



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

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

January 21, 2016

Gary Allard, Plant Manager  
Rathdrum Power, LLC  
P.O. Box 995  
9924 W. Lancaster Road  
Rathdrum, Idaho 83858

RE: Facility ID No. 055-00045, Rathdrum Power, LLC, Rathdrum  
Request for Administrative Permits Amendment

Dear Mr. Allard:

The Department of Environmental Quality (DEQ) is reissuing Tier I Operating Permit (Tier I) No. T1-2014.0032 and Permit to Construct (PTC) P-2014.0014 to Rathdrum Power, LLC at Rathdrum in accordance with IDAPA 58.01.01.381, Rules for the Control of Air Pollution in Idaho (Rules).

DEQ initiates this permit reissuance to correct the reporting frequency from "each calendar quarter" to "each 6-month period" to be consistent with the reporting frequency in the federal regulation 40 CFR 60.334(j)(5). "Each 6-month period" supersedes "each calendar quarter" in Permit Condition 4.25.3 of the Tier I T1-2014.0032 project 61409 issued February 2, 2015 and in Permit Condition 2.29.3 in the PTC No. P-2014.0014 project 61351 issued October 22, 2014. However, no changes have been made to the Statements of Basis for these two permits, and these Statements of Basis are still in effect.

The enclosed permits with the proposed amendment are effective immediately. The amended Tier I replaces Tier I No. T1-2014.0032 project 61409 issued February 2, 2015. The amended PTC replaces PTC No. P-2014.0014 project 61351 issued October 22, 2014.

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 call Shawnee Chen at 208 373-0502 or [Shawnee.chen@deq.idaho.gov](mailto:Shawnee.chen@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/SYC

Permit No. T1-2014.0032 PROJ 61638 & P-2014.0014 PROJ 61648

Enclosures

# AIR QUALITY

## PERMIT TO CONSTRUCT

**Permittee** Rathdrum Power LLC  
**Permit Number** P-2014.0014  
**Project ID** 61648  
**Facility ID** 055-00045  
**Facility Location** 9924 W. Lancaster Road  
Rathdrum, ID 83858

### 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** January 21, 2016



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**Shawnee Chen, P.E., Permit Writer**



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**Mike Simon, Stationary Source Manager**

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# 1. Permit Scope

## Purpose

- 1.1 This is a reissuance of the permit to construct (PTC), initiated by the Department of Environmental Quality, for correcting the reporting frequency from “each calendar quarter” to “each 6-month period” in Permit Condition 2.29.3. [1/21/2016]
- 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 PTC No. P-2014.0014 project 61351, issued on October 22, 2014. [1/21/2016]

## Regulated Sources

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

**Table 1.1 Regulated Sources**

Permit Section	Source Description	Emissions Control
1 - 3	<u>Gas turbine with duct burner</u> Manufacturer: General Electric, Model PG7241FA, with advanced dry low-NO <sub>x</sub> combustors (DLN III) Typical operation: base load (70-100% load range) Normal Output from the turbine alone: 168 MW Nominal Output from turbine with duct burner: 278 MW Turbine rated heat input: 1,682 MMBtu/hr Duct burner rated heat input: 230 MMBtu/hr Fuels: natural gas exclusively	<u>Selective catalytic reduction (SCR) with aqueous ammonia injection</u>  Manufacturer: Hitachi  <u>Catalytic oxidation</u>  Manufacturer: Engelhard
	<u>Auxiliary boiler (startup boiler)</u>  Manufacturer: Vapor Power Model: TG5905AHK500LN with low-NO <sub>x</sub> burners Rated output: 17,200 lb/hr of steam, 500 horsepower Rated heat input: 16.7 MMBtu/hr Fuel: natural gas	<u>Flue gas recirculation</u>  Manufacturer: Vapor Power
	<u>Fuel pre-heater</u>  Manufacturer: ATCO Model: 2E789 with low-NO <sub>x</sub> burners Rated heat input: 4.0 MMBtu/hr Fuel: natural gas	None
	<u>Diesel-fired emergency generator</u>  Manufacturer: Detroit Diesel Model: 6063-TK35 Rated capacity: 550 horsepower	None
	<u>Diesel-fired emergency fire pump</u>  Manufacturer: Clark-Detroit Diesel Model: PDFP06YR Rated capacity: 185 horsepower	None

## 2. Gas Turbine with Duct Burners, Auxiliary Boiler, Fuel Pre-Heater, Diesel-Fired Emergency Generator, Diesel-Fired Emergency Fire Pump

### 2.1 Process Description

Rathdrum Power, LLC operates a combined cycle gas turbine electrical power generation facility located near Rathdrum, Idaho. The facility is operated in combined-cycle mode such that the hot exhaust gases from the General Electric Frame 7F turbine are discharged to the heat recovery steam generator (HRSG) to create steam which drives the steam turbine. The turbine and duct burners are fired with natural gas only, and the facility can generate up to approximately 278 MW of electricity. The facility is equipped with supplemental firing capability in the form of “duct burner” which may add up to 230 MMBtu/hr of additional heat into the HRSG for power generation. Other equipment at the facility includes a mechanical draft cooling tower, auxiliary boiler, fuel pre-heater, diesel-fired emergency generator, and diesel-fired emergency fire water pump. Emissions from the gas turbine and duct firing are controlled with selective catalytic reduction (SCR) and oxidation catalyst which are located within the HRSG, and NO<sub>x</sub> emissions are monitored by a continuous emissions monitoring system.

### 2.2 Control Device Descriptions

Refer to Table 1.1.

## Emission Limits

### 2.3 NO<sub>x</sub> and CO Emissions

During normal operation of the turbine with duct firing, emissions of nitrogen oxides (NO<sub>x</sub>) shall not exceed 4.5 parts per million by volume on a dry basis (4.5 ppmvd) at 15% oxygen from the gas turbine stack. When the duct burners are not operating, emissions of NO<sub>x</sub> shall not exceed 3.4 ppmvd at 15% oxygen from the gas turbine stack. The emission limits expressed in ppmvd shall be based on an hourly average and shall apply at all times except during startup or shutdown of the turbine. Emissions of NO<sub>x</sub> from the gas turbine stack shall not exceed the annual emission limit listed in the Appendix, based on each consecutive 12-month period, and the annual limit shall include emissions during startup, shutdown, and malfunction of the turbine.

During normal operation of the turbine with duct firing, emissions of carbon monoxide (CO) from the gas turbine stack shall not exceed 32.6 pounds per hour on an hourly average. This emission limit shall not apply during periods of startup or shutdown of the turbine. Emissions of CO from the gas turbine stack shall not exceed the annual emission limit listed in the Appendix, based on each consecutive 12-month period, and the annual limit shall include emissions during startup, shutdown, and malfunction of the turbine.

On and after December 6, 2001, the date the performance test required by 40 CFR 60.8 was completed, the owner or operator shall not cause to be discharged to the atmosphere from the stationary gas turbine, any gases which contain NO<sub>x</sub> in excess of 109 ppmvd at 15% oxygen in accordance with 40 CFR 60.332(a)(1). Any emissions which exceed this standard as a result of startup and shutdown shall be addressed in accordance with Permit Condition 2.29.

[10/22/2014]

### 2.4 Duct Burner NO<sub>x</sub> Emissions

On and after December 6, 2001, the date the initial performance test was completed under 40 CFR 60.44b(a), the permittee shall not cause to be discharged into the atmosphere from the duct burner any gases that contain NO<sub>x</sub> (expressed as NO<sub>2</sub>) in excess of 86 ng/J (0.20 lb/MMBtu) of heat input

to the duct burner in accordance with 40 CFR 60.44b(a)(4)(i). The NO<sub>x</sub> emission standards under 40 CFR 60.44b apply at all times when the duct burner is operated in accordance with 40 CFR 60.46b(a).

2.5 Other Criteria Pollutant Emissions

Emissions of sulfur dioxide (SO<sub>2</sub>), particulate matter with an aerodynamic diameter of less than or equal to a nominal ten microns (PM<sub>10</sub>), and volatile organic compounds (VOC) from the gas turbine stack shall not exceed any corresponding emission rate limit listed in the Appendix.

The combined emissions of SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC from the auxiliary boiler and the fuel preheater stacks shall not exceed any corresponding emission rate limit listed in the Appendix.

2.6 Toxic Emissions

Emissions of formaldehyde, acetaldehyde, benzene, and ammonia from the gas turbine stack shall not exceed any corresponding emissions rate limit listed in Table 2.1.

Table 2.1 Toxic Emission Limits

Source Description	Formaldehyde	Acetaldehyde	Benzene	Ammonia	
	T/Yr	T/Yr	T/Yr	lb/hr	T/Yr
Gas Turbine W/Duct Firing	0.6	0.02	0.3	20.6	82.4

- a In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- b 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.
- c Tons per any consecutive 12-calendar month period.

[10/22/2014]

2.7 Visible Emissions

Visible emissions from any point of emission at the facility 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 (Rules for the Control of Air Pollution in Idaho). Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

2.8 Odorous Emissions

Odorous gases shall not be emitted to the atmosphere in such quantities as to cause air pollution in accordance with IDAPA 58.01.01.775.

**Operating Requirements**

2.9 Fuel Sulfur Content

No fuel containing sulfur in excess of 0.8% by weight shall be burned in the gas turbine in accordance with 40 CFR 60.333(b).

2.10 Fuel Type

The turbine, duct burner, and auxiliary boiler shall be fired exclusively by natural gas.

2.11 Hours of Operation

The gas turbine, duct burner, auxiliary boiler, fuel pre-heater, emergency generator, and emergency fire water pump shall not be operated for more than the corresponding allowable hours of operation listed in Table 2.2.

**Table 2.2 Allowable Hours of Operation**

Source Description	Operating Hours hr/yr <sup>1</sup>
Gas Turbine	8,000
Duct Burner	2,927
Auxiliary Boiler	1,000
Fuel Pre-Heater	8,000
Emergency Generator	500
Emergency Fire Water Pump	500

<sup>1</sup> hr/yr means hours of operation per any consecutive 12-month period

[10/22/2014]

2.12 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent particulate matter from becoming airborne, as required in IDAPA 58.01.01.651. In determining what is reasonable, considerations will be given to factors such as the proximity of dust-emitting operations to human habitations, and/or activities and atmospheric conditions which might affect the movement of particulate matter. 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, oil, 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, where 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; or
- Prompt removal of earth or other stored material from streets, where practical.

**MONITORING REQUIREMENTS**

2.13 NOx Monitoring

The permittee shall fully comply with all monitoring requirements established by 40 CFR 72.9(b). In particular, the permittee shall install, certify, operate, and maintain, in accordance with all the requirements of 40 CFR 75, a NOx continuous emission monitoring system (CEMS) (consisting of NOx pollutant concentration monitor and an oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) diluent gas monitor) with an automated data acquisition and handling system for measuring and recording the NOx concentration (in ppm) and the NOx emissions rate (in lb/MMBtu) discharged to the atmosphere from the gas turbine stack, except as provided in 40 CFR 75, Subpart E. The permittee shall fully comply with all recordkeeping requirements set forth in 40 CFR 75, Subpart F. All such records shall be maintained onsite for the most recent five-year period and shall be made available to DEQ representatives upon request.

#### 2.14 Ammonia Feed Rate Monitoring

The permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the rate of ammonia fed to the SCR unit. All data, calibration reports, and maintenance logs or records shall be maintained onsite for the most recent five-year period following the date such data or information was recorded and shall be made available to DEQ representatives upon request.

#### 2.15 Ammonia Slip Monitoring

At the time of initial construction, the permittee shall install, calibrate, maintain, and operate a CEMS to monitor and record the rate of ammonia discharged to the atmosphere from the gas turbine stack. If the ammonia CEMS demonstrates compliance with the ammonia emission limit in Permit Condition 2.6 for a period of two consecutive years, then this CEMS may be removed from service. The initial period of operation shall be from August 30, 2001 through August 30, 2003. However, if any subsequent ammonia performance test conducted in accordance with Permit Condition 2.16 indicates that ammonia emissions are greater than 80% of the ammonia emissions limit in Permit Condition 2.6, then DEQ may require that the ammonia CEMS be re-installed. All data, calibration reports, and maintenance logs or records shall be maintained onsite for the most recent five-year period following the date such data or information was recorded and shall be made available to DEQ representatives upon request.

2.15.1 If DEQ issues a requirement to re-install the ammonia CEMS, the permittee shall install, calibrate, maintain, and operate a CEMS to monitor and record the rate of ammonia discharged to the atmosphere from the gas turbine stack to demonstrate compliance with Permit Condition 2.6. If the ammonia CEMS demonstrates compliance with the ammonia emission limit in Permit Condition 2.6 for a period of 12 consecutive months, then this CEMS may be removed from service. However, if any subsequent ammonia performance test conducted in accordance with Permit Condition 2.16 indicates that ammonia emissions are greater than 80% of the ammonia emission limit in Permit Condition 2.6, then DEQ may require that the ammonia CEMS be re-installed. All CEMS data, calibration reports, and maintenance logs shall be maintained onsite in accordance with General Provision 10.

2.15.2 When the ammonia CEMS is required to be operated, the following actions shall be taken. The permittee shall record:

- a minimum of one cycle of operation (sampling, analyzing, and data recording) in at least 95% of each successive 15-minute interval of turbine operation;
- the pound per hour ammonia emission rate calculated as a block one-hour arithmetic mean from all valid one minute average data points collected during the hour;
- the tons per consecutive 12-month period ammonia emission rate calculated as a sum of the previous 8,760 hours of available data (recorded at least once per month);
- results of all daily CEMS calibrations; and
- quarterly cylinder gas audits.

Cylinder gas audits shall be performed at least quarterly, unless a relative accuracy test audit is performed within that quarter. Relative accuracy test audits (or DEQ approved alternative testing) shall be performed at least once every four quarters. The permittee shall demonstrate compliance with the requirements of 40 CFR Part 60, Appendix F, using the method given by Performance Specification 2 of Appendix B and by substituting ammonia in place of NO<sub>x</sub>. The relative accuracy test audit shall be acceptable if the absolute value of the mean difference between the

reference method results and the CEMS readings is less than 2 ppm. Daily calibration results shall be acceptable if they are  $\pm 2$  ppm of the reference gas.

#### 2.16 Ammonia Performance Test

When an ammonia CEMS is not installed, the permittee shall conduct a performance test to measure ammonia emissions from the gas turbine stack at least once every 12 months, or per a DEQ-approved alternative schedule, to demonstrate compliance with the ammonia emission requirements specified in Permit Condition 2.6. The flow rate of ammonia to the SCR system, and the amount of natural gas combusted in the turbine and duct burners, shall be monitored and recorded during the test. Each performance test conducted to demonstrate compliance shall be performed in accordance with IDAPA 58.01.01.157 and General Provisions 7, 8, and 9.

#### 2.17 NSPS Subpart GG Performance Tests

When required by the Administrator under Section 114 of the Clean Air Act, the permittee shall conduct a performance test using the test methods and procedures in 40 CFR 60.335 and 60.8, or using an alternative approved by the EPA. The performance tests conducted to demonstrate compliance shall be performed in accordance with IDAPA 58.01.01.157 and General Provisions 7, 8, and 9. During the performance test, the amount of natural gas used shall be recorded.

#### 2.18 NSPS Subpart Db NO<sub>x</sub> Performance Test for Duct Firing

When required by the Administrator, under Section 114 of the Clean Air Act, the permittee shall conduct a performance test to measure duct burner NO<sub>x</sub> emissions from the gas turbine emissions stack to demonstrate compliance with the emission limits of 40 CFR 60.44b. Compliance shall be determined through performance testing under 40 CFR 60.46b(f), and in accordance with IDAPA 58.01.01.157 and General Provisions 7, 8, and 9 of this permit. During the performance test, the amount of natural gas used shall be recorded.

#### 2.19 CO Performance Test

The permittee shall conduct a performance test to measure CO emissions from the gas turbine stack at least once every 12 months, or per a DEQ-approved alternative schedule, to demonstrate compliance with the corresponding emission rate limits in Permit Condition 2.3. The performance test shall be performed in accordance with IDAPA 58.01.01.157 and General Provisions 7, 8, and 9 of this permit. During the performance test, the amount of natural gas used shall be recorded.

#### 2.20 Hours of Operation

The permittee shall monitor and record the hours of operation for each source listed in Table 2.2 to demonstrate compliance with Permit Condition 2.11. Annual hours of operations shall be determined by monitoring and recording the hours of operation monthly, and then summing the monthly hours of operation over the previous consecutive 12-month period. All such records shall be maintained onsite for the most recent five-year period and shall be made available to DEQ representatives upon request.

#### 2.21 Fuel Sulfur Content

The permittee shall monitor and record the total sulfur content of the fuel being fired in the turbine in accordance with 40 CFR 60.334(h)(1), except as provided in 40 CFR 60.334(h)(3).

- 2.21.1 In accordance with 40 CFR 60.334(h)(3), the permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:

- The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
- Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

2.21.2 With regard to the custom fuel monitoring schedule approved by the EPA in the July 12, 2001 letter addressed to DEQ, the permittee may, without submitting a special petition to the Administrator, continue monitoring on this schedule in accordance with 40 CFR 60.334(h)(4).

2.21.3 The frequency of determining the sulfur content of the fuel shall be as specified in 40 CFR 60.334(i).

#### 2.22 Duct Burner Monitoring

In accordance with 40 CFR 60.48b(h), the owner or operator of a duct burner, as described in 40 CFR 60.41b, which is subject to the NO<sub>x</sub> standards of 40 CFR 60.44b(a)(4) or 60.44b(l) is not required to install or operate a continuous emissions monitoring system to measure NO<sub>x</sub> emissions.

#### 2.23 Selective Catalytic Reduction

The SCR unit shall be installed, operated, and maintained consistent with manufacturer's recommendations, which includes replacement of the catalyst in a timely manner. All documentation and recommendations from the SCR unit manufacturer, including recommended catalyst replacement schedules, shall be kept onsite and shall be made available to DEQ representatives upon request for as long as the SCR unit is utilized.

#### 2.24 Catalytic Oxidation

The Catalytic Oxidation unit shall be installed, operated, and maintained consistent with manufacturer's recommendations, which includes replacement of the catalyst in a timely manner. All documentation and recommendations from the Catalytic Oxidation unit manufacturer, including recommended catalyst replacement schedules, shall be kept onsite and shall be made available to DEQ representatives upon request for as long as the Catalytic Oxidation unit is utilized.

### REPORTING REQUIREMENTS

#### 2.25 Test Protocols for NO<sub>x</sub> CEMS Certification/Recertification Tests

The permittee shall submit to DEQ for approval a test protocol for each certification and recertification test of the NO<sub>x</sub> CEMS required in Permit Condition 2.13. Each test protocol shall be submitted to DEQ for approval at least 30 days prior to the respective test date.

#### 2.26 Required NO<sub>x</sub> CEMS Information

The permittee shall fully comply with the reporting requirements set forth in 40 CFR 75, Subpart G. In accordance with 40 CFR 75.60(b)(2), copies of all certification or recertification notifications, certification or recertification applications, and monitoring plans shall be submitted to DEQ and EPA Region 10 no later than the respective date specified in 40 CFR 75, Subpart G.

Further, the permittee shall submit to DEQ a written report (including all raw field data, etc.) for each certification or recertification test required by Permit Condition 2.13. Each report shall be submitted to DEQ within 60 days of the date on which the respective test was completed.

## 2.27 Performance Test Protocols

The permittee shall submit a test protocol for each performance test required in Permit Conditions 2.16, 2.17, and 2.18 to DEQ for approval at least 30 days prior to the test date.

## 2.28 Performance Test Reports

The permittee shall submit a written report of the performance tests, and ammonia throughput to the SCR unit as required in Permit Conditions 2.16, 2.17, and 2.18 and the ammonia performance test required in Permit Condition 2.16 to DEQ within 60 days of performing each respective test.

## 2.29 Turbine Excess Emissions - NSPS

For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under 40 CFR Part 60 Subpart GG, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows in accordance with 40 CFR 60.334(j):

### 2.29.1 With regard to NO<sub>x</sub> for turbines using NO<sub>x</sub> and diluent CEMS, in accordance with 40 CFR 60.334(j)(1)(iii):

- An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NO<sub>x</sub> concentration exceeds 109 ppmvd at 15% oxygen [the applicable emission limit in 40 CFR 60.332(a)(1)]. For the purposes of this requirement, a “4-hour rolling average NO<sub>x</sub> concentration” is the arithmetic average of the average NO<sub>x</sub> concentration measured by the CEMS for a given hour (corrected to 15 percent O<sub>2</sub> and, if required under 40 CFR 60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NO<sub>x</sub> concentrations immediately preceding that unit operating hour.
- A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO<sub>x</sub> concentration or diluent (or both).
- Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in 40 CFR 60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of 40 CFR 60.335(b)(1).
- The permittee may, for purposes of determining excess NO<sub>x</sub> emissions, use a CEMS that meets the requirements of 40 CFR 60.334(b), in accordance with 40 CFR 60.334(c).

### 2.29.2 With regard to SO<sub>2</sub>, in accordance with 40 CFR 60.334(j)(2)(i):

For samples of gaseous fuel obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

### 2.29.3 All reports required under 40 CFR 60.7(c) shall be postmarked by the 30th day following the end of each 6-month period in accordance with 40 CFR 60.334(j)(5).

[1/21/2016]

## 2.30 Other Exceedances

The permittee shall submit a report to the DEQ of any and all exceedances of any emission rate,

visible emission, or operating requirement listed in this permit in accordance with IDAPA 58.01.01.130-136.

### 2.31 Certification of Documents

All documents including, but not limited to, records, monitoring data, supporting information, testing reports, or compliance certifications submitted to DEQ shall contain a certification by a responsible official per IDAPA 58.01.01.123. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

# Appendix

## Rathdrum Power LLC

Emission Limits<sup>a</sup> - Hourly (lb/hr) and Annual (T/yr)<sup>b</sup>

### Criteria Pollutant Emissions Limits

Source Description	SO <sub>2</sub>		NO <sub>x</sub>	CO		VOC		PM <sub>10</sub> <sup>c</sup>	
	lb/hr	T/yr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Gas Turbine w/Duct Firing	2.7	10.7	95.4	---	95.5	1.5	5.3	10.7	40.1
Combined Emissions from Auxiliary Boiler and Fuel Pre-Heater	0.015	0.016	2.3	2.0	2.4	0.05	0.06	0.19	0.28

a As determined by pollutant specific U.S. EPA Reference Method, DEQ-approved alternative, or as determined by DEQ's emission estimation methods used in the permit analysis.

b As determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emissions rate by the allowable hours per year that the processes may operate, or by actual annual production rates. The permittee shall not exceed the T/yr listed based on any consecutive 12-month period.

c Includes condensibles.

[10/22/2014]

### 3. General Provisions

#### General Compliance

- 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.]
- 2 The permittee shall at all times (except as provided in the “Rules for the Control of Air Pollution in Idaho”) maintain in good working order and operate as efficiently as practicable all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.  
[IDAPA 58.01.01.211, 5/1/94]
- 3 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

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

[IDAPA 58.01.01.211.03, 5/1/94]

## Performance Testing

- 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.
- 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.
- 9 Within 30 days, or up to 60 days when requested 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 written 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]

## Monitoring and Recordkeeping

- 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

- 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

- 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**

- 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**

- 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**

- 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**

- 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]