Montana Department of
ENVIRONMENTAL QUALITY

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April 16, 2013

Bob Berland
Knife River, Inc.
4800 Wilke Road
Missoula, MT 59808

Dear Mr. Berland:

Montana Air Quality Permit #4865-00 is deemed final as of April 16, 2013, by the Department of Environmental Quality (Department). This permit is for a portable hot-mix asphalt plant and associated equipment. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Julie Merkel
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-3626

Doug Kuenzli
Environmental Science Specialist
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JM:DCK
Enclosure

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
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FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Knife River Inc.

Montana Air Quality Permit number: 4865-00

Preliminary Determination Issued: 02/26/2013
Department Decision Issued: 03/29/2013
Permit Final: 04/16/2013

1. *Legal Description of Site*: Knife River, Inc. (Knife River) would operate a portable drum mix asphalt plant, which would initially be located in Section 6, Township 13 North, Range 19 West in Missoula County, Montana. However, Montana Air Quality Permit (MAQP) #4865-00 would apply while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands. Addendum #1 to MAQP #4865-00 will apply when Knife River is operation within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas.

2. *Description of Project*: Knife River would operate a portable drum mix asphalt plant and associated equipment with a 400 ton per hour (TPH) maximum production capacity and up to two diesel-fired generator sets with a combined capacity of up to 1,538 bhp at various locations throughout Montana.

3. *Objectives of Project*: The objective of this project would be to produce revenue for Knife River through the sale and use of asphalt. The issuance of the permit would allow Knife River to operate the permitted equipment at various locations throughout Montana, including the initial site location.

4. *Alternatives Considered*: In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Knife River has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

5. *A Listing of Mitigation, Stipulations, and Other Controls*: A list of enforceable conditions, including a BACT analysis, would be included in MAQP #4865-00.

6. *Regulatory Effects on Private Property*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. *The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites				X		Yes
J	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Impacts on terrestrials and aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor because the asphalt plant would be considered a minor source of emissions and would have intermittent and seasonal operations. Furthermore, the air emissions would have only minor effects on terrestrial and aquatic life because facility emissions would have good pollutant dispersion in the area of operations (see Section 7.F). Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the proposed project.

B. Water Quality, Quantity and Distribution

Water would be required for dust suppression on the surrounding roadways and the area of operation. Typical application of water spray for dust suppression typically results in the water being evaporated to the atmosphere shortly after its application. Water's dust suppressing capacity is very temporary because of evaporation. Heavy applications of water can create soft mud or penetrate a road to the sub-base which can cause major road failure; therefore, heavy applications are typically not utilized. Consequently, several light applications are preferable to one heavy application. Pollutant deposition and water use would cause minor impacts to water resources because the facility is relatively small with seasonal and intermittent operations. The benefits of using water to control emissions outweigh the potential minor impacts to the surroundings.

C. Geology and Soil Quality, Stability and Moisture

The proposed project would have minor impacts on geology, soil quality, stability, and moisture of soils. Minor impacts from deposition of air pollutants on soils would result (as described in Section 7.F of this EA) and minor amounts of water would be used for pollution control and only as necessary in controlling particulate emissions. Thus, minimal water runoff

would occur. Since a small amount of pollution would be generated and corresponding emissions would be widely dispersed before settling upon vegetation and surrounding soils (as described in Section 7.D of this EA), impacts would be minor. Therefore, any effects upon geology and soil quality, stability, and moisture from air pollutant emissions from equipment and operation would be minor.

D. Vegetation Cover, Quantity, and Quality

The facility would be considered a minor source of emissions by industrial standards and would typically operate in areas previously designated and used for this type of operation. The overall footprint of the facility would be small, so the affect to quantity and quality of vegetative cover in the area would be minimal. There is occurrence reports of one plant species of concern (Missoula Phlox) within sections located near the proposed project section. However, the species occurrence locations are not within the proposed facility location which would be within an existing and previously disturbed gravel pit.

In addition, water use at the facility, soil disturbance from water application, and the associated runoff would also be minimal. Overall, impacts to vegetation from the project would be minor.

E. Aesthetics

MAQP #4865-00 and Addendum #1would include conditions to control emissions, including visible emissions, from the operation. The portable asphalt plant would be considered a minor industrial source.

For the proposed project, the facility would be initially located in an existing pit that is on private land that is permitted for use as an open cut operation. Approximately one acre of land would be disturbed as part of this proposed action. The operation of the proposed equipment would be visible and audible. There is a trailer court located approximately 450 feet to the northwest from the pit area boundary. Two lumber mills are located adjacent to the site as well. Any disturbance to the aesthetic value of the area would be minor because of its location within an existing pre-disturbed industrial site.

F. Air Quality

Air quality impacts from the proposed project would be minor because the facility would be relatively small and comparable in nature to other similar sources permitted by the Department. MAQP #4865-00 and Addendum #1 would include conditions limiting the facility's opacity and particulate matter emissions. The permit would also limit total emissions from the portable asphalt plant and any additional equipment operated at the site to 250 tons per year or less of any individual pollutant, excluding fugitive emissions.

Further, the Department determined that the portable asphalt plant would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's potential emissions are below the major source threshold level of 100 tons per year for any regulated pollutant due to federally enforceable permit conditions which limit the total annual hours of operation and annual asphalt production. Pollutant deposition from the project would be minimal because the emissions would be well controlled, widely dispersed (from factors such as wind speed and wind direction), and would have minimal deposition on the surrounding area. Therefore, air quality impacts from the project in this area would be minor. The applicant has indicated that the source would operate on an intermittent and seasonal basis; therefore, actual emissions may be lower than accounted for in the potential emissions calculations.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the proposed initial area of operation (Section 6, Township 13 North, Range 19 West in Missoula County, Montana), the Department contacted the Montana Natural Heritage Program (MNHP). Search results concluded there are 10 known species of concern located within three miles of the facility. The search area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer. Animal species of concern include the Great Blue Heron, Bald Eagle, Fringed Myotis, Hoary Bat, Cassin's Finch, Western Skink, Westslope Cutthroat Trout Bull Trout, Subterranean Amphipod, and plant species of Missoula Phlox. The proposed facility location will likely be existing industrial site that are already disturbed from previous gravel pit activities and or other industrial activity; therefore, there are no anticipated impacts to any unique endangered, fragile, or limited environmental resources. In addition, this source would be considered a minor source of emissions with intermittent and seasonal operations.

H. Demands on Environmental Resource of Water, Air and Energy

The portable asphalt plant would provide its own energy for operation from the portable diesel generator engines. Water would be required for control of fugitive particulate matter emissions in the plant area and surrounding roads. Impacts to air resources would be minimal because the source would be considered a minor industrial source of emissions, with intermittent and seasonal operations. Because air pollutants generated by the plant would be widely dispersed (see Section 8.F of this EA), energy requirements would be provided by portable generators, and water use would be minimal, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and archaeological sites that may be present in the proposed area of operation. Search results concluded that there has been no previously recorded historical or archaeological site within the section proposed for initial operation, and several previously conducted cultural resource inventories done in the area. According to correspondence from the SHPO, there would be a low likelihood of adverse disturbance to any known archaeological or historic site given previous industrial disturbance to the area and that a cultural resource inventory is unwarranted at this time. Therefore, no impacts to historical or archaeological sites would be expected as a result of operating the asphalt plant at the proposed location because it would occur within an existing open cut pit in an industrial area. However, if cultural materials are discovered during this project the Montana Historical Society should be contacted.

J. Cumulative and Secondary Impacts

Operation of the portable asphalt plant would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because it would be located at an existing gravel pit and would be limited in the amount of air emissions generated. Emissions and noise generated from the equipment would, at most, result in only minor impacts to the area of operation because it would be seasonal and temporary in nature. Additionally, this facility, in combination with other emissions from equipment operations would not be permitted to exceed 250 tons per year of non-fugitive emissions of an individual pollutant. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would be minor.

8. *The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				X		Yes
B	Cultural Uniqueness and Diversity				X		Yes
C	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities			X			Yes
G	Quantity and Distribution of Employment			X			Yes
H	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity			X			Yes
K	Locally Adopted Environmental Plans and Goals			X			Yes
L	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The portable asphalt plant would cause no disruption to the social structures and mores of the area because the source would be considered a minor industrial source and emissions and would have temporary and intermittent operations. The proposed initial location is within an existing industrial site with no existing social structures or mores.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the operation of the portable asphalt plant because the facility would be a portable source, with seasonal and intermittent operations. The predominant use of this area would not change as a result of the proposed operation. Therefore, the cultural uniqueness and diversity of the area would not be impacted.

C. Local and State Tax Base and Tax Revenue

Only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. Because the facility would be portable and temporary, it is unlikely that people would move to the area as a result of this project. Impacts to local tax base and revenue would be minor and short-term because the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The proposed project would have a minor impact on local industrial production since the facility would increase local asphalt production and air emissions slightly. The facility would be located in an existing gravel pit on private land. Because minimal deposition of air pollutants would occur on the surrounding land (as described above in Section 7.F), only minor effects on the surrounding vegetation or agricultural production would occur. In addition, the

facility operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation, as described in Section 7.D above. Pollutant deposition from the project would be minimal because the emissions would be well controlled, widely dispersed (from factors such as wind speed and wind direction), and would have minimal deposition on the surrounding area.

E. Human Health

Conditions would be incorporated into MAQP #4865-00 and Addendum #1to ensure that the asphalt plant would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 7.F of this EA, the air emissions from this project would be minimized by the use of a fabric filter pollution control device for the drum dryer and mineral filler storage emissions, water spray for fugitive emissions, and other process limits that would be required by MAQP #4865-00 and Addendum #1. Furthermore, the applicant has stated that they plan to operate on an intermittent and seasonal basis and therefore only minor impacts would be expected on human health from the proposed facility.

F. Access to and Quality of Recreational and Wilderness Activities

Access to recreational opportunities would not be limited or modified by this facility. The equipment would be located within an existing industrial site that has been established for similar use. All recreational opportunities, if available in the area, would still be accessible. Noise from the facility would be minimal to surroundings because of the facility size, expected hours of operation, and rural location. The applicant has stated that the facility would operate on a seasonal and intermittent basis. The pit is on private land and the Department has determined that the project would be a minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at this site are expected to be minor.

G. Quantity and Distribution of Employment

The portable asphalt plant would be relatively small. Knife River has stated that they plan to operate the plant with three employees and approximately 15 truck drivers. Because the operation would be seasonal, no individuals would be expected to permanently relocate as a result of operating the portable asphalt plant. Therefore, there would be minor effects on the quantity and distribution of employment in this area.

H. Distribution of Population

The proposed project would be considered a portable industrial facility and would require few employees to operate. No individuals would be expected to permanently relocate to this area. Therefore, the operation would not impact the normal population distribution in the initial area of operation or any future operating site.

I. Demands for Government Services

The operation of the portable asphalt plant would cause minimal demand for government services. This project would result in an increase in traffic on existing roadways. Government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, any increase or demand for government services would be minor given the temporary and portable nature of the project.

J. Industrial and Commercial Activity

The proposed project would represent only a minor increase in the industrial activity in the proposed area of operation because the facility would be a small industrial source, portable and temporary in nature. Some additional industrial or commercial activity would be expected as a result of the proposed operation; however, these impacts to the industrial and commercial activity would be minor.

K. Locally Adopted Environmental Plans and Goals

The Department is unaware of any locally adopted environmental plans and goals in the proposed initial project location. MAQP #4865-00 and Addendum #1 contains conditions and limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards. Because the facility would have intermittent and seasonal operations any impacts from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

Overall, the proposed project would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source would be portable and the footprint of the facility would remain relatively small. Furthermore, no other industrial operations are expected to result from this permitting action. Any increase in traffic would have minor effects on local traffic in the immediate area.

This facility may be operated in conjunction with other equipment owned and operated by Knife River, but any cumulative impacts or secondary impacts are expected to be minor and short-term. In conclusion, the source is relatively small, the facility emissions would be minimal, and the project would have only minor cumulative and secondary impacts.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of portable asphalt plant. MAQP #4865-00 and Addendum #1 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: D. Kuenzli
Date: February 20, 2013