

Air Quality

PERMIT TO CONSTRUCT

Permittee FMI – EPS, LLC
Permit Number P-2016.0046
Project ID 61762
Facility ID 053-00005
Facility Location 280 Rose St
Jerome, ID 83338

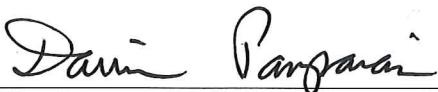
Permit Authority

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 August 23, 2016



Tom Burnham, Permit Writer



for, Mike Simon, Stationary Source Manager

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1 Permit Scope

Purpose

- 1.1 This is a conversion of the Tier II Operating Permit and Permit to Construct to a Permit to Construct (PTC).
- 1.2 This PTC replaces Tier II Operating Permit and Permit to Construct No. P-060406, issued on June 8, 2006.

Regulated Sources

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

Table 1.1 Regulated Sources

Permit Section	Source	Control Equipment
3	Boiler A Manufacturer: Superior Model: 6-750 Construction date: 1996 Rated heat capacity: 6.3 MMBtu/hr Burner type: Horizontally fired Stack diameter: 14 inches Stack height: 32 feet Fuel: Natural gas	None
2	Processing equipment	None

2 Processing Equipment

2.1 Process Description

Expandable Polystyrene (EPS) raw material (beads) arrives in 1,000-pound boxes. The beads are vacuum fed to the pre-expander where they are partially expanded to their desired density, using steam from a natural gas-fired boiler. Steam is used to heat the beads and to release pentane, which is the encapsulated blowing agent contained within the beads. Expanded beads are aged in the prepuff storage for a period between 6 to 48 hours, to allow the prepuff to stabilize. The material is then transferred into molds where, using steam, the beads are fused together into desired shapes, based on the mold forms. The molded shapes are then cut to their final size and shape, and stored. Each step of the process results in pentane emissions.

Volatile organic compounds (VOC) emissions, as pentane, are emitted from the processes and equipment referenced above, the above referenced equipment is hereafter referred to as "process equipment".

2.2 Control Device Descriptions

There are no emission controls for these processes.

Emission Limits

2.3 Emission Limits

- The combined VOC emissions from the process equipment shall not exceed 1,714 lb/day.
- The combined VOC emissions from the process equipment shall not exceed 74.3 tons per any consecutive 12-month period.

2.4 Emission Calculations

Compliance with the Emissions Limits Permit Condition shall be determined using the equations appearing below and in the Throughput Limits Permit Condition:

- Daily VOC Limit

$$\text{Daily VOC} = \text{Throughput} \left(\frac{\text{lb}}{\text{day}} \right) \times \% \text{pentane} \times 0.85$$

- Annual VOC Limit

$$\text{Annual VOC} = \text{Throughput} \left(\frac{\text{lb}}{12 \text{ month}} \right) \times \text{average} \% \text{ pentane} \times 0.85 / 2000 \text{lb/T}$$

Operating Requirements

2.5 Throughput Limits

Throughput shall be limited based on the pentane content of the EPS beads and shall be determined using the following equations:

- Maximum Daily Throughput Limit

$$\text{Daily Throughput (lb/day)} = \frac{1,714 \text{ lb VOC}}{\%pentane \times 0.85}$$

- Maximum Annual Throughput Limit

$$\text{Annual Throughput (tons/yr)} = \frac{74.3 \text{ ton VOC}}{\text{average}\%pentane \times 0.85}$$

2.6 Pentane Limit

The permittee shall not expand, or further process, any EPS beads that contain pentane in quantities greater than 7% by weight.

Monitoring and Recordkeeping Requirements

2.7 Monitoring Operating Parameters

A compilation of the most recent five years of records shall be kept onsite and shall be available to Department representatives upon request. The permittee shall monitor and record the following information:

- The pentane emissions in pounds of VOC per day and pounds of VOC per the most recent 12-month period, using the equations in the Emission Calculations Permit Condition;
- The actual throughput of beads calculated by the Throughput Limits Permit Condition both daily and monthly;
- Documentation for each purchase of EPS beads that shows the percent pentane by weight of the beads.

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]