

# Air Quality

## PERMIT TO CONSTRUCT

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**Permittee** P4 - Quartzite Quarry  
**Permit Number** P-2016.0025  
**Project ID** 61715  
**Facility ID** 029-00043  
**Facility Location** 1973 Government Dam Road  
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** Choose DRAFT or month Choose day, 2016

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**Tom Burnham, Permit Writer**

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**Mike Simon, Stationary Source Manager**

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# 1 Permit Scope

## Purpose

**1.1** This is the initial permit to construct (PTC) for the a replacement of the primary Jaw Crusher and for the existing Secondary Cone Crusher and Primary Triple Deck Screens, which have been operating at the quartzite quarry since the 1970s as components of a grandfathered source that did not require a permit to construct or operate. This PTC also includes NSPS requirements for the replacement primary crusher. Present emission levels are maintained by throughput limits on the replacement primary Jaw Crusher.

## Regulated Sources

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

**Table 1.1 Regulated Sources**

Permit Section	Source	Control Equipment
2	Primary Jaw Crusher Manufacturer: Metso Model: Norberg C150 Year manufactured: 2015 Maximum throughput: 970 T/hr	Baghouse BH-01 Manufacturer: OptiFlo Model: 1646868-001 Flowrate: 10,000 dscfm
2	Secondary Cone Crusher Manufacturer: Metso Model: Norberg Symons Year manufactured: 1968 Maximum throughput: 410 T/hr	Baghouse BH-02 Manufacturer: OptiFlo Model: 1646892-001 Flowrate: 7,150 dscfm
2	Primary Triple Deck Screens Manufacturer: JCI Model: 6203S-32LT Year manufactured: 2011-2012 Maximum throughput: 713 T/hr	Baghouse BH-3 Manufacturer: OptiFlo Model: 1646892-001 Flowrate: 6,200 dscfm

## 2 Rock Crushing Equipment

### 2.1 Process Description

Raw quartzite material is hauled from the pit, emptied into the dump hopper, and screened into the primary jaw crusher. The larger material is crushed and the smaller material is all conveyed to the secondary cone crusher. The primary triple deck screens sort the material to finished, re-crush, and waste streams. The finished material passes through a wet screen and is stockpiled for shipping.

### 2.2 Control Device Descriptions

**Table 2.1 Rock Crushing Equipment Description**

Emissions Units / Processes	Control Devices	Emission Points
Primary Jaw Crusher Manufacturer: Metso Model: Norberg C150 Year Manufactured: 2015 Capacity: 970 T/hr	Baghouse BH-01 Manufacturer: OptiFlo Model: 1646868-001 Flowrate: 10,000 dscfm	BH-01 stack
Secondary Cone Crusher Manufacturer: Metso Model: Norberg Symons Year Manufactured: 1968 Capacity: 410 T/hr	Baghouse BH-02 Manufacturer: OptiFlo Model: 1646892-001 Flowrate: 7,150 dscfm	BH-02 stack
Primary Triple Deck Screens Manufacturer: JCI Model: 6203S-32LT Year Manufactured: 2011-2012 Capacity: 713 T/hr	Baghouse BH-03 Manufacturer: OptiFlo Model: 1646892-001 Flowrate: 6,200 dscfm	BH-03 stack

### Emission Limits

#### 2.3 40 CFR 60.672, Subpart OOO - Standard for particulate matter

Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under 60.8, emissions from the primary jaw crusher and baghouse BH-01 stack shall not exceed 0.032 g/dscm (0.014 gr/dscf) in accordance with 40 CFR 60.672.

#### 2.4 Opacity Limit

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

## Operating Requirements

### 2.5 Throughput Limits

Quartzite rock hauled to the dump hopper feeding the primary jaw crusher shall not exceed 12,969.6 tons per calendar day for the Primary Jaw Crusher. Permittee shall either:

- (a) estimate dump hopper input by truckloads hauled to the dump hopper that feeds the primary jaw crusher, with the capacity of each truckload hauled to the dump hopper that feeds the primary jaw crusher based on a truck factor of 68 tons per truck, or
- (b) estimate dump hopper input by an alternate method, including but not limited to determining the actual throughput of quartzite rock emptied into the dump hopper feeding the primary jaw crusher, provided that the permittee obtain DEQ's prior written approval of any such alternate method.

### 2.6 Baghouse Operation

The permittee shall operate baghouses (BH-01, BH-02, and BH-03) to control PM and PM<sub>10</sub> emissions from the crushers.

Within 60 days of initial start-up, the permittee shall have developed a Baghouse System Procedures document for the inspection and operation of the baghouses system which controls emissions from the primary and secondary crushers. The Baghouse System Procedures document shall be a permittee developed document independent of the manufacturer supplied operating manual but may include summaries of procedures included in the manufacturer supplied operating manual.

The Baghouse System Procedures document shall describe the procedures that will be followed to comply with General Provision 3.10 and shall contain requirements for weekly see-no-see visible emissions inspections of the baghouse. The inspection shall occur during daylight hours and under normal operating conditions.

The Baghouse System Procedures document shall also include a schedule and procedures for corrective action that will be taken if visible emissions are present from the baghouse at any time. At a minimum the document shall include:

- procedures to determine if bags or cartridges are ruptured; and
- procedures to determine if bags or cartridges are not appropriately secured in place.

The Permittee shall maintain records of the results of each baghouse system inspections in accordance with General Provision 3.10. The records shall include, but not be limited to, the following:

- Date and time of inspection;
- Equipment inspected (e.g. exterior housing of baghouse, fan motor, auger, inlet air ducting);
- Description of whether visible emissions were present, and if visible emissions were present a description of the corrective action that was taken.
- Date corrective action was taken.

The Baghouse System Procedures document shall be submitted to DEQ within 60 days of permit issuance and shall contain a certification by a responsible official. Any changes to the Baghouse System Procedures document shall be submitted within 15 days of the change.

The Baghouse System Procedures document shall also remain on site at all times and shall be made available to DEQ representatives upon request.

The operating, monitoring and recordkeeping requirements specified in the Baghouse System Procedures document are incorporated by reference to this permit and are enforceable permit conditions.

## **Monitoring and Recordkeeping Requirements**

### **2.7 Throughput Monitoring**

Quartzite rock emptied into the dump hopper feeding the primary jaw crusher shall be monitored on a calendar day basis to determine compliance with the calendar day throughput limit.

- The dump hopper input shall be estimated by truckloads hauled to the dump hopper that feeds the primary jaw crusher.
- The capacity of each truckload shall be 68 tons per truckload.

### **2.8 40 CFR 60.674, Subpart OOO - Visible Emissions Monitoring**

Each calendar quarter the permittee shall conduct 30-minute visible emission inspection for baghouse BH-01 using EPA Method 22 in accordance with §60.674(c):

- The inspection shall be conducted while the crusher is operating.
- If visible emissions are observed, the permittee shall initiate corrective action within 24 hours.
- The inspection dates, results, and any corrective actions shall be recorded in a logbook.
- The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request. In accordance with 40CFR 60.676 (b).

## **Performance Testing Requirements**

### **2.9 40 CFR 60.675, Subpart OOO - Initial PM Performance Test**

For baghouse BH-01 controlling the primary jaw crusher, the permittee shall perform an initial performance test according to 40 CFR 60 §60.8 and §60.675, Subpart OOO.

- The performance test shall be performed within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after startup as required under §60.8.
- The permittee shall use Method 5 or Method 17 of 40 CFR 60.11 to determine the particulate matter concentration.

## Reporting Requirements

### 2.10 40 CFR 60.676, Subpart OOO – Reporting Requirements

The owner or operator shall submit a written report of the results to DEQ in accordance with 40 CFR 60.676(f) and 60.8.

- The report shall include the performance test result to demonstrate compliance with the particulate matter standards in Permit Conditions 2.3.

### 2.11 Baghouse Procedure Reporting Requirement

The Baghouse System Procedures document shall be submitted to DEQ within 60 days of permit issuance and shall contain a certification by a responsible official. The permittee shall send the documents to:

Idaho Department of Environmental Quality  
Pocatello Regional Office  
444 Hospital Way, #300  
Pocatello, ID 83201

## Fugitive Dust

- 2.12 All reasonable precautions shall be taken to prevent particulate matter (PM) from becoming airborne in accordance with IDAPA 58.01.01.650–651.

## Federal Requirements

### 2.13 Federal 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:

- New Source Performance Standards (NSPS) Area Sources, 40 CFR Part 60, Subpart OOO

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 incorporated by IDAPA 58.01.01.107.03.

### 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]