



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502
www.deq.idaho.gov

C.L. "Butch" Otter, Governor
Curt Fransen, Director

December 18, 2014

Josh Smith, Asphalt Operations Manager
Knife River, Inc. 00372
5450 W. Gowen
Boise, ID 83709

RE: Facility ID No. 777-00372, Knife River, Inc. 00372, Boise
Transfer of Ownership of PTC Operating Permit

Dear Mr. Smith:

This letter acknowledges receipt on December 2, 2014 of a request for a facility name change for a permit to construct (PTC), in accordance with IDAPA 58.01.01.209.04 (Rules for the Control of Air Pollution in Idaho). The facility name change request is for PTC No. P-060100, issued April 25, 2006, and is based on the following information:

Current Permittee Information

Permittee: Hap Taylor & Sons dba Knife River
Mailing Address: 32260 Old Hwy 34, Tangent, OR 97389
Responsible Official: Jeff Steyaert, Regional Environmental Manager
Phone Number: (541) 928-6491

Proposed Permittee Information

Permittee: Knife River, Inc. 00372
Mailing Address: 5450 W. Gowen, Boise, ID 83709
Responsible Official: Josh Smith, Asphalt Operations Manager,
josh.smith@kniferiver.com
Phone Number: (208) 362-6152

All other information in the permit remains the same.

Attached to this letter is revised PTC No. P-2014.0046 with the revised permit cover page reflecting the facility name change. The effective date of the PTC operating permit transfer is December 18, 2014. DEQ recommends that you maintain a copy of this letter for your records.

This transfer does not release Knife River, Inc. 00372 from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances. If you have any questions, please contact Darrin Pampaian at (208) 373-0502 or darrin.pampaian@deq.idaho.gov.

Knife River, Inc. 00372, Boise
December 18, 2014
Page 2 of 2

This transfer does not release Knife River, Inc. 00372 from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances. If you have any questions, please contact Darrin Pampaian at (208) 373-0502 or darrin.pampaian@deq.idaho.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Simon". The signature is written in a cursive style with a large, stylized "M" and "S".

Mike Simon
Stationary Source Program Manager
Air Quality Division

Attachment

MS/drp

Permit No. P-2014.0046 PROJ 61458

AIR QUALITY

PERMIT TO CONSTRUCT

Permittee	Knife River, Inc. 00372
Permit Number	P-2014.0046
Project ID	61458
Facility ID	777-00372
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 contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200–228.

Date Issued

December 18, 2014



Darrin Pampaian, P.E., Permit Writer



Mike Simon, Stationary Source Manager

Contents

1	Permit Scope.....	3
2	Hot-Mix Asphalt Plant.....	4
3	Statewide Requirements	5
4	Operations in PM ₁₀ Nonattainment Areas	10
5	General Provisions.....	11

1 Permit Scope

Purpose

- 1.1 This is a revised permit to construct (PTC) to change the facility name from Norm's Utility Contractor, Inc., which was changed to Hap Taylor & Son dba Knife River on July 16, 2007, to Knife River, Inc. 00372.
- 1.2 Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right-hand margin.
- 1.3 This PTC replaces Permit to Construct No. P-060100, issued on April 25, 2006.

Regulated Sources

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

Table 1.1 Regulated Sources

Permit Section	Source	Control Equipment
2	<u>HMA Drum Dryer:</u> Manufacturer: Hauck Quad Burner Model: 8835HMSIPR Manufactured: 1991 Drum dryer maximum heat input capacity: 88.2 MMBtu/hr Type: Portable, Parallel flow drum mix Design Aggregate: Up to 50% RAP HMA burner permitted fuel type: Natural gas	<u>Baghouse:</u> Manufacturer: Model 8800-P/10
	<u>Asphalt Tank Heater:</u> Manufacturer: Astec/CIE Power Flame Burner Model: H915-91 Type: Horizontally fired Rated heat input capacity: 2.115 MMBtu/hr Permitted fuel type: Natural gas	N/A

2 Hot-Mix Asphalt Plant

2.1 Process Description

Knife River, Inc. 00372 (Knife River) operates a portable hot-mix asphalt (HMA) plant that consists of a natural gas-fired parallel flow drum mix dryer, an aboveground asphalt oil storage tank with a natural gas-fired tank heater, a baghouse, storage silos, conveyors and feed bins, aggregate stock piles, and haul trucks.

Stockpiled aggregate is transferred to feed bins. Aggregate may consist of up to 50 percent recycled asphalt pavement (RAP). Aggregate is dispensed from the bins onto feeder conveyors, which transfer the aggregate to the natural-gas-fired drum mix dryer. Aggregate travels through the rotating drum dryer, and when dried, the aggregate is mixed with liquid asphalt cement. The resulting HMA is then conveyed to hot storage bins until it can be loaded into trucks for transport off site or transferred to silos for temporary storage.

Electrical power is provided by a connection to the local grid or may be provided using a portable generator engine. Permit conditions for the operation of the generator are included in the Norm's Utility Contractor, Inc. portable ready-mix concrete plant, PTC No. P-050124, dated March 8, 2006.

2.2 Control Device Descriptions

Particulate matter (PM) emissions from the HMA drum dryer are controlled by a baghouse.

3 Statewide Requirements

The permittee shall comply with the following conditions when the portable hot-mix asphalt plant is operated anywhere (attainment or unclassifiable areas) within the state of Idaho.

Emission Limits

3.1 Opacity Limit (NSPS)

Visible emissions from the HMA drum dryer shall not exhibit 20% opacity or greater in accordance with 40 CFR 60.92(a)(2). Opacity shall be determined using EPA Method 9.

3.2 Opacity Limit (IDAPA)

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

3.3 HMA Drum Dryer PM Grain Loading Emissions Limit (NSPS)

Particulate matter (PM) emissions from the HMA drum dryer shall not exceed 0.04 grains per dry standard cubic foot (gr/dscf) in accordance with 40 CFR Part 60.92(a)(1).

3.4 Criteria Pollutant Emissions Limits

The PM and PM₁₀ emissions from the HMA drum dryer shall not exceed any corresponding emissions rate limits listed in Table 3.1.

Table 3.1 Asphalt Plant Stack Emission Limits

Source Description	PM	PM ₁₀	
	lb/hr	lb/day	T/yr
Asphalt Plant Stack	8.25	57.5	3.45

Notes: lb/hr = pounds per hour
 lb/day = pounds per 24-hour period (pounds per day)
 T/yr = tons per consecutive 12-month period (tons per year)

3.5 Toxic Air Pollutant Emissions Limits

Carcinogens

- Formaldehyde emissions shall not exceed 957 pounds per year from the asphalt plant, asphalt tank heater, and silo filling and load-out, combined.
- Polycyclic organic matter (POM) emissions shall not exceed 0.51 pounds per year from the asphalt plant, asphalt tank heater, and silo filling and load-out, combined.

3.6 Visible Fugitive Emissions Limits at Property Boundary

Visible fugitive dust emissions shall not be observed leaving the property boundary for a period or periods aggregating more than three minutes in any 60 minute period. Visible emissions shall be determined by Method 22, which is contained in 40 CFR Part 60 Appendix A, or by a DEQ-approved alternative method.

Operating Requirements

3.7 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent particulate matter (PM) from becoming airborne in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable, considerations 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:

- 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, 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.

3.8 Permitted Fuels

- The fuel used in the hot-mix asphalt plant shall be natural gas, exclusively.
- The fuel used in the asphalt tank heater shall be natural gas, exclusively.

3.9 Hot-Mix Asphalt Production Limits

- The production rate of the asphalt plant shall not exceed a maximum of 250 tons of HMA per hour.
- The production rate of the asphalt plant shall not exceed a maximum of 2,500 tons of HMA per day.
- The production rate of the asphalt plant shall not exceed a maximum of 300,000 tons of HMA per any consecutive 12-month period.
- Tons per day of recycled asphalt pavement fed as part of the design aggregate shall not exceed 50 percent of the total HMA production in tons per day for that day or 1,250 tons of HMA per day, whichever is less.
- The asphalt tank heater shall not operate more than 18 hours per day.
- The asphalt tank heater shall not operate more than 6,720 hours per any consecutive 12-month period.

3.10 Baghouse Operation

The asphalt plant shall not be operated unless the baghouse is in operation.

3.11 Baghouse Monitoring Equipment

The permittee shall, in accordance with manufacturer specifications, install, calibrate, maintain, and operate equipment to continuously measure the pressure differential across the hot-mix asphalt drum dryer baghouse.

3.12 Pressure Drop Across the Baghouse

The pressure drop across the baghouse shall be maintained within manufacturer and O&M manual specifications. Documentation of both the manufacturer and O&M manual operating pressure drop specifications shall remain on site at all times and shall be made available to DEQ representatives upon request.

3.13 Inspection and Maintenance to Minimize Polycyclic Organic Matter (POM) Emissions

- The permittee shall, in accordance with manufacturer specifications and as needed but no less frequently than annually, inspect, calibrate, and maintain the drum dryer burner to provide good combustion and maintenance practices to minimize POM emissions.
- The permittee shall, in accordance with manufacturer specifications and as needed but no less frequently than annually, inspect, calibrate, and maintain the baghouse to provide good operation and maintenance practices to minimize POM emissions.

3.14 Operations and Maintenance Manual

The permittee shall have developed an O&M manual for the baghouse, which controls the PM emissions from the hot-mix asphalt drum dryer. The O&M manual shall describe the procedures that will be followed to comply with the General Compliance General Provision and the manufacturer specifications for the baghouse. The manual shall contain, at a minimum, the pressure drop range for the baghouse, requirements for the annual inspection and maintenance of the baghouse, and requirements for periodic inspections (i.e., monthly) during each month of operation to include but not be limited to checking the bags for structural integrity and that they are properly secured in place. The manual shall remain on site at all times and shall be made available to DEQ representatives upon request.

3.15 Collocation

The hot-mix asphalt plant shall not collocate with any other hot-mix asphalt plant.

Monitoring and Recordkeeping Requirements

3.16 Operating Parameters

The following parameters shall be monitored and recorded. Records of this information shall remain on site for the most recent two-year period and shall be made available to DEQ representatives upon request.

- Pressure drop across the baghouse once weekly when the asphalt plant is operating;
- Date and results of baghouse inspection once monthly when the asphalt plant is operating;
- Hot-mix asphalt production in tons per day, tons per month and tons per any consecutive 12 month period (tons per year);
- Tons of recycled asphalt used per day; and
- Asphalt tank heater hours of operation in hours per day, hours per month, and hours per any consecutive 12-month period (hours per year).

3.17 Reasonable Control Measures

The permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive emissions during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. 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 fugitive emissions 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. The monthly inspection is not required when the facility is not in operation.

Records of each facility-wide fugitive emissions inspection shall remain on site for the most recent two year period and shall be made available to DEQ representatives upon request.

3.18 Visible Emissions Monitoring

The permittee shall conduct an inspection of visible emissions from the hot-mix asphalt plant baghouse stack during daylight hours and under normal operating conditions once during each calendar month that the asphalt plant operates. The inspection shall consist of a see/no see evaluation of visible emissions. If any visible emissions are present from the hot-mix asphalt plant baghouse stack, 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 excess emissions regulations contained in 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. The monthly visible emissions inspection is not required when the facility is not in operation.

Records of each visible emissions inspection shall remain on site for the most recent two-year period and shall be made available to DEQ representatives upon request.

3.19 Performance Testing Requirements

3.19.1 No later than September 29, 2016, a performance test shall be conducted on the hot-mix asphalt plant under worst-case normal operating conditions in accordance with IDAPA 58.01.01.157, the Performance Testing General Provision of this permit, and in accordance with 40 CFR 60.90 if the initial source test for an affected facility has not been conducted in accordance with that regulation. The performance test shall be conducted to demonstrate compliance with the applicable PM standards defined in 40 CFR 60.92 and the pound per hour PM emissions limit in the Criteria Pollutants Emissions Limits Permit Condition. The following shall be monitored and recorded during the performance tests:

- The hourly production rate of the hot-mix asphalt plant expressed as tons per hour,
- The pressure drop across the baghouse, and
- The visible emissions observed during the performance tests.

3.19.2 The permittee shall conduct performance tests at a frequency of no less than once every five years to demonstrate compliance with the 0.04 grains of PM per dry standard cubic foot (gr/dscf) emissions limit, the pound per hour PM emissions limit in the Criteria Pollutants Emissions Limits Permit Condition and the opacity limits in the Opacity Limit (NSPS) and Opacity Limit (IDAPA) Permit Conditions.

Reporting Requirements

3.20 Relocation

All existing portable equipment shall be registered. At least 10 days prior to relocation of any equipment covered by this permit, the permittee shall submit a scaled plot plan and a complete Portable Equipment Registration and Relocation Form (PERF, available on the DEQ website at www.deq.idaho.gov), in accordance with IDAPA 58.01.01.500, to the following address:

PERF Processing Unit
DEQ – Air Quality
1410 N. Hilton
Boise, ID 83706-1255

3.21 Performance Test Protocol

At least 30 days prior to conducting any emission test, the permittee is encouraged to submit a written performance test protocol to DEQ in accordance with IDAPA 58.01.01.157.01.a.

3.22 Performance Test Report

In accordance with IDAPA 58.01.01.157.04, the permittee shall submit a written report of the performance test results to DEQ within 30 days of completion of the test.

4 Operations in PM₁₀ Nonattainment Areas

The permittee shall not locate the portable HMA plant in any PM₁₀ nonattainment area under this permit. As of the date of this permit, the PM₁₀ nonattainment areas in north Idaho include the Sandpoint and Pinehurst areas. Contact DEQ for current area status and more specific details about the nonattainment area boundaries.

Prior to operation in any PM₁₀ nonattainment area, Knife River shall submit an air quality permit to construct application that requests the ability to locate and operate the portable HMA plant within a PM₁₀ nonattainment area.

5 General Provisions

General Compliance

5.1 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.]

5.2 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]

5.3 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

5.4 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

5.5 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]

5.6 The permittee shall furnish DEQ written notifications as follows:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;

- A notification of the date of any suspension of construction, if such suspension lasts for one year or more;
- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
- A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

- 5.7 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.
- 5.8 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.
- 5.9 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

- 5.10 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

- 5.11 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions due to start-up, shut-down, scheduled maintenance, safety measures, upsets, and breakdowns.

[IDAPA 58.01.01.130–136, 4/5/00]

Certification

- 5.12 All documents submitted to DEQ—including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification—shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

- 5.13 No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

- 5.14 No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

- 5.15 This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

- 5.16 The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.211, 5/1/94]