April 4, 2018

Joseph Smith, Regional Environmental Manager
Knife River Corporation – Mountain West - 00472
4800 Wilkie Rd
Missoula, MT 59808

RE: Facility ID No. 777-00472, Project No. 62035, Knife River Corporation – Mountain West
- 00472
Facility Name Change by Permit to Construct Revision

Dear Mr. Smith:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2010.0005, Project 62035 to change the name of the facility from Knife River, Inc. 00472 to Knife River Corporation – Mountain West - 00472. This PTC is issued in accordance with IDAPA 58.01.01.209.04 of the Rules for the Control of Air Pollution in Idaho and is based on the certified information received on March 26, 2018. The facility name change is based on the following information:

**Previous Facility Information**
Permittee: Knife River, Inc. 00472
Mailing Address: 5450 W. Gowen Rd., Boise, ID 83709
Facility Location: Portable
Facility Contact: Zac O’Kelley, Operations Manager
Phone Number: (208) 562-5073
E-mail Address: zac.okelley@kniferiver.com
Responsible Official: Zac O’Kelley, Operations Manager
Phone Number: (208) 562-5073

**Updated Facility Information**
Permittee: Knife River Corporation – Mountain West - 00472
Mailing Address: 4800 Wilkie Rd., Missoula, MT 59808
Facility Location: Portable
Facility Contact: Joseph Smith, Regional Environmental Manager
Phone Number: (406) 876-4637
E-mail Address: joe.smith@kniferiver.com
Responsible Official: Joseph Smith, Regional Environmental Manager
Phone Number: (406) 876-4637
This permit is effective immediately and replaces PTC No. P-2010.0005, issued March 29, 2011. This permit does not release Knife River Corporation – Mountain West - 00472 from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Tom Krinke, AQ Compliance Officer, at (208) 373-0419 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends that the following representatives attend the meeting: your facility’s plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

If you have any questions, please contact Kelli Wetzel at (208) 373-0502 or kelli.wetzel@deq.idaho.gov.

Sincerely,

Mike Simon
Stationary Source Program Manager
Air Quality Division

Attachment

MS/kw Permit No. P-2010.0005 PROJ 62035
Air Quality

PERMIT TO CONSTRUCT

Permittee: Knife River Corporation – Mountain West - 00472
Permit Number: P-2010.0005
Project ID: 62035
Facility ID: 777-00472
Facility Location: Portable throughout the state of Idaho

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 pollutants 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: April 4, 2018

Kelli Wetzel, 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 a hot mix asphalt plant facility to change the name from Knife River, Inc. 00472 to Knife River Corporation – Mountain West – 00472.

1.2 This PTC replaces Permit to Construct No. P-2010.0005, issued on March 29, 2011.

Regulated Sources

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

<table>
<thead>
<tr>
<th>Permit Section</th>
<th>Source</th>
<th>Control Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Hot Mix Asphalt Plant – Counter Flow Drum Dryer</td>
<td>Baghouse</td>
</tr>
<tr>
<td></td>
<td>Manufacturer: GENCOR Industries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Model: 400 Ultra Plant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum Production: 400 T/hr, 1,400,000 T/yr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fuel Types: Natural Gas, #2 distillate fuel, reprocessed fuel oil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum Heat Input: 135 MMBtu/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sulfur Content: 0.5%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Asphalt Tank Heater (1)</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Fuel Types: Natural Gas, #2 distillate fuel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sulfur Content: 0.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum Heat Input: 1.0 MMBtu/hr</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Above Ground Storage Tanks (3)</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>30,000 gallon capacity (Asphalt, 2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10,000 gallon capacity (RFO, 1)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Silo Filling and Conveyance</td>
<td>Baghouse</td>
</tr>
<tr>
<td>2</td>
<td>Scalp Screening &amp; Transfer Points</td>
<td>Reasonable Control</td>
</tr>
<tr>
<td>3</td>
<td>125 kW Generator Set</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Engine Manufacturer: IVECO Motors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Engine Model: NEF67 TE1X or equivalent *</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufactured Year: 1997</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Displacement: 1.1 liters/cylinder</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rated Power: 231 bhp (engine)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fuel Type: #2 Distillate Fuel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumption Rate: 10.95 gal/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sulfur Content: 0.5%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>910 kW Generator Set</td>
<td>Diesel Oxidation Catalyst Muffler</td>
</tr>
<tr>
<td></td>
<td>Engine Manufacturer: Caterpillar</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Engine Model: C32 or equivalent *</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufactured Year: 2007</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Displacement: 2.68 liters/cylinder</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fuel Type: #2 Distillate Fuel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rated Power: 1350 bhp (engine)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumption Rate: 67 gal/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sulfur Content: 0.0015%</td>
<td></td>
</tr>
</tbody>
</table>

a) "or equivalent" is defined as equipment which has an equivalent or less brake horsepower than listed in this table, which does not result in an increase in emissions, and which does not result in the emission of a toxic air pollutant not previously emitted.
2 Hot Mix Asphalt Plant

Process Description

2.1 Process Description

A portable Hot Mix Asphalt (HMA) plant use aggregate material that is mixed, heated and dried. The aggregate is then combined with liquid asphalt to create hot mix asphalt. This hot mix asphalt will be primarily used for road surfaces.

The HMA manufacturing process is typified by the following types of plants: batch mix plants, parallel flow mix plants and counter flow mix plants. The Knife River plant permitted here is a portable counter flow mix HMA plant.

The counter flow drum dryer design uses proportioning cold feed (aggregate) controls for the process materials. Sized aggregate is introduced to the counter flow drum at the opposing end to the burner. As the drum rotates, the aggregate and the combustion air move in opposing directions with the aggregate moving toward the burner. Recycled Asphalt Pavement (RAP) is introduced into the process at approximately the mid-point of the drum dryer. Drying of the materials takes place in the rotating, slightly declined, direct-fired drum dryer. During the drying process, the mixture is heated to temperatures around 325 °F and then coated with liquid asphalt cement. In this plant, the heated aggregate is coated with liquid asphalt cement at the end of the drum. Liquid asphalt cement flow is controlled by a variable flow pump that is electronically linked to the aggregate weigh scales. The resulting HMA is conveyed to an enclosed silo where it is loaded into trucks for transport to the work site.

The exhaust gases from the drum dryer are collected and ducted to a baghouse by an induced draft fan. Silo filling and conveyance from the drum dryer to the silo is an enclosed process with exhaust gases routed to the baghouse. Fine particulates collected by the baghouse are returned for blending with the aggregate and production of HMA.

Aggregate and RAP will constitute approximately 94% by weight of the total mixture but can vary with the types of aggregate RAP used and the grade of asphalt cement.

The counter flow Knife River HMA plant will have a maximum production rate of 10,000 T/day and a maximum annual production rate of 1,400,000 T/yr. This HMA plant may also collocate and operate simultaneously (both within a given day), at a reduced production rate, with a rock crushing plant under the conditions specified in this permit.


2.2 Control Device Descriptions

The particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten microns (PM₁₀) emissions from the HMA plant are controlled by a baghouse system. Table 2.1 below describes the control devices or control measures associated with the HMA plant.

<table>
<thead>
<tr>
<th>Emissions Units / Processes</th>
<th>Control Devices</th>
<th>Emission Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Mix Asphalt Drum Dryer</td>
<td>Baghouse</td>
<td>Baghouse Stack</td>
</tr>
<tr>
<td></td>
<td>Covered conveyor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Good combustion control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use of permitted fuels</td>
<td></td>
</tr>
<tr>
<td>Asphalt Tank Heater</td>
<td>Good combustion control</td>
<td>Tank Heater Stack</td>
</tr>
<tr>
<td></td>
<td>Use of permitted fuels</td>
<td></td>
</tr>
<tr>
<td>Materials Transfer</td>
<td>Reasonable Control</td>
<td>Fugitives</td>
</tr>
</tbody>
</table>
Emission Limits

2.3 Emission Limits
The emissions from the drum dryer stack shall not exceed any emissions rate limit in the following table.

<table>
<thead>
<tr>
<th>Source Description</th>
<th>PM$_{10}$(b)</th>
<th>CO</th>
<th>NO$_x$</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMA drum dryer</td>
<td>9.2</td>
<td>16.1</td>
<td>52.0</td>
</tr>
</tbody>
</table>

a In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
b Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensible particulate as defined in IDAPA 58.01.01.006.81.
c Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
d Tons per any consecutive 12-month period.

2.4 40 CFR 60, Subpart I – Standard for Particulate Matter
The permittee shall comply with the applicable requirements of 40 CFR 60, Subpart I – Standards of Performance for Hot Mix Asphalt Facilities.

In accordance with 40 CFR 60.92, no owner or operator shall discharge or cause the discharge into the atmosphere from any HMA facility any gases which:

- Particulate matter in excess of 0.04 gr/dscf (90 mg/dscm)
- 20% opacity

2.5 Opacity Limit
Emissions from any stack, vent, or functionally equivalent opening 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.

2.6 Odors
No person shall allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids into the atmosphere in such quantities as to cause air pollution in accordance with IDAPA 58.01.01.1766.01.

Operating Requirements

2.7 Asphalt Production Limits
To demonstrate compliance with the emissions limits, the production rate of asphalt shall not exceed any of the following limits:

- 10,000 tons per day from April 1 through November 30.
- 5,000 tons per day from April 1 through November 30 during any day during which a collocated rock crushing plant is also operated.
- 5,000 tons per day from December 1 through March 31.
- 2,500 tons per day from December 1 through March 31 during any day during which a collocated rock crushing plant is also operated.
2.8 Setback Distance Requirements

Setback distance is defined as the minimum distance from any emission stack to property boundary. On days when the large (912 kW) generator is utilized to operate the HMA plant, the setback distance in any direction to the property boundary shall be greater than or equal to 512 feet (156 meters), ±6 feet. On days when line power is utilized to operate the HMA plant, the setback distance in any direction to the property boundary shall be greater than or equal to 476 feet (145 meters), ±6 feet.


2.9 Permitted Fuels

The HMA drum dryer and the Asphalt Tank heater shall only combust natural gas/propane, distillate fuel #2, or reprocessed fuel oil (RFO) as fuel.

2.10 Fuel Sulfur Content

No person shall sell, distribute, use, or make available for use any distillate fuel oil containing more than the following percentages of sulfur in accordance with IDAPA 58.01.01.725-728:

- ASTM Grade 1 fuel oil - 0.3% by weight.
- ASTM Grade 2 fuel oil - 0.5% by weight.
- The permittee shall not use any RFO containing more than 0.5% sulfur by weight.

2.11 40 CFR 279, Subpart b, Used Oil Specification

In accordance with 40 CFR 279.11, with the exception of total halogens which are limited to 1,000 ppm (or 4,000 ppm as noted below), used oil burned for energy recovery shall not exceed any of the allowable levels of the constituents and property listed in Table 2.3. In addition, used oil shall not contain quantifiable levels (2 ppm) of polychlorinated biphenyls (PCB).

<table>
<thead>
<tr>
<th>Constituent/Property</th>
<th>Allowable Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>5 ppm</td>
</tr>
<tr>
<td>Cadmium</td>
<td>2 ppm</td>
</tr>
<tr>
<td>Chromium</td>
<td>10 ppm</td>
</tr>
<tr>
<td>Lead</td>
<td>100 ppm</td>
</tr>
<tr>
<td>Sulfur</td>
<td>5,000 ppm (0.5% by weight)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>A minimum of 100 °F</td>
</tr>
<tr>
<td>Total Halogens²</td>
<td>4,000 ppm</td>
</tr>
<tr>
<td>PCBs²</td>
<td>&lt; 2 ppm</td>
</tr>
</tbody>
</table>

1 The specification does not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste (see 40 CFR 279.10(b)).

2 Used oil containing more than 1,000 parts per million (ppm) total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under § 279.10(b)(1). Such used oil is subject to subpart H of part 266 of this chapter rather than 40 CFR 279 when burned for energy recovery unless the presumption of mixing can be successfully rebutted (see § 279.11).

3 for the Applicable standards burning of used oil containing PCB are imposed by 40 CFR 761.20(e).
2.12 **Reasonable Control of Fugitive Emissions**

All reasonable precautions shall be taken to prevent particulate matter from becoming airborne in accordance with IDAPA 58.01.01.650-651 and IDAPA 58.01.01.808. In determining what is reasonable, consideration will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of PM. Some of the reasonable precautions include, but are not limited to, the following:

- Good operating practices, including water spraying or other suitable measures, shall be employed to prevent dust generation and atmospheric entrainment during operations such as stockpiling, screen changing and general maintenance.

- 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.

- Prompt removal of earth or other stored material from streets, where practical.

2.13 **Baghouse System Control Equipment**

The permittee shall install and operate a baghouse to control PM and PM$_{10}$ from the HMA Dryer and to ensure compliance with particulate matter emission limits.

2.14 **Baghouse Control Procedures**

The permittee shall maintain and follow a Baghouse Filter System Procedures document for the inspection and operation of the baghouse filter system which controls particulate matter emissions from the asphalt dryer. The Baghouse Filter 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 Filter System Procedures document shall describe the procedures that will be followed to comply with the maintenance General Provision and shall contain requirements for monthly see/no-see visible emissions inspections of the baghouse. The inspection shall occur during daylight hours and under normal operating conditions.

The Baghouse/Filter System Procedures document shall include a schedule and procedures for corrective action that will be taken if visible emissions are present from the asphalt dryer 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 filter system inspection. The records shall include a description of whether visible emissions were present and if visible emissions were present a description of the corrective action that was taken.

Any changes to the Baghouse Filter System Procedures document shall be submitted to DEQ within 15 days of the change.

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

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


Monitoring and Recordkeeping Requirements

2.15 Visible Emissions/Opacity Monitoring

Each month the permittee shall conduct a site-wide inspection of potential sources of visible emissions; including any stack, vent, or other functionally equivalent opening; during daylight hours and under normal operating conditions, to demonstrate compliance with the opacity limit Permit Condition. The inspection shall consist of a see/no see evaluation for each potential source. If any visible emissions are present from any point of emission, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60 minute period, the permittee shall take all necessary corrective action and report the exceedance in accordance with IDAPA 58.01.01.130-136.

The permittee shall maintain records of the results of each visible emissions inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee’s assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken. All records shall be maintained on-site for a period of 5 years and shall be made available to DEQ representatives upon request.

2.16 Fugitive Dust Monitoring

Each day the permittee shall conduct a site-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions to ensure fugitive emissions are reasonably controlled. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each fugitive emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.
2.17 **Asphalt Production Monitoring**

The permittee shall monitor and record asphalt production and RAP usage in tons per day and tons per year to demonstrate compliance with the asphalt production limits Permit Condition. Annual asphalt production, including RAP usage, shall be determined by summing monthly asphalt production and RAP usage over each previous consecutive 12-month period.

2.18 **Setback Distance Monitoring**

The permittee shall measure and record the minimum setback distance to demonstrate compliance with the setback:

- Before initial startup of any emissions source listed in the Regulated Sources Table;
- Each time the source is relocated.

Information recorded shall include, but not be limited to, a brief description of the nearest distance to any area where the general public has access, the minimum setback distance in feet or meters to an accuracy of ±6 feet, and a description of the method used to measure distance.

2.19 **Used Oil Certification**

The permittee shall demonstrate compliance with the used oil specifications Permit Condition by obtaining a used oil certification from the used oil fuel supplier on an as-received basis for each shipment or by having the fuel analyzed by a qualified laboratory. The certification shall include the following information:

- The name and address of the used oil supplier;
- The measured concentration, expressed as ppm, of each constituent listed in the used oil specifications Table;
- The flash point of the used oil expressed as degrees Fahrenheit;
- The analytical method or methods used to determine the concentration of each constituent and property (flash point) listed in the used oil specifications Table;
- The date and location of each sample; and
- The date of each certification analysis.

2.20 **Fuel Sulfur Content Monitoring**

The permittee shall maintain documentation of supplier verification of fuel oil and used oil sulfur content on an as-received basis.

2.21 **Odor Complaints**

The permittee shall maintain records of all odor complaints received to demonstrate compliance with IDAPA 58.01.01.776.01. The permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee’s assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.
Performance Testing Requirements

2.22 Periodic Performance Testing

Performance testing on the Asphalt Dryer Baghouse stack shall be performed no less than once every five years following the date the initial performance test.

The performance test shall measure the PM$_{10}$ emission rate in pounds per hour and the opacity to demonstrate compliance with the emissions limit and opacity permit conditions.

The performance test shall be conducted under worst-case normal operating conditions and in accordance with IDAPA 58.01.01.157; the HMA Drum Dryer Emission Limits, Initial and Periodic Performance Test and the Performance Test Monitoring and Recordkeeping Permit Conditions; and the Performance Test General Provision of this permit. The permittee is encouraged to submit a performance testing protocol for approval 30 days prior to conducting the performance tests.

2.23 Performance Test Monitoring and Recordkeeping

The permittee shall monitor and record the following during each performance test:

- The HMA production rate, in tons per hour, once every 15 minutes;
- The recycled asphalt pavement usage in tons per hour, once every 15 minutes;
- The type of fuel combusted in the HMA Dryer; and
- The visible emissions observed during the performance test.

2.24 NSPS 40 CFR 60, Subpart I, Performance Test Methods

- In accordance with 40 CFR 60.93(b) and 60.11(b), the permittee shall determine compliance with the particulate matter standard Permit Condition as follows:
  - EPA Reference Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).
  - EPA Reference Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

- In accordance with 40 CFR 60.93(a), in conducting performance tests, the permittee shall use as reference methods and procedures the test methods in 40 CFR 60 Appendix A.

- In accordance with 40 CFR 60.11(e), for the purpose of demonstrating compliance, opacity observations shall be conducted concurrently with the initial performance test.

2.25 PM/PM$_{10}$ Performance Test Methods and Procedures

The permittee shall use EPA Methods 5 and 202 or such comparable and equivalent methods approved in accordance with Subsection 157.02.d to determine compliance with the particulate matter standard permit condition in accordance with IDAPA 58.01.01.700.04.

The permittee shall use EPA Method 9 to determine compliance with the opacity matter standard permit condition in accordance with IDAPA 58.01.01.625.04.
Reporting Requirements

2.26 Performance Test Reporting

Performance test reports shall include records of the monitoring required by this permit during the test, and documentation that the performance test was conducted under worst-case normal operating conditions and in accordance with IDAPA 58.01.01.157. Performance test reports shall be submitted by the permittee to the following address:

Air Quality Permit Compliance
Department of Environmental Quality
Twin Falls Regional Office
650 Addison Avenue West, Suite 110
Twin Falls, ID 83301

Phone: (208) 736-2190
Fax: (208) 736-2194

2.27 Relocation

At least 10 days prior to relocation of any equipment listed in the Regulated Sources Table, the permittee shall submit a scaled plot plan and a complete Portable Equipment Relocation Form (PERF) in accordance with IDAPA 58.01.01.500, to the following address or fax number:

PERF Processing Unit
DEQ – Air Quality
1410 N. Hilton
Boise, ID 83706-1255
Phone: (208) 373-0502
Fax: (208) 373-0340

The scaled plot plan shall show the location of any emissions source listed in Table 1, and any area outside of a building where the general public has access, including property boundaries. Electronic copies of the PERF may be obtained from the DEQ website.

2.28 Non-Attainment Areas

The permittee shall not relocate and operate any equipment listed in the Regulated Sources Table in any PM$_{2.5}$ or PM$_{10}$ nonattainment area.

Contact DEQ for current nonattainment area status and more specific details about the nonattainment area boundaries.

2.29 Collocation

The emission sources listed in the Regulated Sources Table may not co-locate with any other operating emissions sources except for a rock crushing plant. Emissions sources are considered to be co-located if they are operating within 1,000 feet (305 meters) of each other. When collocated with a rock crushing plant, the hot mix asphalt plant may be operated simultaneously with the rock crushing plant (both within a given day) if the corresponding Asphalt Production Rate limits listed in this permit are complied with. If the rock crushing plant is located over 1000 feet from the HMA plant, then it is not considered to be collocated with the HMA plant.

2.30 Incorporation of Federal Requirements by Reference

Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for the purposes of the reference, including any notes and appendices therein. Documents include, but are not limited to:

- Standards of Performance of New Stationary Sources (NSPS), 40 CFR 60, Subparts I and III.

For permit conditions referencing or cited in accordance with any document incorporated by reference (including permit conditions identified as NSPS), should there be any conflict between the requirements of the permit condition and the requirements of the document, the requirements of the document shall govern, including any amendments to that regulation.

2.31 NSPS 40 CFR 60, Subpart A – General Provisions

The permittee shall comply with the requirements of 40 CFR 60, Subpart A – General Provisions. A summary of applicable requirements for affected facilities is provided in the following table:

Table 2.4 NSPS 40 CFR 60, Subpart A – Summary of General Provisions for Owners and Operators of Affected Facilities

<table>
<thead>
<tr>
<th>Section</th>
<th>Subject</th>
<th>Summary of Section Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.4</td>
<td>Address(es)</td>
<td>All requests, reports, applications, submittals, and other communications associated with 40 CFR 60, Subpart I and III shall be submitted to: Department of Environmental Quality Twin Falls Regional Office 650 Addison Avenue West, Suite 110 Twin Falls, ID 83301 All requests, reports, applications, submittals, and other communications associated with 40 CFR 60, Subpart A shall be submitted to: Director Air and Waste and Department of Environmental Quality EPA Region X Boise Regional Office 1200 Sixth Avenue 650 Addison Avenue West, Suite 110 OAQ-107 Twin Falls, ID 83301 Seattle, WA 98101</td>
</tr>
<tr>
<td>60.7(a), (b), and (f)</td>
<td>Notification and Recordkeeping</td>
<td>• Notification shall be furnished of commencement of construction postmarked no later than 30 days of such date. • Notification shall be furnished of initial startup postmarked within 15 days of such date. • Notification shall be furnished of any physical or operational change that may increase emissions postmarked 60 days before the change is made. • Records shall be maintained of the occurrence and duration of any startup, shutdown or malfunction; any malfunction of the air pollution control equipment; or any periods during which a CMS or monitoring device is inoperative. • Records shall be maintained, in a permanent form suitable for inspection, of all measurements, performance testing measurements, calibration checks, adjustments and maintenance performed, and other required information. Records shall be maintained for a period of two years following the date of such measurements, maintenance, reports, and records.</td>
</tr>
<tr>
<td>Section</td>
<td>Subject</td>
<td>Summary of Section Requirements</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
<td>--------------------------------</td>
</tr>
</tbody>
</table>
| 60.8    | Performance Tests | - At least 30 days prior notice of any performance test shall be provided to afford the opportunity to have an observer to be present.  
- Within 60 days of achieving the maximum production rate, but not later 180 days after initial startup, performance test(s) shall be conducted and a written report of the results of such test(s) furnished.  
- Performance testing facilities shall be provided as follows:  
  Sampling ports adequate for test methods applicable to such facility.  
  Safe sampling platform(s).  
  Safe access to sampling platform(s).  
  Utilities for sampling and testing equipment.  
- Performance tests shall be conducted and data reduced in accordance with 40 CFR 60.8(b), (e), and (f). |
| 60.11(a), (d), (f), and (g) | Compliance with Standards and Maintenance Requirements | - When performance tests are required, compliance with standards is determined by methods and procedures established by 40 CFR 60.8.  
- At all times, including periods of startup, shutdown, and malfunction, the owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.  
- For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. |
| 60.12   | Circumvention | - No permittee shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. |
| 60.14   | Modification | - A physical or operational change which results in an increase in the emission rate to the atmosphere or any pollutant to which a standard applies shall be considered a modification, and upon modification an existing facility shall become an affected facility in accordance with the requirements and exemptions in 40 CFR 60.14.  
- Within 180 days of the completion of any physical or operational change, compliance with all applicable standards must be achieved. |
| 60.15   | Reconstruction | - An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate in accordance with the requirements of 40 CFR 60.15. |
3 Compression Ignited Internal Combustion Engines

Process Description

3.1 Process Description

The facility uses two compression ignited internal combustion engines as power sources. A 1,350 bhp IC engine is used to power a 910 kW generator set which is used for general operations when line power is not readily available. This unit is also equipped with an oxidation catalyst for better control of CO, VOC and PM_{10} pollutants. A 231 bhp IC engine is used to power a 125 kW generator set which is also used during the night.

3.2 Control Device Descriptions

The 1,350 bhp engine is controlled by a diesel oxidation catalyst. The 231 bhp engine is uncontrolled. Table 3.1 below describes the control devices or control measures associated with the engines.

<table>
<thead>
<tr>
<th>Table 3.6 Internal Combustion Engines Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions Units / Processes</td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>1,350 bhp IC engine</td>
</tr>
<tr>
<td>231 bhp IC engine</td>
</tr>
</tbody>
</table>

Emission Limits

3.3 Emission Limits

The emissions from the Internal Combustion Engines stack shall not exceed any corresponding emissions rate limits listed in Table 3.2.

<table>
<thead>
<tr>
<th>Table 3.7 Internal Combustion Engines Emission Limits <em>(a)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Description</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1,350 bhp Engine</td>
</tr>
<tr>
<td>231 bhp Engine</td>
</tr>
</tbody>
</table>

(a) In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.

(b) Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensible particulate as defined in IDAPA 58.01.01.006.

(c) Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.

(d) Tons per any consecutive 12-calendar month period.

3.4 NSPS, 40 CFR 60, Subpart IIII – Smoke (Opacity) Standards

When combusting distillate fuel oil, the exhaust opacity from the 1,350 bhp engine must not exceed:

- 20 percent during the acceleration mode,
- 15 percent during the lugging mode.
Operating Requirements

3.5 Operational Hour Limits
Operation of the 231 bhp IC engine shall not exceed 8 hours per day.
Operation of the 1,350 bhp IC engine shall not exceed 16 hours per day.

3.6 40 CFR 60, Subpart III – Fuel Sulfur Content
The 1,350 bhp IC engine shall only combust 0.0015% (15 ppm) sulfur by weight distillate fuel oil. The fuel must also contain a minimum cetane index of 40 or a maximum aromatic content of 35% by volume.

3.7 Permitted Fuel
The two internal combustion engines shall only combust #2 distillate fuel.

3.8 Diesel Oxidation Catalyst
The permittee shall install and operate a diesel oxidation catalyst associated with the 1,350 bhp IC engine to ensure compliance with VOC, CO and PM$_{10}$ emission limits. The catalyst must also maintain, at a minimum, the manufacturer’s control efficiencies listed below:

- 20% for Particulate Matter PM/PM$_{10}$
- 41% for Carbon Monoxide
- 66% for Hydrocarbons (Volatile Organic Compounds)

3.9 NSPS, 40 CFR 60, Subpart III – Engine Maintenance
The permittee shall operate and maintain the 1,350 bhp IC engine according to the manufacturer’s written instructions or procedures developed by the permittee that are approved by the engine manufacturer, over the entire life of the engine. In addition, the permittee may only change those settings that are permitted by the manufacturer.

3.10 NSPS, 40 CFR 60, Subpart III – Compliance Demonstration
The permittee shall maintain onsite manufacturer certification documentation for the 1,350 bhp IC engine.

Monitoring and Recordkeeping Requirements

3.11 IC Engines Operating Hours Monitoring
The permittee shall monitor and record:

- The hours of operation of each IC engine on a calendar day basis; and
- Each calendar month the hours of operation of each IC engine during previous consecutive 12-calendar month period.

3.12 Fuel Sulfur Content Monitoring
The permittee shall maintain documentation of supplier verification of fuel oil sulfur content on an as-received basis.
3.13  NSPS, 40 CFR 60, Subject III – Recordkeeping Requirements

All records associated with the 1,350 bhp IC engine shall be maintained relating to the following information:

- All notifications submitted to demonstrate compliance and all documentation supporting any notification.
- Maintenance performed on the engine.
- If the engine used on site is certified, documentation from the manufacturer that it is certified to meet EPA emissions standards. This information shall remain onsite at all times and shall be made available to DEQ representatives upon request. A copy of the manufacturer’s recommendation for inspection, maintenance, and testing of this system.
4 General Provisions

General Compliance

4.1 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.]

4.2 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]

4.3 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

4.4 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

4.5 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]

4.6 The permittee shall furnish DEQ written notifications as follows:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;
- A notification of the date of any suspension of construction, if such suspension lasts for one year or more; and
• A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.01, 5/1/94]

• A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and

• A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date.

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

4.7 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.

4.8 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.

4.9 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]

Monitoring and Recordkeeping

4.10 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
4.11 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.

Certification
4.12 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.

False Statements
4.13 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.

Tampering
4.14 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.

Transferability
4.15 This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

Severability
4.16 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.