



Steve Bullock, Governor  
Tracy Stone-Manning, Director

P. O. Box 200901 Helena, MT 59620-0901 (406) 444-2544 Website: [www.deq.mt.gov](http://www.deq.mt.gov)

April 04, 2013

Leo Zwemke  
Knife River Corporation  
P.O. Box 80066  
Billings, MT 59108

Dear Mr. Zwemke:

The Department of Environmental Quality (Department) has made its decision on the Montana Air Quality Permit application for Knife River Corporation. The application was given permit number 3096-02. The Department's decision may be appealed to the Board of Environmental Review (Board). A request for hearing must be filed by April 19, 2013. This permit shall become final on April 20, 2013, unless the Board orders a stay on the permit.

Procedures for Appeal: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed before the final date stated above. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, Montana 59620.

Conditions: See attached.

For the Department,

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

Tashia Love  
Environmental Science Specialist  
Air Resources Management Bureau  
(406) 444-5280

JM:TL  
Enclosures

**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Permitting and Compliance Division**  
**Air Resources Management Bureau**  
**P.O. Box 200901, Helena, MT 59620**  
**(406) 444-3490**

**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

*Issued To:* Knife River Corporation  
PO Box 80066  
Billings, Montana 59108

2880 South 56<sup>th</sup> Street West, Billings, Montana. The home pit of the facility is Section 29, Township 1 South, Range 25 East in Yellowstone County, Montana

*Montana Air Quality Permit Number (MAQP):* 3096-02

*Preliminary Determination Issued:* March 04, 2013

*Department Decision Issued:* April 04, 2013

*Permit Final:*

1. *Legal Description of Site:* Knife River Corporation (Knife River) proposes to operate a portable drum mix asphalt plant which will initially be located in Section 29, Township 1 South, Range 25 East in Yellowstone County, Montana. However, MAQP #3096-02 applies while operating at any location in Montana, except those areas having a Montana Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum would be required for locations in or within 10 km of certain PM<sub>10</sub> nonattainment areas.
2. *Description of Project:* The Department received a permit application from Knife River for the replacement of a batch mix asphalt plant with a drum mix asphalt plant, including an addition of a recycled asphalt feeder. The modification also changes the home pit location of the asphalt plant..
3. *Objectives of Project:* The object of the project would be to produce business and revenue for the company through the sale and use of asphalt. The issuance of MAQP #3096-02 would allow Knife River to operate the permitted equipment at various locations throughout Montana (as described above), including the proposed initial site location.
4. *Alternatives Considered:* In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the MAQP to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Knife River 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 listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in MAQP #3096-02.
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 the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would 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

This permitting action would be expected to have a minor effect on terrestrial and aquatic life and habitats, as the proposed plant would operate within a Knife River owned gravel source. Furthermore, the air emissions would likely have only minor effects on terrestrial and aquatic life because facility emissions would be well dispersed in the area of the operation (see Section 7.F of this EA) and would have intermittent and seasonal operations. 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 mineral processing equipment and surrounding facility area. The water use would be expected to cause minor, if any, impacts to water sources. In addition, the facility would emit air pollutants, and corresponding deposition of pollutants would occur, as described in Section 7.F of this EA. However, the Department determined that, due to dispersion characteristics of pollutants and conditions that would be placed in MAQP #3096-02, any impacts from deposition of pollution on water quality, quantity, and distribution expected would be minor.

C. Geology and Soil Quality, Stability, and Moisture

Only minor impacts from deposition on soil would likely result (as described in 7.F of this EA) and only minor amounts of water would be used for pollution control, and only as necessary, in controlling particulate emissions. Thus, only minimal water runoff would likely occur. Since only minor amounts of pollution would be expected and corresponding emissions would be widely dispersed before settling upon surrounding soil and vegetation (as described in Section 7.D of EA), impacts would be minor. Therefore, any effects upon geology and soil quality, stability, and moisture from air pollutant emissions from equipment operations would likely be minor and short-lived.

D. Vegetation Cover, Quantity, and Quality

Only minor impacts would be expected to occur on vegetative cover, quality, and quantity because the facility would be operating on land that is currently used as a gravel source owned by Knife River. During operations, the facility would likely be a relatively minor source of emissions and the pollutants widely dispersed (as described in 7.F of this EA) therefore, deposition on vegetation from the proposed project would be expected to be minor. Also, due to limited water usage (as described in Section 7.F of this EA) and minimal associated disturbance from the application of water and run-off (as described in Section 7.B of this EA), corresponding vegetative impacts would likely be minor.

E. Aesthetics

The portable drum mix asphalt plant would disturb approximately six acres of land. Activity within the facility will create noise while operating at the proposed site. The proposed project is on private land owned by Knife River. The application states the nearest home and/or structure is 1,100 feet from the proposed project site, therefore visual and noise impacts would occur. The facility would operate on an intermittent and seasonal basis, therefore impacts would be minor and short-lived.

F. Air Quality

Air quality impacts from the proposed project would likely be minor because the facility would be small and operate on an intermittent and temporary basis. MAQP #3096-02 includes conditions limiting the facility's opacity and requiring water and spray bars to be available on site to ensure compliance with opacity standards. These conditions would limit fugitive emissions. The facility would also require the use of a baghouse on the dryer to control particulate emissions. Further, Knife River has taken federally-enforceable limitations to remain a minor source of emissions with respect to Title V. Pollutant deposition from the facility would be expected to be minimal because the pollutants are widely dispersed (from factors such as wind speed and wind direction) and exhibit minimal deposition on the surrounding area. Therefore, air quality impacts from operating the facility in this area would be expected to be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program (MNHP) in an effort to identify any species of concern that may be found in the area where the proposed project will occur. Search results have concluded three animal species of concern in the area. Area, in this case, will be defined by the township and range of the proposed site, with an additional 1-mile buffer. The known species of concern include: the Bald Eagle (Sensitive), the Pinyon Jay, and the Western Hog-nosed Snake (Sensitive).

While the Bald Eagle may be found within the search area, this species is known to inhabit forested areas along rivers and lakes, which are not impacted by the operation of this facility. The Pinyon Jay's preferred habitat is low-elevation ponderosa pine and limber pine-juniper woodlands. In Montana, the Western Hog-nosed Snake has been reported in areas of sagebrush and grassland habitat. The proposed project would have minor impacts considering its operations will occur in a previously disturbed gravel source.

MAQP #3906-02 application states there are no potential impacts to wetlands or drainage patterns. Areas not mined are planted with sugar beets, corn, or barley. Berms are planted with natural dry land grass mix. Trees and shrubs are also used as vegetative screens. The

application also states that the dewatering of the Knife River gravel source provides water for the Montana Department of Transportation wetland east of the site where waterfowl is highly active.

Specific impacts of operating the proposed project in this area would be minor since the project is located partially within an existing gravel source. Therefore, the Department determined that any effects upon these species would likely be minor and short-lived.

#### H. Demands on Environmental Resources of Water, Air, and Energy

Due to the relatively small size of the project, only small demands on environmental resources would likely be required for proper operation. Only small quantities of water would be required for dust suppression of particulate emissions being generated at the site. In addition, impacts to air resources would be expected to be minor because the source would be considered a minor industrial source of emissions, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed as described in Section 7.F of this EA. Furthermore, Knife River has taken federally-enforceable limitations to remain a minor source of emissions with respect to Title V.

#### I. Historical and Archaeological Sites

The Department contacted the Montana History Society – State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction and operation. According to their records, there have been several previously records sites within the designated search locales. In addition to the sites, there have been a few previously conducted cultural resource inventories done in the areas.

As long as no disturbance or alteration to structures over fifty years of age, SHPO feels “that there is a low likelihood cultural properties will be impacted”. Therefore, it is unlikely that the project would affect any historic or archaeological site and no resulting impacts.

#### J. Cumulative and Secondary Impacts

The operation of the proposed project would likely cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate air emissions. Noise would also be generated from the site. Emissions and noise would cause minimal disturbance because the facility would be expected to operate in areas designated and used for such operations on a temporary and seasonal basis. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as outlined in MAQP #3096-02. Overall, any cumulative and or 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 operation of the proposed project would be expected to cause minor disruption to the social structures and mores in the area because the source would be a minor industrial source in an area that is primarily agricultural. The facility would only have intermittent operations. Further, the facility would be required to operate according to the conditions that would be placed in MAQP #3096-02. Therefore, the existing social structures and mores would experience minor impacts as a result of this permitting action.

B. Cultural Uniqueness and Diversity

The impact to cultural uniqueness and diversity of these areas would be minor from the proposed equipment because the site will be located in an area that is an existing industrial site owned by Knife River where access is secure and controlled. Additionally, the facility would be considered a portable source with seasonal and intermittent operations. Therefore, the Department determined that there would be minor effects to cultural uniqueness and diversity.

C. Local and State Tax Base and Tax Revenue

The proposed project would have little, if any impact on the local and state tax base and tax revenue because the facility would be a temporary source and small by industrial standards. The proposed project itself would likely employ three employees for the proposed project. According to the MAQP #3096-02 application, indirectly an additional 15-20 employees would be required for crushing aggregate, hauling asphalt, dispatching trucks, etc. Thus, only minor impacts to the local and state tax case and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue would be expected to be minor because the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The operation of the proposed project would have only a minor impact on local industrial production since the facility would be a minor source of air emissions (by industrial standards). Because minimal deposition of air pollutants would occur on the surrounding land (as described in Section 7.F of this EA), only minor and temporary effects on the surrounding vegetation (i.e. agricultural production) would occur. In addition, the facility operations would be temporary in nature and would be permitted with operational conditions that would minimize impacts upon surrounding vegetation, as described in Section 7.D of this EA.

E. Human Health

MAQP #3096-02 would incorporate conditions to ensure the proposed project 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 the facility would be minimized by the use of a baghouse, water spray, and other conditions established in MAQP #3096-02. Therefore, only minor impacts would be expected upon human health from the proposed drum mix asphalt plant.

F. Access to and Quality of Recreational and Wilderness Activities

Based on the information received from Knife River, no recreational activities or wilderness areas are near the proposed project site. No access to the public is available on the land privately owned by Knife River where the proposed project would be located. Therefore, no impacts to the access to and quality of recreational and wilderness activities would be expected.

G. Quantity and Distribution of Employment

The portable drum mix asphalt plant would only require a few employees to operate and would have seasonal and intermittent operations. The proposed project would be considered a portable source and would not be expected to have long-term effects upon the quantity and distribution of employment in any given area of operation. The application states that 3 employees would be employed as a direct result of the proposed project. Therefore, minor effects upon the quantity and distribution of employment in these areas would be expected.

H. Distribution of Population

The drum mix asphalt plant is a portable industrial facility that would only require a limited number of employees. No individuals would be expected to permanently relocate to this area as a result of operating the drum mix asphalt plant. Therefore, the proposed project would not likely impact the normal population distribution in the initial area of operation or any future operating site.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the drum mix asphalt plant operates. In addition, government services would be required for acquiring the appropriate permits from government agencies. Demands for government services would be minor.

J. Industrial and Commercial Activity

The operation of the portable drum mix asphalt plant would represent only a minor increase in the industrial activity in the proposed area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature. Therefore, only limited additional industrial or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

Knife River would be allowed, by MAQP #3096-02, to operate in areas designated by Environmental Protection Agency as attainment or unclassified for ambient air quality. MAQP #3096-02 contains operational restrictions for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards, as a locally adopted environmental plan or goal for operating at this proposed site. Because the proposed drum mix asphalt plant would be a portable source and would likely have intermittent and seasonal operations, any impacts from the project would be expected to be minor and short-lived.

L. Cumulative and Secondary Impacts

The operation of the facility would cause only 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 a portable and temporary source. Minor increases in traffic would have minor effects on local traffic in the immediate area. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Further, this facility may be operated in conjunction with other equipment owned and operated by Knife River, but any cumulative impacts upon the social and economic aspects of the human environment would likely be minor and short-lived. Thus, only minor and temporary cumulative effects would be expected to the local economy.

*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 operation of a portable drum mix asphalt plant; MAQP #3096-02 provides conditions and limitations to ensure the facility would 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: Tashia Love  
Date: February 12, 2013