 MMBtu/hr, each Manufacturer: York Rating: 0.12 MMBtu/hr	None
	<u>2 Natural Gas Make-Up Air Units:</u> Manufacturer: Trane Rating: 0.1 MMBtu/hr Manufacturer: Trane Rating: 0.12 MMBtu/hr	None
	<u>3 Natural Gas Water Heaters:</u> Manufacturer: Rheem Rating: 0.04 MMBtu/hr, each	None
	<u>1 Natural Gas Clothes Dryer:</u> Manufacturer: Continental Rating: 0.1 MMBtu/hr	None

Permit Section	Source	Control Equipment
2	<u>Primary Anaerobic Digesters #1 and #2:</u> Design Capacity: 994,000 gallons, each Biogas Production: 189,000 cubic feet per day, total	<u>Flare #1:</u> Manufacturer: Varec Model: 239A Manufacture Date: 1975 Heat Input Rating: 4.73 MMBtu/hr Fuel: Digester Gas (Biogas) only
	<u>Process Boiler #1:</u> Manufacturer: Kewanee Model: 3R11-FG Manufacture Date: 1975 Rating: 3.375 MMBtu/hr Fuel: Digester Gas (Biogas) only	None
	<u>Process Boiler #2:</u> Manufacturer: Kewanee Model: M335-KG Manufacture Date: 1997 Rating: 4.181 MMBtu/hr Fuel: Digester Gas (Biogas) and Natural Gas	
<u>Process Boiler #3:</u> Manufacturer: Burnham Model: LN4FPW-450A-40-DG Manufacture Date: 2014 Rating: 4.713 MMBtu/hr Fuel: Digester Gas (Biogas) and Natural Gas		
3	<u>Emergency Generator #1:</u> Manufacturer: Caterpillar Model: 3412C Manufacture Date: 1997 Rating: 1,006 bhp – 750 kW Fuel: Diesel	None
	<u>Emergency Generator #2:</u> Manufacturer: Caterpillar Model: C15 – Tier II Manufacture Date: 2019 Rating: 671 bhp – 500 kW Fuel: Diesel	

- a) Natural Gas heaters and HVAC units at the facility are permitted for 8,760 hours with the maximum capacity ratings in Table 1.1 and no other permit conditions.

2 Anaerobic Digesters and Process Boilers

2.1 Process Description

There are two primary anaerobic digesters that produce digester gas (biogas) that is used as the primary fuel for three process boilers. Additionally, there are two secondary anaerobic digesters that are used to contain bio-solids and do not provide biogas to the system. Any excess biogas produced in the digesters that is not combusted in the process boilers is routed to the open flare to burn off.

Iron salt or equivalent chemical additives will be added to the sludge feed that is broken down in the anaerobic digesters. The addition of the iron salt reduces the H₂S content of the biogas which in turn reduces the sulfur dioxide emissions from the boiler and the flare. Alternate treatment processes that meet this same endpoint may be implemented. The accumulating/excess biogas will be collected and conveyed via piping to a flare. It will be mixed with atmospheric oxygen and combusted. Prior to reaching the flare, the biogas will be diverted to three process boilers

Process boilers are used at the facility to support process and heating operations. One process boiler operates solely on biogas; the other two process boilers operate on biogas as the primary fuel and natural gas as the secondary fuel. The flare is used to combust excess biogas that is not used in the process boilers.

2.2 Control Device Descriptions

Table 2.1 Anaerobic Digesters and Process Boilers Description

Emissions Units / Processes	Control Devices	Emission Points
<u>Primary Anaerobic Digesters #1 and #2:</u> Design Capacity: 994,000 gallons, each Biogas Production: 189,000 cubic feet per day, total	<u>Flare #1:</u> Manufacturer: Varec Model: 239A Install Date: 1975 Rating: 4.73 MMBtu/hr Fuel: Digester Gas (Biogas) only	<u>Flare #1 Stack:</u> Height: 17 ft Diameter: 15 in Temperature: 1,832 °F Flow Rate: 65.62 ft/s Orientation: Vertical
<u>Process Boiler #1:</u> Manufacturer: Kewanee Model: 3R11-FG Manufacture Date: 1975 Rating: 3.375 MMBtu/hr Fuel: Digester Gas (Biogas) only	None	<u>Process Boiler #1 Stack:</u> Height: 25 ft Diameter: 18 in Temperature: 350 °F Flow Rate: 11.95 ft/s Orientation: Vertical
<u>Process Boiler #2:</u> Manufacturer: Kewanee Model: M335-KG Manufacture Date: 1997 Rating: 4.181 MMBtu/hr Fuel: Digester Gas (Biogas) and Natural Gas		<u>Process Boiler #2 Stack:</u> Height: 33 ft Diameter: 16 in Temperature: 350 °F Flow Rate: 15.15 ft/s Orientation: Vertical
<u>Process Boiler #3:</u> Manufacturer: Burnham Model: LN4FPW-450A-40-DG Manufacture Date: 2014 Rating: 4.713 MMBtu/hr Fuel: Digester Gas (Biogas) and Natural Gas		<u>Process Boiler #3 Stack:</u> Height: 31 ft Diameter: 14 in Temperature: 499 °F Flow Rate: 19.79 ft/s Orientation: Vertical

Emission Limits

2.3 Emission Limits

The emissions from the flare and process boilers stacks shall not exceed any corresponding emissions rate limits listed in Table 2.2.

Table 2.2 Flare and Process Boilers Emission Limits^(a)

Source Description	PM _{2.5} /PM ₁₀ ^(b)		SO ₂ ^(e)		NO _x		CO		VOC	
	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)
Flare #1	0.1	0.3	1.55	6.79	0.3	1.4	1.5	6.4	3.12	13.66
Process Boiler #1	0.04	0.19			0.6	2.5	0.5	2.1	0.03	0.14
Process Boiler #2	0.05	0.23			0.7	3.1	0.6	2.6	0.04	0.17
Process Boiler #3	0.06	0.26			0.8	3.4	0.7	2.9	0.04	0.19

- In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- Particulate matter with an aerodynamic diameter less than or equal to a nominal two point five (2.5) and ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
- Tons per any consecutive 12-calendar month period.
- The SO₂ emission limit is combined for the four emission units and is calculated using the maximum daily throughput of biogas, 100% conversion of H₂S to SO₂, and natural gas combustion up to the maximum heat input of the boilers and flare.

2.4 Hydrogen Sulfide (H₂S) Emission Limit

The concentration of hydrogen sulfide (H₂S) entering the flare and process boilers from the anaerobic digesters shall not exceed 1,200 ppmV of H₂S, based on the most recent consecutive 12 month average of all monitored values obtained by the hydrogen sulfide monitor or Draeger® tube, or equivalent, sampling.

2.5 Biogas Production Limit

Biogas production from the anaerobic digesters shall not exceed 189,000 scf per day, and 68.985 MMscf for any consecutive 12-month period.

2.6 Opacity Limit

Emissions from the flare and process boilers stacks, or any other stack, vent, or functionally equivalent opening associated with the flare and process boilers, 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.

2.7 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 in accordance with IDAPA 58.01.01.776.01.

2.8 Particulate Matter Standards for Gas Fired Boilers

The permittee shall not exceed 0.015 gr/dscf at 3% oxygen for the combustion of natural gas or biogas in the flare and process boilers as required by IDAPA 58.01.01.677.

Operating Requirements

2.9 Anaerobic Digesters

Only primary anaerobic digesters shall be used to actively produce biogas. The secondary anaerobic digesters shall only be used to contain biosolids and shall not provide biogas to the system.

2.10 Fuel Usage

All biogas produced in the anaerobic digesters shall be combusted in the process boilers and/or flare.

The permittee shall only combust biogas in Process Boiler #1. Process Boilers #2 and #3 shall combust biogas as the primary fuel with natural gas as a secondary fuel. Any biogas not combusted in the process boilers shall be combusted in the flare.

2.11 Pilot Flame

The permittee shall install, maintain, and operate the digester flare which shall be operated with a pilot flame present during the operation of the digesters. In the event of a flame failure, the permittee shall follow a standard operating procedure to reinitiate the pilot flame as expeditiously as practicable.

2.12 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent particulate matter from becoming airborne in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable, consideration will be given to factors such as the proximity of dust emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of PM. Some of the reasonable precautions include, but are not limited to, the following:

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
- Application, where practical, of asphalt, water, or suitable chemicals to, or covering of, dirt roads, material stockpiles, and other surfaces which can create dust.
- Installation and use, where practical, of hoods, fans, and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.
- Covering, when practical, of open bodied trucks transporting materials likely to give rise to airborne dusts.
- Paving of roadways and their maintenance in a clean condition, where practical.
- Prompt removal of earth or other stored material from streets, where practical.

Monitoring and Recordkeeping Requirements

2.13 Pilot Flame Monitoring

The permittee shall install, maintain, and operate a thermocouple or similar device that detects the presence of a flame in the biogas flare.

2.14 Hydrogen Sulfide Monitoring

The permittee shall install, calibrate, maintain, and operate an H₂S gas monitor that shall be placed downstream of the digester, and upstream of the process boilers and biogas flare to measure the H₂S concentrations in the biogas produced by the anaerobic digesters. The monitor shall be installed in accordance with the manufacturer specifications. When conducting H₂S monitoring, Draeger® tubes, or equivalent, may be used to collect a sample in lieu of the H₂S monitor.

Calibration of the H₂S monitor shall be performed and recorded in accordance with the O&M manual and no less frequently than semi-annually if the meter is in service. If the meter is out of service, the meter must be cleaned and calibrated before being put into service.

Gas checks must be conducted weekly for new H₂S analyzers, and an acceptable gas check is an analyzer response that is $\pm 20\%$ of a known concentration. If gas checks are within the $\pm 20\%$ range for four consecutive weeks, then the frequency of gas checks can be reduced to monthly. If four consecutive monthly gas checks are within the acceptable range, then the frequency can be reduced to semi-annually. If any gas check response is outside the $\pm 20\%$ range, then the frequency would start over at weekly.

- A *gas check* is defined as an introduction of a known concentration of gas to the analyzer system prior to any adjustment being made to the analyzer response and recording the system response. A gas check will identify if the analyzer system is maintaining accuracy over time and determine if gas checks and calibration frequency should be increased or decreased.

The measured H₂S concentrations from the H₂S monitor or Draeger® tubes, or equivalent shall be recorded once per week in units of ppmV.

Monitoring and recordkeeping of H₂S concentrations shall occur during each calendar week of operations. Monthly monitoring may be conducted in lieu of weekly monitoring, provided that 24 consecutive weeks of monitoring do not exceed 90% of the H₂S limit permit condition. If any single measurement during monthly monitoring equals or exceeds 90% of the H₂S limit permit condition, then monitoring frequency shall revert to each calendar week until the 24 consecutive weeks of monitoring do not equal or exceed 90% of the H₂S Limit Permit Condition. When conducting monthly monitoring, Draeger tubes, or equivalent may be used to collect a sample in lieu of the H₂S monitor. Samples must be collected downstream of the digester and upstream of the process boilers and biogas flare. Records of this information shall be maintained on site and be made available to DEQ representatives upon request and in accordance with the General Provisions.

2.15 Biogas Flow Rate Monitoring

The permittee shall monitor and record the total biogas flow rate on a daily basis in units of standard cubic feet per day, and calculate a rolling 12-month average of standard cubic feet per year.

Monitoring at the facility will utilize three existing flow meters to measure the total biogas flow rate on a daily basis. The permittee shall comply with the following requirements to determine the quantity of biogas produced by the anaerobic digester:

- The permittee shall calibrate, maintain, and operate biogas flow meters installed before the flare and boilers, downstream of the anaerobic digesters. The total biogas flow rate will be determined by totaling the flow through all meters. The biogas flow meters shall be installed, operated, and maintained in accordance with the O&M manual and the manufacturer specifications.

- Calibration of the biogas flow meters shall be performed and recorded in accordance with the O&M manual.

2.16 Operations and Maintenance Manual

Within 60 days of permit issuance, the permittee shall develop and submit an operations and maintenance (O&M) manual which discusses the operation of the H₂S monitor or Draeger® tubes, or equivalent, and Pilot Flame Detector, and describes the procedures that will be followed to maintain the anaerobic digesters in good working order to assure operations are as efficient as practical. A copy of the document shall be submitted to DEQ's Boise Regional Office. The procedures and specifications described in the O&M manual shall address, at a minimum, the following topics:

Biogas Flow-rate Monitor

- Standard operational procedure for flow-rate sampling,
- Frequency and method of calibration, and
- Flow rate measurement range

H₂S Monitor

- Standard operational procedure for H₂S concentration sampling,
- Frequency and method of calibration, and
- H₂S concentration measurement range

Pilot Flame Detector

- Method of ensuring continuous operation,
- Procedure for pilot flame re-ignition

Anaerobic Digesters

- Procedure for monitoring biogas under positive pressure,
- Corrective action procedure if biogas is detected outside of pressure gauge range.

The contents of the O&M manual shall be based on manufacturer's specifications for each piece of equipment. A copy of the manufacturer's recommendations shall be included with the O&M manual, and both shall be made available to DEQ representatives upon request.

Any changes to the O&M Manual shall be submitted to DEQ within 15 days of the change.

2.17 Manufacturer's Recommendations and Specifications for Boiler Operations

The permittee shall operate and maintain all boilers to manufacturer's recommendations and specifications all times and shall make the manufacturer's recommendations and specifications available to DEQ representatives upon request.

3 Emergency Generators

3.1 Process Description

Two diesel-fired emergency generators will provide electrical backup power to the WRF in the event electric power is interrupted. Each emergency generator will combust ultra-low sulfur diesel (ULSD) and will be routinely tested to ensure proper operation. Each engine may operate up to one hour per day and 100 hours per year for maintenance and testing. Emergency use shall not be restricted.

3.2 Control Device Descriptions

Table 3.1 Emergency Generators Description

Emissions Units / Processes	Control Devices	Emission Points
<u>Emergency Generator #1:</u> Manufacturer: Caterpillar Model: 3412C Manufacture Date: 1997 Rating: 1,006 bhp – 750 kW Fuel: Diesel	None	<u>Emergency Generator #1 Stack:</u> Height: 25 ft Diameter: 8 in Temperature: 957 °F Flow Rate: 6,423.7 cfm Orientation: Vertical
<u>Emergency Generator #2:</u> Manufacturer: Caterpillar Model: C15 – Tier II Manufacture Date: 2019 Rating: 671 bhp – 500 kW Fuel: Diesel		<u>Emergency Generator #2 Stack:</u> Height: 11.17 ft Diameter: 8 in Temperature: 988 °F Flow Rate: 3,605.5 cfm Orientation: Vertical

Emission Limits

3.3 Emission Limits

The emissions from the Emergency Generators stack shall not exceed any corresponding emissions rate limits listed in Table 3.2.

Table 3.2 Emergency Generators Emission Limits^(a)

Source Description	PM _{2.5} /PM ₁₀ ^(b)		SO ₂		NO _x		CO		VOC	
	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)
EG #1 – Caterpillar 3412C	0.241	0.012	0.011	0.0006	13.191	0.660	1.571	0.079	0.288	0.014
EG #2 – Caterpillar C15	0.044	0.002	0.008	0.0004	6.791	0.340	0.886	0.044	0.044	0.002

- a) In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- b) Particulate matter with an aerodynamic diameter less than or equal to a nominal two point five (2.5) and ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- c) Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
- d) Tons per any consecutive 12-calendar month period.

3.4 Opacity Limit

Emissions from the Emergency Generators stack, or any other stack, vent, or functionally equivalent opening associated with the Emergency Generators, 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.

Certification and Operating Requirements

3.5 Emergency Generator Engine Certification

Emergency Generator #2, Caterpillar C15 engine shall be an EPA Tier II Certified engine.

3.6 Emergency Generator Engine Operating Limits

To demonstrate compliance with the Emissions Limits permit condition, operation of the emergency generators shall not exceed the following operational limits:

- 1 hour per day, each
- 100 hours per consecutive 12-months, each

Fuel Specifications

3.7 Emergency Generator Engine Fuel Specifications

The emergency generator engines shall only combust distillate fuel oil which meets ASTM Grades 1 or 2, or a mixture of ASTM Grades 1 and 2, and which has a maximum sulfur content of 0.0015% (15 ppm) by weight.

NSPS/NESHAP Applicability

3.8 40 CFR 63 Subpart ZZZZ Applicability - Emergency Generator #1, Caterpillar 3412C

This emergency generator is an existing stationary RICE located at an area source of HAP emissions that commenced construction or reconstruction before June 12, 2006 in accordance with 40 CFR 63.6590(a)(1)(iii).

3.9 40 CFR 60 Subpart IIII Applicability - Emergency Generator #2, Caterpillar C15

This emergency generator commenced construction after July 11, 2005, was manufactured after April 1, 2006, and is not fire pump engines and subject to this subpart in accordance to 40 CFR 60.4200(a)(2)(i),.

3.10 40 CFR 63 Subpart ZZZZ Applicability - Emergency Generator #2, Caterpillar C15

This emergency generator is a new stationary RICE located at an area source of HAP emissions that commenced construction or reconstruction after June 12, 2006 and subject to this subpart in accordance with 40 CFR 63.6590(a)(2)(iii).

In accordance to 40 CFR 63.6590(c)(1), this emergency generator is a new stationary RICE located at an area source and meets the requirements of this part by meeting the requirements of 40 CFR Part 60 Subpart IIII.

40 CFR 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

3.11 Emissions and Operating Limitations - Emergency Generator #1, Caterpillar 3412C

In accordance with 40 CFR 63.6603, the emergency generators must comply with the following requirements:

- Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - In accordance with 40 CFR 63.6625(i), the permittee has the option of implementing an oil analysis program to extend the oil change frequency specified in the Emissions and Operating Limitations permit condition. The oil

analysis must be performed at the same frequency as specified in the Emissions and Operating Limitations permit condition. The oil analysis program must, at a minimum, analyze the following three parameters:

- Total Base Number, viscosity, and percent water content.

The limits for these parameters are as follows:

- A Total Base Number of less than 30% of the Total Base Number of the oil when new;
- The viscosity of the oil has changed by more than 20% from the viscosity of the oil when new;
- The water content is greater than 0.5% (by volume).

If any of the limits are exceeded, the Permittee must change the oil within two days of receiving the results of the analysis or before commencing operation of the IC engine, whichever is later.

The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the IC engine.

The analysis program must also be part of the maintenance plan for the engine.

- Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

3.12 General Compliance Requirements - Emergency Generator #1, Caterpillar 3412C

In accordance with 40 CFR 63.6605, the permittee shall operate and maintain the engine and associated pollution control equipment (where applicable) in a manner consistent with safety and good air pollution control practices for minimizing emissions.

3.13 Monitoring, Installation, Collection, Operation, and Maintenance Requirements – Emergency Generator #1, Caterpillar 3412C

In accordance with 40 CFR 63.6625, the permittee shall:

- Operate and maintain the engine and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a specific maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- Install and operate a non-resettable hour meter if one is not already installed.
- Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission limits apply.

3.14 Recordkeeping Requirements – Emergency Generator #1, Caterpillar 3412C

In accordance with 40 CFR 63.6655(e), the permittee shall maintain records of the maintenance conducted on the engine and after-treatment control device (if any) according to your own maintenance plan.

In accordance with 40 CFR 63.6655(f), the permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified as emergency, and how many hours are spend for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

3.15 Record Retention – Emergency Generator #1, Caterpillar 3412C

In accordance with 40 CFR 63.6660, all records shall be readily accessible in hard copy or electronic form for a minimum of five (5) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

3.16 Incorporation of Federal Requirements by Reference – Emergency Generator #1, Caterpillar 3412C

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:

- National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories, 40 CFR Part 63, Subpart ZZZZ - National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

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

3.17 General Provisions – Emergency Generator #1, Caterpillar 3412C

In accordance with 40 CFR 63.6665, the permittee shall comply with the requirements of 40 CFR 63 – General Provisions in §63.1 through §63.15.

40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

3.18 Engine Maintenance – Emergency Generator #2, Caterpillar C15

In accordance with 40 CFR 60.4206, the permittee shall operate and maintain the IC engine according to the manufacturer’s written instructions or procedures developed by the permittee that are approved by the engine manufacturer, over the entire life of the engine.

3.19 Monitoring Requirements – Emergency Generator #2, Caterpillar C15

In accordance with 40 CFR 60.4209, the permittee shall install, operate, and maintain a non-resettable hour meter.

3.20 Incorporation of Federal Requirements by Reference – Emergency Generator #2, Caterpillar C15

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:

- New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

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

3.21 General Provisions – Emergency Generator #2, Caterpillar C15

In accordance with 40 CFR 60.4218, the permittee shall comply with the requirements of 40 CFR 60.1 through 60.19, except for Sections 60.11 and 60.18 as detailed in the Subpart.

Monitoring and Recordkeeping Requirements

3.22 Emergency IC Engine Operation Recordkeeping

The permittee shall monitor and record Emergency IC Engine operation in hours per day to demonstrate compliance with the Emergency Generator Engine Operating Limits permit condition.

Monthly Emergency IC Engine operation shall be determined by summing daily operation over the previous calendar month. Consecutive 12-months of Emergency IC Engine operation shall be determined by summing the monthly operation over the previous consecutive 12 month period to demonstrate compliance with the consecutive 12-months Emergency Generator Engine Operating Limit permit condition.

3.23 Distillate Fuel Oil Specifications Recordkeeping

On an as-received basis for each shipment of distillate fuel oil, the permittee shall maintain the following supplier verified and certified information:

- ASTM grade
- Percent sulfur content by weight

3.24 Recordkeeping

All monitoring and recordkeeping documentation required by this permit shall be maintained in accordance with the Recordkeeping general provision.

4 General Provisions

General Compliance

4.1 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.]

4.2 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, 5/1/1994]

4.3 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, 5/1/1994]

Inspection and Entry

4.4 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

4.5 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, 5/1/1994]

4.6 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, 5/1/1994]
- 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, 5/1/1994]

Performance Testing

- 4.7** 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.
- 4.8** 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.
- 4.9** 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, 4/5/2000 and 4/11/2015]

Monitoring and Recordkeeping

- 4.10** 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, 5/1/1994]

Excess Emissions

- 4.11** 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, 4/5/2000]

Certification

- 4.12** 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, 5/1/1994]

False Statements

- 4.13** 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, 3/23/1998]

Tampering

- 4.14** 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, 3/23/1998]

Transferability

- 4.15** This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/2006]

Severability

- 4.16** 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, 5/1/1994]