



August 2, 2016

VIA EMAIL

Molly Prickett
P4 – South Rasmussen Mine
1853 Hwy. 34,
Soda Springs, Idaho 83276

RE: Facility ID No. 029-00038, P4 - South Rasmussen Mine, Soda Springs
Proposed Modified Permit to Construct for Public Comment

Dear Ms. Prickett:

The Department of Environmental Quality (DEQ) has prepared a proposed Permit to Construct No. P-2011.0015 PROJ 61692 for P4 - South Rasmussen Mine for installing two new generators located at 18 Miles Northeast of Soda Springs. A public comment period has been requested, and DEQ is scheduling a 30-day public comment period in accordance with IDAPA 58.01.01.209.01.c. Rules for the Control of Air Pollution in Idaho. To find the exact dates and all other information concerning this public comment period, please go to our website: <http://www.deq.idaho.gov>

Enclosed is proposed PTC No. P-2011.0015 PROJ 61692 for your review. You may submit comments during the public comment period if you so choose. Please email them to Anne.Drier@deq.idaho.gov or directly to me at Shawnee.chen@deq.idaho.gov.

If you have any questions regarding the terms or conditions of the proposed permit, or about the public comment period, please contact me at (208) 373-0502 or Shawnee.chen@deq.idaho.gov.

Sincerely,

SHAWNEE CHEN

Shawnee Chen, P.E.
Senior Air Quality Engineer
Air Quality Division

Permit No. P-2011.0015 PROJ 61692

AIR QUALITY

PERMIT TO CONSTRUCT

Permittee P4 - South Rasmussen Mine
Permit Number P-2011.0015
Project ID 61692
Facility ID 029-00038
Facility Location 18 Miles Northeast of Soda Springs
Soda Springs, ID 83276

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 Proposed for Public Comment

Shawnee Chen, P.E., Permit Writer

Mike Simon, Stationary Source Manager

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1. Permit Scope

Purpose

- 1.1. This is a revised permit to construct (PTC) for adding two new diesel generators, removing one generator, relocating one generator, and updating the ratings on three generators. [PROPOSED]
- 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. [PROPOSED]
- 1.3. This PTC replaces Permit to Construct No. P-2011.0015 Project 60712 issued on April 6, 2011. [PROPOSED]

Regulated Sources

Table 1.1 lists all sources of regulated emissions in this permit

Table 1.1 Regulated Sources

| Permit Section | Sources | Control Equipment |
|----------------|--|-------------------|
| 2 | Haul Road Pond Generator (GEN5) Manufacturer: Cummins Inc. Model: QSB7-G9/C150D2RE Max. Capacity: 234 KW (314 bhp) Date of Construction: to be determined (TBD) Model Year: 2016 EPA Certification: Tier 4 Internal Combustion Engine (ICE) Cylinder Displacement: 6.7 liters per cylinder Fuel: diesel | None |
| 2 | Primary Horseshoe Dump Generator (GEN2) Manufacturer: John Deere Model: 6068HF485 Max. Capacity: 235 KW (315 bhp) Date of Construction: June 2010 Model Year: 2010 EPA Certification: Tier 3 ICE Cylinder Displacement: 6.8 liters per cylinder Fuel: diesel | None |
| 2 | Alternate Horseshoe Dump Generator (GEN6) Manufacturer: Cummins Inc. Model: QSB7-G9/C200D2RE Max. Capacity: 234 KW (314 bhp) Date of Construction: TBD Model Year: 2016 EPA Certification: Tier 4 ICE Cylinder Displacement: 6.7 liters per cylinder Fuel: diesel | None |
| 2 | Backup Horseshoe Dump Generator (GEN3) Manufacturer: John Deere Model: 6068HF485 Max. Capacity: 235 KW (315 bhp) Date of Construction: June 2010 Model Year: 2010 EPA Certification: Tier 3 ICE Cylinder Displacement: 6.8 liters per cylinder Fuel: diesel | None |

| Permit Section | Sources | Control Equipment |
|----------------|---|-------------------|
| 2 | Smith Pond Generator (GEN1) Manufacturer: John Deere Model: 6068HF285 Max. Capacity: 147 KW (197 bhp) Date of Construction: September 2010 Model Year: 2010 EPA Certification: Tier 3 ICE Cylinder Displacement: 6.8 liters per cylinder Fuel: diesel | None |

[PROPOSED]

2. Five Diesel Generators

Process Description

2.1 Process Description

The Horseshoe Project will be permitted to comprise five generators. The generators are used to power the Horseshoe Overburden Pile (“HSOP”) pumping system. The mining operations at the South Rasmussen Mine ended in 2013. Reclamation has continued onsite since mine closure and is expected to continue until at least 2022.

This permit is being issued based on all of these generators being certified to the emission standards in 40 CFR 60.4204(b) and based on the generators not being equipped with particulate filters.

[PROPOSED]

2.2 Emission Controls Description

Table 2.1 Generator Description

| Emissions Units / Processes | Emission Control Devices |
|-----------------------------|--------------------------|
| Generators | None |

Emission Limits

2.3 Opacity Limit

For each generator, emissions from the generator stack, or any other stack, vent, or functionally equivalent opening associated with the generator, 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.

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

2.4 Should there be any conflict between the requirements of the permit conditions and the requirements of 40 CFR 60, Subpart IIII, the requirements of the subpart shall govern, including any amendments to that regulation.

Within the context of 40 CFR 60 Subpart IIII, the terms “you”/“they” and “your”/“their” mean “permittee” and “permittee’s”, respectively.

[PROPOSED]

2.5 40 CFR 60.4200 – Applicability

The owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006 and are not fire pump engines, are subject to 40 CFR 60, Subpart IIII, in accordance with 40 CFR 60.4200(a)(2).

The provisions of 40 CFR 60.4208 are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005, in accordance with 40 CFR 60.4200(a)(4).

[PROPOSED]

2.6 40 CFR 60.4204 - Emission Standards

Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder shall comply with the emission standards for new CI engines in 40 CFR 60.4201 for their 2007 model year and later stationary CI ICE, as applicable in

accordance with 40 CFR 60.4204(b). This applies to GEN1, GEN2, GEN3, GEN5, and GEN6.

As in 40 CFR 60.4201(a), the 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 3,000 horsepower (HP) and a displacement of less than 10 liters per cylinder shall be certified to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power. 40 CFR 89.112 and 40 CFR 89.113 apply to GEN1, GEN2, and GEN3. 40 CFR 1039.101 and 40 CFR 1039.115 apply to GEN5 and GEN6.

2.6.1 GEN 1, GEN2, and GEN3

- In accordance with 40 CFR 89.112(a), GEN 1, GEN2, and GEN3 are subject to the following emissions standards.

| Generator Unit | Model Year | Engine Displacement (Liters per Cylinder) | Engine Size (kw) | EPA Certification | Emissions Standards and 40 CFR Citations | Rated Power (kW) | NMHC + NO _x | CO | PM |
|---|------------|---|------------------|-------------------|--|------------------|------------------------|-----|------|
| | | | | | | | g/KW-hr | | |
| The Smith Pond Generator (GEN1) | 2010 | 6.8 | 147 | Tier 3 | Table 1 of 40 CFR 89.112 | 130≤KW<225 | 4.0 | 3.5 | 0.20 |
| Primary Horseshoe Dump Generator (GEN2) | 2010 | 6.8 | 235 | Tier 3 | Table 1 of 40 CFR 89.112 | 225≤KW<450 | | | |
| Backup Horseshoe Dump Generator (GEN3) | 2010 | 6.8 | 235 | Tier 3 | | | | | |

- In accordance with 40 CFR 89.113(a), GEN 1, GEN2, and GEN3 are subject to the following smoke emission standard.
 - (a) Exhaust opacity from compression ignition nonroad engines for which this subpart (40 CFR 89) is applicable must not exceed:
 - (1) 20 percent during the acceleration mode;
 - (2) 15 percent during the lugging mode; and
 - (3) 50 percent during the peaks in either the acceleration or lugging modes.
 - (b) Opacity levels are to be measured and calculated as set forth in 40 CFR part 86, subpart I. Notwithstanding the provisions of 40 CFR part 86, subpart I, two-cylinder nonroad engines may be tested using an exhaust muffler that is representative of exhaust mufflers used with the engines in use.

2.6.2 GEN 5 and GEN6

- In accordance with 40 CFR 1039.101, GEN 5 and GEN6 are subject to the following emissions standards.

| Generator Unit | Model Year | Engine Displacement (Liters per Cylinder) | Engine Size (kw) | EPA Certification | Emissions Standards and 40 CFR Citations | Rated Power (kW) | PM | NO _x | NMHC | CO |
|---|------------|---|------------------|-------------------|--|------------------|---------|-----------------|------|-----|
| | | | | | | | g/KW-hr | | | |
| Haul Road Pond Generator (GEN5) | 2016 | 6.7 | 234 | Tier 4 | Table 1 of 40 CFR 1039.101 | 130≤KW<560 | 0.02 | 0.40 | 0.19 | 3.5 |
| Alternate Horseshoe Dump Generator (GEN6) | 2016 | 6.7 | 234 | Tier 4 | | | | | | |

- In accordance with 40 CFR 1039.115, GEN 5 and GEN6 shall meet other requirements. Refer to CFR for details.

[PROPOSED]

2.7 40 CFR 60.4206 – General Compliance Requirement

Owners and operators of stationary CI ICE shall operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 over the entire life of the engine.

[PROPOSED]

2.8 40 CFR 60.4207 - Fuel Requirements

In accordance with 40 CFR 60.4207(b), beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

Requirements of 40 CFR 80.510(b) for nonroad diesel fuel are listed as follows:

All nonroad diesel fuel is subject to the following per-gallon standards:

- Sulfur content.
 - 15 ppm maximum.
- Cetane index or aromatic content, as follows:
 - A minimum cetane index of 40; or
 - A maximum aromatic content of 35 volume percent.

[PROPOSED]

2.9 40 CFR 60.4208 - Deadline for Installing Previous Model Years Stationary CI ICE

- In accordance with 40 CFR 60.4208(a), after December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines. This applies to GEN 1, GEN2, and GEN3.
- In accordance with 40 CFR 60.4208(e), after December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines. This applies to GEN5 and GEN6.
- In accordance with 40 CFR 60.4208(h), in addition to the requirements specified in 40 CFR 60.4204, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that

do not meet the applicable requirements specified in 40 CFR 60.4208 (a) through (e) after the dates specified in 40 CFR 60.4208(a) through (e).

[PROPOSED]

2.10 40 CFR 60.4211 – Compliance Requirements

- In accordance with 40 CFR 60.4211(a), you shall do the following, except as permitted under 40 CFR 60.4211(g):
 - Operate and maintain the stationary CI ICE according to the manufacturer's emission-related written instructions;
 - Change only those emission-related settings that are permitted by the manufacturer; and
 - Meet the requirements of 40 CFR parts 89 and/or 1068, as they apply to the permittee. Sections of 40 CFR 89 apply to GEN1, GEN2, and GEN3. Sections of 40 CFR 1068 apply to GEN5 and GEN6. Refer to CFR for details.
- In accordance with 40 CFR 60.4211(c), if you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4204(b), you must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g).
- In accordance with 40 CFR 60.4211(g), if you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:
 - If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

[PROPOSED]

2.11 40 CFR 60.4218 - General Provisions to NSPS 40 CFR 60 Subpart A

The permittee shall comply with Table 8 to 40 CFR 60, Subpart III that shows which parts of the General Provisions in 40 CFR 60.1 through 60.19 that apply to the permittee. Refer to CFR for details.

[PROPOSED]

3. General Provisions

General Compliance

3.1 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.]

3.2 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]

3.3 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

3.4 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

3.5 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]

3.6 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

- 3.7** 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.
- 3.8** 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.
- 3.9** 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 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 and 4/11/15]

Monitoring and Recordkeeping

- 3.10** 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

- 3.11** 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

- 3.12** 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

- 3.13** 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

- 3.14** 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

- 3.15** 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

- 3.16** 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]