STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

March 29, 2011

Zachary O'Kelley, Operations Manager
Knife River, Inc.
5450 Gowen Road
Boise, Idaho 83709

RE: Facility ID No. 777-00472, Knife River, Inc., Portable HMA, Albion
Final Permit Letter

Dear Mr. O'Kelley:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2010.0005 Project 60672 to Knife River, Inc. for a portable hot mix asphalt plant (HMA) to be located near Albion. This PTC is issued in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho) and is based on the certified information provided in your PTC application received December 23, 2010.

This permit is effective immediately and replaces PTC No. P-2010.0005, issued on March 19, 2010. This permit does not release Knife River, Inc. from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

Pursuant to the Construction and Operation Notification General Provision of your permit, it is required that construction and operation notification be provided. Please provide this information as listed to DEQ's Twin Falls office at the address listed in the permit.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Steve VanZandt, Air Quality Analyst, at (208) 736-4261 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.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to contact Ken Hanna at (208) 373-0283 or kenneth.hanna@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

Mike Simon
Stationary Source Program Manager
Air Quality Division

MS\KH

Permit No. P-2010.0005 PROJ 60672

Enclosures

Printed on Recycled Paper

Air Quality PERMIT TO CONSTRUCT State of Idaho Department of Environmental Quality	PERMIT NUMBER	CLASS	SIC
	P-2010.0005	SM80	2951
	FACILITY ID	AQCR	NAICS
	777-00472	Portable	324121
	ZONE	UTM COORDINATES (km)	
	Portable	Portable	Portable

PERMITTEE			
Knife River, Inc.			
PROJECT			
Project No. 60672, Revision for HMA Plant to Collocate with a Rock Crushing Plant			
MAILING ADDRESS	**CITY**	**STATE**	**ZIP**
5450 West Gowen Road	Boise	ID	83709
FACILITY CONTACT	**TITLE**	**TELEPHONE**	
Zac O'Kelley	Operations Manager	(208) 562-5073	
RESPONSIBLE	**TITLE**	**TELEPHONE**	
Zac O'Kelley	Operations Manager	(208) 562-5073	
EXACT PLANT LOCATION		**COUNTY**	
Portable; initial proposed location is 950 East Road, 2.5 miles NW of Albion		initial proposed location: Cassia County	

GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Hot Mix Asphalt Plant

PERMIT AUTHORITY

This permit is issued according to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200 through 228, and 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.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) 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; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the 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.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes in design, equipment or operations may be considered a modification. Modifications are subject to DEQ review in accordance with IDAPA 58.01.01.200 through 228 of the Rules for the Control of Air Pollution in Idaho.

KEN HANNA, PERMIT WRITER	**DATE ISSUED**	March 29, 2011
MIKE SIMON, STATIONARY SOURCE MANAGER		

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PERMIT TO CONSTRUCT SCOPE

Purpose

1. This is a revised permit to construct to increase the Hot Mix Asphalt Plant (HMA) daily production rate and to allow for collocation with a rock crusher.

2. The emission sources regulated by this permit are listed in the following table.

Table 1 REGULATED SOURCES

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

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.

HOT MIX ASPHALT PLANT

Process Description

3. 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.

[March 29, 2011]

4. Emission Controls Description

The particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten microns (PM_{10}) emissions from the HMA plant are controlled by a baghouse system. Table 2 below describes the control devices or control measures associated with the HMA plant.

Table 2 HOT MIX ASPHALT PLANT CONTROL DESCRIPTION

Emissions Units / Processes	Emission Control Devices	Emission Points
Hot Mix Asphalt Drum Dryer	Baghouse Covered conveyor Good combustion control Use of permitted fuels	Baghouse Stack
Asphalt Tank Heater	Good combustion control Use of permitted fuels	Tank Heater Stack
Materials Transfer	Reasonable Control	Fugitives

Emission Limits

5. Emission Limits

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

Table 3 HOT MIX ASPHALT PLANT EMISSION LIMITS[a]

Source Description	PM_{10}[b]		CO		NOx	
	lb/hr[c]	T/yr[d]	lb/hr[c]	T/yr[d]	lb/hr[c]	T/yr[d]
HMA Drum Dryer	9.2	16.1	52.0	91.0	22.0	38.5

a) In absence of any other credible evidence, compliance is assured 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 condensable 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 method, or DEQ-approved alternative.
d) Tons per any consecutive 12-calendar month period.

6. 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.

7. 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:

- Contain particulate matter in excess of 0.04 gr/dscf (90 mg/dscm), or
- Exhibit 20% opacity, or greater.

8. 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 58.01.01.776.01.

Operating Requirements

9. 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.
- 1,400,000 tons per any consecutive 12-calendar month period.
- Recycled Asphalt Pavement (RAP) may be used at a rate of up to 50% of the total production.

[March 29, 2011]

10. 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.

[March 29, 2011]

11. 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.

12. 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.

13. 40 CFR 279, Subpart b, Used Oil Specifications

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 4. In addition, used oil shall not contain quantifiable levels (2 ppm) of polychlorinated biphenyls (PCB).

Table 4 USED OIL SPECIFICATIONS[a]

Constituent/property	Allowable level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100 deg. F minimum
Total halogens	1,000 or 4,000 ppm maximum[b]
PCBs[c]	< 2 ppm

a) 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)).
b) 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).
c) Applicable standards for the burning of used oil containing PCB are imposed by 40 CFR 761.20(e).

14. Reasonable Control of Fugitives 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.

15. 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.

16. 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.

[March 29, 2011]

Monitoring and Recordkeeping Requirements

17. 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.

18. 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.

19. 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.

20. 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.

21. 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.

22. 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.

23. 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

24. NSPS 40 CFR 60, Subpart I – Initial PM_{10} Performance Test

Performance testing on the Asphalt Dryer Baghouse stack shall be performed within 60 days after achieving the maximum permitted production rate stated in the asphalt production limit permit Condition, but not later than 180 days after initial startup of the HMA plant, in accordance with 40 CFR 60.8.

The initial performance test shall measure the PM_{10} emission rate in grains per dry standard cubic feet and the opacity to demonstrate compliance with the emission limits in the particulate matter standard permit condition.

The performance test shall be conducted under worst-case normal operating conditions and in accordance with 40 CFR 60.93, 60.8, and 60.11; the Particulate Matter Standard, Performance Test Monitoring and Recordkeeping and Performance Test Methods 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.

Each performance test shall consist of three separate runs using the applicable test method in accordance with 40 CFR 60.8(f).

25. Periodic Performance Testing

Performance testing on the Asphalt Dryer Baghouse stack shall be performed concurrently with the initial performance test required by the initial performance test permit condition, and no less than once every five years following the date the initial performance test is required by the initial performance test permit condition.

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.

26. 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.

27. 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.

28. 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

29. 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
Twin Falls Regional Office
Department of Environmental Quality
1363 Fillmore
Twin Falls, ID 83301

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

30. 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.

31. NSPS 40 CFR 60, Subpart A – General Provisions

The permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A – General Provisions in accordance with 40 CFR 60.1. A summary of requirements for affected facilities is provided in Table 5.

Table 5 NSPS 40 CFR 60 Subpart A – General Provisions

Section	Section Title	Summary of Section Requirements
60.4	Address	• All notifications and reports shall be submitted to: Department of Environmental Quality Lewiston Regional Office 1118 F Street Lewiston, ID 83501
60.7(a),(b),(c), (d) and (f)	Notification and Record Keeping	• Notification of physical or operational change that may increase emissions postmarked 60 days before the change is made. • Maintain records of the occurrence and duration of any: startup, shutdown or malfunction of the affected source; malfunction of air pollution control device; and any period when a continuous monitoring system or monitoring device is inoperative. • For affected units with continuous monitoring device requirements report excess emissions and monitoring system performance semiannually, postmarked by January 30th and July 30th (in the format required by NSPS). • Maintain in a permanent form records suitable for inspection of all measurements, system testing, performance measurements, calibration checks, and adjustments/maintenance performed. Records shall be maintained for a period of two years from the date the record is required to be generated by the applicable regulation.
60.8	Performance Tests	• The owner or operator shall provide notice at least 30 days prior to any performance test to afford an opportunity for an observer to be present during testing.
60.11(a),(b),(c), (d) and (g)	Compliance with Standards and Maintenance Requirements	• Other than opacity standards, where performance tests are required compliance with standards is determined by methods and procedures established by 40 CFR 60.8. • Compliance with NSPS opacity standards is determined by Method 9 of Appendix A. • At all times, including periods of startup, shutdown, and malfunction to the extent practicable, the operator shall maintain and operate any affected facility and air pollution control equipment consistent with good air pollution control practices. • For the purposes of determining compliance with standards any credible evidence may be used if the appropriate performance or compliance test procedure has been performed.
60.12	Circumvention	• No owner or operator shall build, erect, install or use any article or method, including dilution, to conceal an emission which would otherwise constitute a violation.
60.14	Modification	• Physical or operational changes to source types that are regulated by a NSPS which result in an increase in hourly emissions to which a standard applies is considered a modification (unless expressly exempted the NSPS). Modified sources become subject to the NSPS standards.

32. 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.

33. 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.

[March 29, 2011]

34. 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 for New Stationary Sources (NSPS), 40 CFR Part 60, Subparts I and IIII

For permit conditions referencing or cited in accordance with any document incorporated by reference (including permit conditions identified as NSPS or NESHAP), 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.

COMPRESSION IGNITED INTERNAL COMBUSTION ENGINES

Process Description

35. 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.

36. Emission Controls Description

The 1,350 bhp engine is controlled by a diesel oxidation catalyst. The 231 bhp engine is uncontrolled. Table 6 below describes the control devices or control measures associated with the engines.

Table 6 ENGINE CONTROL DESCRIPTION

Emissions Units / Processes	Emission Control Devices	Emission Points
1,350 bhp IC engine	Diesel Oxidation Catalyst Use of permitted fuels	Engine Stack
231 bhp IC engine	Good combustion control Use of permitted fuels	Engine Stack

Emission Limits

37. Emissions Limits for Compression ICEs

The emissions from each engine shall not exceed any emissions rate limit in the following table.

Table 7 GENERATOR SET EMISSION LIMITS[a]

Source Description	PM_{10}[b]		NOx		CO		VOC	
	lb/hr[c]	T/yr[d]	lb/hr[c]	T/yr[d]	lb/hr[c]	T/yr[d]	lb/hr[c]	T/yr[d]
1,350 bhp Engine	0.05	0.15	14.08	41.11	0.33	0.97	0.01	0.03
231 bhp Engine	0.50	0.73	7.12	10.40	1.53	2.24	0.58	0.85

a) In absence of any other credible evidence, compliance is assured 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 condensable 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 method, or DEQ-approved alternative.
d) Tons per any consecutive 12-calendar month period.

38. 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

39. Generator 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.

40. 40 CFR 60, Subpart IIII - 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.

41. Permitted Fuel

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

42. 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)

43. NSPS, 40 CFR 60, Subpart IIII – 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.

44. NSPS, 40 CFR 60, Subpart IIII – Compliance Demonstration

The permittee shall maintain onsite manufacturer certification documentation for the 1,350 bhp IC engine.

Monitoring and Recordkeeping Requirements

45. 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.

46. Fuel Sulfur Content Monitoring

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

47. NSPS, 40 CFR 60, Subject IIII – 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.

PERMIT TO CONSTRUCT GENERAL PROVISIONS

General Compliance

48. 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 and 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.]

49. 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]

50. 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

51. 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 or 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

52. The permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211:

- A notification of the date of initiation of construction, within five working days after occurrence;
- 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;
- 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, 5/1/94]

Performance Testing

53. 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, at its option, may 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.

54. 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.

55. Within 30 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

56. The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Records of monitoring information 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 and 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

57. The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

[IDAPA 58.01.01.130-136, 4/5/00]

Certification

58. 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

59. 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

60. 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

61. 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

62. 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]