



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

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

Governor Brad Little  
Director John H. Tippetts

November 13, 2019

Andy Zimmerman, WWTP Superintendent  
Nampa Waste Water Treatment Plant  
340 West Railroad Street  
Nampa, Idaho 83687

RE: Facility ID No. 027-00110, Nampa Waste Water Treatment Plant, Nampa  
Final Permit Letter

Dear Mr. Zimmerman:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2010.0182 Project 62235 to Nampa Waste Water Treatment Plant located at 340 West Railroad Street in Nampa for the addition of a 5<sup>th</sup> primary digester and a flare. 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 14, 2019.

This permit is effective immediately and replaces PTC No. P-2010.0182, issued on October 19, 2018. This permit does not release Nampa Waste Water Treatment Plant 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, DEQ highly recommends that you schedule a meeting with David Luft, Air Quality Manager, at (208) 373-0201 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends that the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

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

for, Mike Simon  
Stationary Source Program Manager  
Air Quality Division  
MSML  
Permit No. P-2010.0182 Project 62235  
Enclosures

## Air Quality

### PERMIT TO CONSTRUCT

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**Permittee** Nampa Waste Water Treatment Plant  
**Permit Number** P-2010.0182  
**Project ID** 62235  
**Facility ID** 027-00110  
**Facility Location** 340 W. Railroad St.  
Nampa, ID 83687

### 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 13, 2019



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**Morrie Lewis, Permit Writer**



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**Mike Simon, Stationary Source Manager**

for,

## Contents

1	Permit Scope.....	3
2	Anaerobic Digesters, Boilers, and Flare.....	7
3	Heaters and Emergency Engines.....	13
4	NSPS General Provisions.....	17
5	General Provisions.....	20

# 1 Permit Scope

## Purpose

- 1.1 This is a modified permit to construct (PTC) a fifth primary digester and a flare, to increase gas production and to account for control of H<sub>2</sub>S emissions by dosage of ferric chloride. [11/13/19]
- 1.2 Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right-hand margin.
- 1.3 This PTC replaces Permit to Construct No. P-2010.0182, issued on October 19, 2018. [11/13/19]

## Regulated Sources

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

**Table 1.1 Regulated Sources**

Permit Section	Source	Control Equipment
2	<u>Primary Anaerobic Digester #1</u> Storage capacity: 881,000 gallons Gas generation capacity: 213,432 scf/day Installation date: 1964	Boiler #1 Boiler #2 Boiler #3 Boiler #4 Flare #1 Flare #2 Iron Salt Dosing Control Equipment (Ferric Chloride)
	<u>Primary Anaerobic Digester #2</u> Storage capacity: 881,000 gallons Gas generation capacity: 213,432 scf/day Installation date: 1980	
	<u>Primary Anaerobic Digester #3</u> Storage capacity: 881,000 gallons Gas generation capacity: 234,408 scf/day Installation date: 2010	
	<u>Primary Anaerobic Digester #4</u> Storage capacity: 881,000 gallons Gas generation capacity: 234,408 scf/day Installation date: 2019	
	<u>Primary Anaerobic Digester #5</u> Storage capacity: 881,000 gallons Gas generation capacity: 234,408 scf/day Installation date: 2020	
	<u>Secondary Anaerobic Digester #1</u> Storage capacity: 433,000 gallons Installation date: 1948	
	<u>Secondary Anaerobic Digester #2</u> Storage capacity: 433,000 gallons Installation date: 1948	

**Table 1.1 Regulated Sources**

Permit Section	Source	Control Equipment
2	<u>Boiler #1</u> Manufacturer: Burnham Model: 4FHW 311A 50DG NG WEB Heat input capacity: 2.603 MMBtu/hr Fuel: biogas and natural gas only Installation date: 2012	N/A
	<u>Boiler #2</u> Manufacturer: Burnham Commercial Model: 4FW 311A 50DG NG WEB Heat input capacity: 2.603 MMBtu/hr Steam generation capacity: 1,000 lb/hr Fuel: biogas and natural gas only Installation date: 2008	N/A
	<u>Boiler #3</u> Manufacturer: Burnham Commercial Model: 4FW 311A 50DG NG WEB Heat input capacity: 2.603 MMBtu/hr Steam generation capacity: 1,000 lb/hr Fuel: biogas and natural gas only Installation date: 2010	N/A
	<u>Boiler #4</u> Manufacturer: Burnham Commercial Model: 4FW 311A 50DG NG WEB Heat input capacity: 2.603 MMBtu/hr Steam generation capacity: 1,000 lb/hr Fuel: biogas and natural gas only Installation date: 2010	N/A
	<u>Flare #1</u> Manufacturer: Varec Model: WG 244WS01912119S6 Heat input capacity: 14.125 MMBtu/hr Fuel: biogas and natural gas only Installation date: 2010	N/A
	<u>Flare #2</u> Manufacturer: Varec Model: 244WS Heat input capacity: 14.125 MMBtu/hr Fuel: biogas and natural gas only Installation date: 2020	N/A

**Table 1.1 Regulated Sources**

Permit Section	Source	Control Equipment
3	<u>Heater #1</u> Manufacturer: Sterling Model: QVSF Heat input capacity: 0.200 MMBtu/hr Fuel: natural gas only Installation date: 2009	N/A
	<u>Heater #2</u> Manufacturer: Sterling Model: QVSF Heat input capacity: 0.200 MMBtu/hr Fuel: natural gas only Installation date: 2009	N/A
	<u>Heater #3</u> Manufacturer: Sterling Model: QVSF Heat input capacity: 0.200 MMBtu/hr Fuel: natural gas only Installation date: 2009	N/A
	<u>Heater #4</u> Manufacturer: Sterling Model: QVSF Heat input capacity: 0.200 MMBtu/hr Fuel: natural gas only Installation date: 2009	N/A
	<u>Heater #5</u> Manufacturer: ADP Model: SEP Heat input capacity: 0.145 MMBtu/hr Fuel: natural gas only Installation date: 2001	N/A
	<u>Heater #6</u> Manufacturer: ADP Model: SEP Heat input capacity: 0.145 MMBtu/hr Fuel: natural gas only Installation date: 2001	N/A
	<u>Heater #7</u> Manufacturer: ADP Model: SEP Heat input capacity: 0.145 MMBtu/hr Fuel: natural gas only Installation date: 2001	N/A
	<u>Heater #8</u> Manufacturer: ADP Model: SEP Heat input capacity: 0.145 MMBtu/hr Fuel: natural gas only Installation date: 2001	N/A
	<u>Pressure Washer Heater</u> Manufacturer: Hotsy Model: S5735-3 Heat input capacity: 0.657 MMBtu/hr Fuel: natural gas only Installation date: 1998	N/A

**Table 1.1 Regulated Sources**

Permit Section	Source	Control Equipment
3	<u>Emergency Engine #1</u> Manufacturer: Caterpillar Model: C27 Serial #: MJE01635 Maximum power rating: 1,190 bhp Maximum operation: 6 hr/day and 100 hr/yr (non-emergency) Tier certification: 2 Fuel: diesel fuel only Installation date: 2009	Tier 2 technologies
	<u>Emergency Engine #2</u> Manufacturer: Caterpillar Model: C27 Serial #: MJE01769 Maximum power rating: 1,190 bhp Maximum operation: 6 hr/day and 100 hr/yr (non-emergency) Tier certification: 2 Fuel: diesel fuel only Installation date: 2009	Tier 2 technologies
	<u>Emergency Engine #3</u> Manufacturer: Caterpillar Model: C27 Serial #: MJE01770 Maximum power rating: 1,190 bhp Maximum operation: 6 hr/day and 100 hr/yr (non-emergency) Tier certification: 2 Fuel: diesel fuel only Installation date: 2009	Tier 2 technologies

[11/13/19]

## 2 Anaerobic Digesters, Boilers, and Flare

### 2.1 Process Description

The facility operates primary and secondary anaerobic digesters. Biogas is generated in the primary anaerobic digesters. The accumulated biogas is collected and conveyed via piping to a dual-fuel fired boiler or flare for combustion. The secondary anaerobic digesters are used only for storage of biogas and stabilized biosolids.

The boilers use biogas as the primary fuel and natural gas as the secondary fuel. The biogas is combusted in the boilers to produce steam for heat for use in the anaerobic digesters. Any excess biogas produced that is not stored in the secondary anaerobic digesters and not used by the boilers is conveyed to a candlestick flare, mixed with atmospheric oxygen, and combusted.

[11/13/19]

### 2.2 Control Device Descriptions

Table 2.1 Anaerobic Digesters Description

Emissions Units / Processes	Control Devices
Primary Anaerobic Digester #1	Boilers and flares
Primary Anaerobic Digester #2	Boilers and flares
Primary Anaerobic Digester #3	Boilers and flares
Primary Anaerobic Digester #4	Boilers and flares
Primary Anaerobic Digester #5	Boilers and flares
Secondary Anaerobic Digester #1	Boilers and flares
Secondary Anaerobic Digester #2	Boilers and flares

[11/13/19]

## Emission Limits

### 2.3 Emission Limits

The emissions from the boiler and candlestick flare stacks shall not exceed any corresponding emissions rate limits listed in the following table.

Table 2.2 Boiler and Flare Emission Limits <sup>(a)</sup>

Source Description	PM <sub>2.5</sub> /PM <sub>10</sub> <sup>(b)</sup>		SO <sub>2</sub>		NO <sub>x</sub>		CO		VOC	
	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>
Boiler #1	0.03	0.14	0.50	2.21	0.25	1.11	0.10	0.43	0.02	0.08
Boiler #2	0.03	0.14	0.50	2.21	0.25	1.11	0.10	0.43	0.02	0.08
Boiler #3	0.03	0.14	0.50	2.21	0.25	1.11	0.10	0.43	0.02	0.08
Boiler #4	0.03	0.14	0.50	2.21	0.25	1.11	0.10	0.43	0.02	0.08
Flare #1	0.18	0.78	2.43	10.62	0.96	4.21	5.23	22.89	0.85	3.71
Flare #2	0.18	0.78	2.43	10.62	0.96	4.21	5.23	22.89	0.85	3.71

- In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and recordkeeping requirements.
- Particulate matter (PM) including condensable PM as defined in IDAPA 58.01.01.006, with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers for PM<sub>2.5</sub>, and less than or equal to a nominal 10 micrometers for PM<sub>10</sub>.
- 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.

[11/13/19]

### 2.4 Opacity Limit

Emissions from each boiler, from each flare, and from any other stack, vent, or functionally equivalent opening associated with a boiler 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.

[11/13/19]

### 2.5 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.

### 2.6 Biogas H<sub>2</sub>S Concentration Limit

The average annual concentration of hydrogen sulfide (H<sub>2</sub>S) of the biogas entering the boilers and flares shall not exceed 700 ppmv.

[11/13/19]

### 2.7 Particulate Matter Emission

Particulate matter emissions from each boiler and each candlestick flare shall not exceed 0.015 gr/dscf at 3% O<sub>2</sub> as required by IDAPA 58.01.01.676.

[11/13/19]

## **Operating Requirements**

### **2.8 Anaerobic Digesters**

Only primary anaerobic digesters shall be used as anaerobic digesters actively producing biogas at any time. The secondary anaerobic digesters shall not produce biogas at any time. They may be used to store stabilized biosolids and biogas produced by the primary anaerobic digesters.

[11/13/19]

### **2.9 Biogas Combustion Limits**

Biogas production from the anaerobic digesters and combusted in the boilers and candlestick flares shall not exceed 1,130,088 scf/day, based on the average scf combusted per day over the preceding 365-day period.

[11/13/19]

### **2.10 Biogas Combustion**

All biogas produced in the digesters shall be combusted in the boilers and/or flares.

[11/13/19]

### **2.11 Boiler Operation**

Each boiler shall be operated at only 100% load whenever all four boilers are fired on biogas.

Each boiler shall be operated at 75% load or greater whenever less than four boilers are fired on biogas.

Existing rain caps shall be removed from each boiler stack within 30 days of permit issuance.

[11/13/19]

### **2.12 Boiler Permitted Fuel**

To ensure compliance with boiler Emission Limits, the boilers shall only combust biogas or natural gas as fuel.

[11/13/19]

### **2.13 Flare Permitted Fuel**

To ensure compliance with flare Emission Limits, the flares shall only combust biogas or natural gas as fuel. Natural gas shall only be used for a pilot flame.

[11/13/19]

### **2.14 Flare Ignition System**

The permittee shall maintain and operate a flare during operation of any anaerobic digester. A flame shall be present at all times when combustible gases are vented through the flare. The outlet of the flare shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare.

[11/13/19]

### **2.15 Flare Operation and Maintenance**

The permittee shall install, maintain, and operate each flare in accordance with manufacturer's specifications and in accordance with the general control device requirements of 40 CFR 60.18(b) through (e) (Permit Condition 4.1).

[11/13/19]

## **2.16 Iron Salt Dosing Control Equipment**

The permittee shall operate the control equipment in accordance with the O&M manual. The procedures specified in the O&M manual are incorporated by reference into this permit and are enforceable permit conditions. The O&M manual and copies of any manufacturer's manual(s) and recommendations shall remain on site at all times and shall be made available to DEQ representatives upon request.

[11/13/19]

## **Monitoring and Recordkeeping Requirements**

### **2.17 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.

### **2.18 Biogas H<sub>2</sub>S Concentration Monitoring**

Unless an alternative monitoring and recordkeeping method is approved by DEQ, the permittee shall comply with the following requirements to determine the concentration of H<sub>2</sub>S in the gas stream produced by the anaerobic digester:

- The H<sub>2</sub>S biogas concentration shall be measured downstream of the digesters and upstream of the boilers and the flare. Use of a Draeger tube as a method for monitoring biogas H<sub>2</sub>S concentration has been approved by DEQ. The Draeger tube sampling shall be conducted in accordance with the O&M manual and the manufacturer specifications.
- Calibration of the H<sub>2</sub>S concentration monitor shall be performed no less frequently than semi-annually and recorded in accordance with the O&M manual.
- The H<sub>2</sub>S concentrations from the monitor shall be recorded once per week.

Monitoring and recordkeeping of H<sub>2</sub>S concentrations shall occur weekly during operation of the digester. Monthly monitoring may be conducted in lieu of weekly monitoring, provided that 24 consecutive weeks of monitoring show that the measured H<sub>2</sub>S concentration does not equal or exceed 90% of 700 ppmv (630 ppmv). If any measured H<sub>2</sub>S concentration during monthly monitoring equals or exceeds 630 ppmv, then the monitoring frequency shall revert to weekly until 24 consecutive weeks of monitoring do not equal or exceed 630 ppmv. Records of this information shall be maintained on site and be made available to DEQ representatives upon request and in accordance with the Monitoring and Recordkeeping general provision.

[11/13/19]

### **2.19 Biogas Combustion 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 biogas produced by the anaerobic digester and to ensure compliance with Biogas Combustion Limits (Permit Condition 2.9):

- The permittee shall install, calibrate, maintain, and operate biogas flow meters that shall be placed at the inlets of each boiler and each flare, in order to determine the total quantity of biogas combusted. Each of the biogas flowmeters shall be installed, operated and maintained in accordance with the O&M manual and the manufacturer specifications.
- Calibration of each of the biogas flow meters shall be performed and recorded in accordance with the O&M manual and the manufacturer specifications.
- The permittee shall monitor and record the total biogas flow rate on a daily basis in units of scf/day.

[11/13/19]

### **2.20 Flare Ignition System Monitoring**

The permittee shall install, maintain, and operate heat sensing devices such as thermocouples, ultraviolet beam sensors, infrared sensors, or alternative equivalent devices, capable of detecting that a flame is always present in each flare.

[11/13/19]

### **2.21 O&M Manual**

Within 60 days after permit issuance, the permittee shall develop and submit to DEQ an Operation and Maintenance (O&M) manual for review and comment at the address provided (Permit Condition 2.22). Any changes to the O&M manual shall be submitted to DEQ for review and comment within 15 days of the change.

The O&M manual shall describe for the Iron Salt Dosing Control Equipment and for Biogas H<sub>2</sub>S Concentration Monitoring procedures that will be followed to ensure compliance with H<sub>2</sub>S and SO<sub>2</sub> emission limits (Permit Conditions 2.3 and 2.6), the control equipment maintenance and operation general provision (Permit Condition 5.2), and manufacturer's specifications. The O&M manual shall be a permittee-developed document based upon, but independent from, the manufacturer-supplied operating manual(s). The O&M Manual shall include the following, at a minimum:

- Methodology for monitoring digester feed rate and determining iron salt (e.g., ferric chloride) dosing rate.
- Minimum iron salt dosing rate or ratio to ensure compliance with H<sub>2</sub>S and SO<sub>2</sub> emission limits (e.g., 50 kg ferric chloride/ton of feed).
- Procedures for corrective action that will be taken if H<sub>2</sub>S emissions exceed 95% of the Biogas H<sub>2</sub>S Concentration Limit;
- Schedule and procedures for routine inspection, maintenance, and repair/replacement of the dosing equipment and mixing pumps.
- Calibration of the H<sub>2</sub>S monitor.

**2.22 DEQ Address**

All requests, reports, applications, submittals, certifications, and other communications required by this permit shall be submitted to:

Air Quality Permit Compliance  
Department of Environmental Quality  
Boise Regional Office  
1445 N. Orchard St.  
Boise, Idaho 83706

phone: (208) 373-0550  
fax: (208) 373-0287

### 3 Heaters and Emergency Engines

#### 3.1 Process Description

Three diesel-fired emergency engines powering electrical generators are used to supply emergency backup power to the entire facility.

[11/13/19]

#### 3.2 Control Device Descriptions

Table 3.1 Engine Descriptions

Emissions Units / Processes	Control Equipment
Emergency Engine #1	Tier 2 technologies
Emergency Engine #2	Tier 2 technologies
Emergency Engine #3	Tier 2 technologies

[11/13/19]

### Emission Limits

#### 3.3 Emission Limits

The emissions from the emergency engine stacks shall not exceed any corresponding emissions rate limits listed in the following table.

Table 3.2 Engine Emission Limits <sup>(a)</sup>

Source Description	PM <sub>10</sub> <sup>(b)</sup>		SO <sub>2</sub>		NO <sub>x</sub>		CO		VOC	
	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>
Emergency Engine #1	0.13	0.01	0.01	0.001	15.89	0.79	1.15	0.06	0.14	0.01
Emergency Engine #2	0.13	0.01	0.01	0.001	15.89	0.79	1.15	0.06	0.14	0.01
Emergency Engine #3	0.13	0.01	0.01	0.001	15.89	0.79	1.15	0.06	0.14	0.01

- a) In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and recordkeeping requirements.
- b) Particulate matter (PM) including condensable PM as defined in IDAPA 58.01.01.006, with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers for PM<sub>2.5</sub>, and less than or equal to a nominal 10 micrometers for PM<sub>10</sub>.
- 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.

[11/13/19]

#### 3.4 NSPS 40 CFR 60, Subpart IIII – Emission Standards for the Emergency Engines

The permittee shall comply with the emission standards for new nonroad compression ignition (CI) engines in 40 CFR 60.4202 for each emergency engine, for all pollutants, in accordance with 40 CFR 60.4205(b).

- The certification emission standards for new nonroad CI engines in Table 1 to 40 CFR 89.112:

SUMMARY OF TABLE 1 TO 40 CFR 89.112 – EMISSION STANDARDS

Rated Power (kW)	Tier	NMHC + NO <sub>x</sub> g/kW-hr	CO g/kW-hr	PM g/kW-hr
kW > 560	Tier 2	6.4	3.5	0.20

- The certification emission standards for new nonroad CI engines in 40 CFR 89.113:

- The exhaust opacity from nonroad CI engines shall not exceed 20 percent during the acceleration mode; 15 percent during the lugging mode; and 50 percent during the peaks in either the acceleration or lugging modes.

[11/13/19]

### **3.5 Opacity Limit**

Emissions from each emergency engine stack, from each heater stack, from the pressure washer stack, and from any other stack, vent, or functionally equivalent opening associated with an engine, heater, or pressure washer (Table 1.1) 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.

[11/13/19]

## **Operating Requirements**

### **3.6 Engine Operating Limits**

To demonstrate compliance with the Emissions Limits permit condition and in accordance with 40 CFR 60.4211, each engine shall be operated only for testing and maintenance of that engine, for required regulatory purposes, and during emergency situations. Operation of each emergency engine for maintenance, testing, and required regulatory purposes shall not exceed:

- 6 hours per day
- 100 hours per consecutive 12-months

### **3.7 Engine Fuel Specifications**

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

### **3.8 NSPS 40 CFR 60, Subpart IIII – Engine Replacement or Reconstruction**

If any engine is to be changed out, replaced, or reconstructed, the permittee shall comply with the requirements of 40 CFR 60.4205, 40 CFR 60.4208, and 40 CFR 60.4211.

[11/13/19]

### **3.9 NSPS 40 CFR 60, Subpart IIII – Engine Hour Meter**

In accordance with 40 CFR 60.4209, each engine shall be equipped with a non-resettable hour meter.

[11/13/19]

### **3.10 NSPS 40 CFR 60, Subpart IIII – Operating and Maintenance Requirements**

In accordance with 40 CFR 60.4211(a) and 40 CFR 60.4206, the permittee shall:

- Operate and maintain each emergency engine and control device 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 engines.
- Change only those emission-related settings that are permitted by the manufacturer.
- Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as applicable.

[11/13/19]

### **3.11 NSPS 40 CFR 60, Subpart III – Compliance Requirements**

The permittee shall operate each engine according to the requirements in 40 CFR 60.4211(f)(1) through (3) and Engine Operating Limits (Permit Condition 3.6). In order for each engine to be considered an emergency engine, any operation other than emergency operation, maintenance, and testing, is prohibited. If an engine is not operated according to these requirements, that engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

- There is no time limit on the use of each emergency engine in emergency situations.
- The permittee may operate each emergency engine for any combination of the following purposes for a maximum of 100 hours per calendar year.
  - Each emergency engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition DEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency engine(s) beyond 100 hours per calendar year.

[11/13/19]

### **3.12 NSPS 40 CFR 60, Subpart III – Fuel Requirements**

The permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, in accordance with 40 CFR 60.4207(b).

- All nonroad diesel fuel is subject to the following per-gallon standards:
  - 15 parts per million by weight (ppmw) maximum sulfur content; and a
  - Minimum cetane index of 40, or maximum aromatic content of 35 volume percent.

[11/13/19]

## **Monitoring and Recordkeeping Requirements**

### **3.13 Engine Operation Monitoring**

The permittee shall monitor and record operation of each emergency engine in hours per day to demonstrate compliance with Engine Operating Limits (Permit Condition 3.6).

Monthly operation of each emergency engine shall be determined by summing daily operation over the previous calendar month. Consecutive 12-months operation of each emergency engine shall be determined by summing the monthly operation over the previous consecutive 12-month period to demonstrate compliance with the consecutive 12-months emergency engine operating limits permit condition.

[11/13/19]

### **3.14 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

**3.15 Operation and Maintenance Recordkeeping**

The permittee shall maintain records of the operation and maintenance of each engine to demonstrate compliance with Operation and Maintenance Requirements (Permit Condition 3.6).

**3.16 NSPS 40 CFR 60, Subpart III – Engine Operation Monitoring**

In accordance with 40 CFR 60.4214, the permittee shall keep records of the operation of each engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time.

[11/13/19]

**3.17 NSPS 40 CFR 60, Subpart III – Monitoring Requirements**

The permittee shall meet the monitoring requirements of 40 CFR 60.4209. In addition, the permittee shall also meet the monitoring requirements specified in 40 CFR 60.4211.

- The permittee shall install a non-resettable hour meter on each of the emergency engines, prior to startup of each engine.
- If the emergency engines are equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached.

[11/13/19]

**3.18 NSPS 40 CFR 60, Subpart III – Notification, Reports, and Records**

- The permittee is not required to submit an initial notification as required in 40 CFR 60.7(a)(1) for the emergency engines, in accordance with 40 CFR 60.4214(b).
- If the emergency engines are equipped with a diesel particulate filter, the permittee shall keep records of any corrective action taken after the backpressure monitor has notified the permittee that the high backpressure limit of the engine is approached, in accordance with 40 CFR 60.4214(c).

[11/13/19]

**3.19 NSPS 40 CFR 60, Subpart III – Testing Requirements**

If performance tests are conducted pursuant to 40 CFR 60, Subpart III, the permittee shall do so according to and using the methodologies provided in 40 CFR 60.4212.

[11/13/19]



## 4 NSPS General Provisions

### 4.1 NSPS 40 CFR 60, Subpart A – General Provisions

The permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A – General Provisions in accordance with 40 CFR 60.1. A summary of requirements for affected facilities is provided in Table 4.1.

**Table 4.1 NSPS 40 CFR 60, Subpart A - Summary of General Provisions**

Section	Subject	Summary of Section Requirements
60.4	Address	<ul style="list-style-type: none"> <li>DEQ is delegated these Subparts and all requests, reports, applications, submittals, and other communications associated with 40 CFR 60 Subparts A and IIII shall be submitted to:            Department of Environmental Quality            Boise Regional Office            1445 N. Orchard            Boise, ID 83706</li> </ul>
60.7(a), (b), and (f)	Notification and Recordkeeping	<ul style="list-style-type: none"> <li>Notification shall be furnished of commencement of construction postmarked no later than 30 days of such date.</li> <li>Notification shall be furnished of initial startup postmarked within 15 days of such date.</li> <li>Notification shall be furnished of any physical or operational change that may increase emissions postmarked 60 days before the change is made.</li> <li>Records shall be maintained of the occurrence and duration of any startup, shutdown or malfunction; any malfunction of the air pollution control equipment; or any periods during which a CMS or monitoring device is inoperative.</li> <li>Records shall be maintained, in a permanent form suitable for inspection, of all measurements, performance testing measurements, calibration checks, adjustments and maintenance performed, and other required information. Records shall be maintained for a period of two years following the date of such measurements, maintenance, reports, and records.</li> </ul>
60.8	Performance Tests	<ul style="list-style-type: none"> <li>At least 30 days prior notice of any performance test shall be provided to afford the opportunity to have an observer to be present.</li> <li>Within 60 days of achieving the maximum production rate, but not later 180 days after initial startup, performance test(s) shall be conducted and a written report of the results of such test(s) furnished.</li> <li>Performance testing facilities shall be provided as follows:           <ul style="list-style-type: none"> <li>Sampling ports adequate for test methods applicable to such facility.</li> <li>Safe sampling platform(s).</li> <li>Safe access to sampling platform(s).</li> <li>Utilities for sampling and testing equipment.</li> </ul> </li> <li>Performance tests shall be conducted and data reduced in accordance with 40 CFR 60.8(b), (c), and (f)</li> </ul>
60.11(a), (d), (f), and (g)	Compliance with Standards and Maintenance Requirements	<ul style="list-style-type: none"> <li><i>Table 8 to NSPS Subpart IIII specifies that 40 CFR 60.11 requirements are not applicable to sources regulated only by Subpart IIII.</i></li> <li>When performance tests are required, compliance with standards is determined by methods and procedures established by 40 CFR 60.8.</li> <li>At all times, including periods of startup, shutdown, and malfunction, the owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.</li> <li>For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.</li> </ul>



**Table 4.1 NSPS 40 CFR 60, Subpart A - Summary of General Provisions**

Section	Subject	Summary of Section Requirements
60.11(b), (c), and (e)	Compliance with Standards and Maintenance Requirements (Opacity)	<ul style="list-style-type: none"> <li>• <i>Table 8 to NSPS Subpart IIII specifies that 40 CFR 60.11 requirements are not applicable to sources regulated only by Subpart IIII.</i></li> <li>• Compliance with opacity standards shall be determined by Method 9 in Appendix A of 40 CFR 60. The permittee may elect to use COM measurements in lieu of Method 9, provided notification is made at least 30 days before the performance test.</li> <li>• The opacity standards shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided.</li> <li>• Opacity observations shall be conducted concurrently with the initial performance test required in 40 CFR 60.8 in accordance with the requirements and exceptions in 40 CFR 60.11(e).</li> </ul>
60.12	Circumvention	<ul style="list-style-type: none"> <li>• No permittee shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard.</li> </ul>
60.13	Monitoring Requirements (CMS)	<ul style="list-style-type: none"> <li>• All CMS and monitoring devices shall be installed and operational prior to conducting performance tests required by 40 CFR 60.8.</li> <li>• A performance evaluation of the COMS or CEMS shall be conducted before or during any performance test and a written report of the results of the performance evaluation furnished. Reporting requirements include submitting performance evaluations reports within 60 days of the evaluations required by this section, and submitting results of the performance evaluations for the COM within 10 days before a performance test, if using a COM to determine compliance with opacity during a performance test instead of Method 9.</li> <li>• The zero and span calibration drifts must be checked at least once daily and adjusted in accordance with the requirements in 40 CFR 60.13(d).</li> <li>• The zero and upscale (span) calibration drifts of a COMS must be automatically, intrinsic to the opacity monitor, checked at least once daily.</li> <li>• Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all CMS shall be in continuous operation and shall meet minimum frequency of operation requirements as specified in 40 CFR 60.13(e).</li> <li>• All CMS or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. CMS shall be located and installed in accordance with the requirements in 40 CFR 60.13(f) and (g).</li> <li>• Data shall be reduced and computed in accordance with the procedures in 40 CFR 60.13(h), (i), and (j).</li> </ul>
60.14	Modification	<ul style="list-style-type: none"> <li>• A physical or operational change which results in an increase in the emission rate to the atmosphere or any pollutant to which a standard applies shall be considered a modification, and upon modification an existing facility shall become an affected facility in accordance with the requirements and exemptions in 40 CFR 60.14.</li> <li>• Within 180 days of the completion of any physical or operational change, compliance with all applicable standards must be achieved.</li> </ul>
60.15	Reconstruction	<ul style="list-style-type: none"> <li>• An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate in accordance with the requirements of 40 CFR 60.15.</li> </ul>
60.18	General Control Device Requirements	<ul style="list-style-type: none"> <li>• <i>Table 8 to NSPS Subpart IIII specifies that 40 CFR 60.18 requirements are not applicable to sources regulated only by Subpart IIII.</i></li> <li>• Flares shall be designed for and operated with no visible emissions as determined by the methods specified in 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.</li> <li>• Flares shall be operated with a flame present at all times, as determined by the methods specified in 40 CFR 60.18(f).</li> <li>• The permittee shall adhere to either the heat content specifications in paragraph 40 CFR 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR 60.18(c)(4), or the requirements in 40 CFR 60.18(c)(3)(i).</li> <li>• Flares shall be steam-assisted, air-assisted, or nonassisted.</li> <li>• The permittee shall monitor flare control devices to ensure that they are operated and maintained in conformance with their designs.</li> <li>• Flares shall be operated at all times when emissions may be vented to them.</li> </ul>

[11/13/19]

#### **4.2 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 of New Stationary Sources (NSPS) 40 CFR 60, Subpart A.
- NSPS 40 CFR 60, Subpart III.

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.

[11/13/19]



## 5 General Provisions

### General Compliance

5.1 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.]

5.2 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]

5.3 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

5.4 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

5.5 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]

5.6 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

5.7 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.

5.8 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.

5.9 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

5.10 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**

- 5.11 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**

- 5.12 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**

- 5.13 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**

- 5.14 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**

- 5.15 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**

- 5.16 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]