



PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: July 16, 2008

Name of Applicant: Northern Improvement Company

Source: Drum Mix Asphalt Plant

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Permit Application Number 4236-00.

Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Resources Management Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by August 15, 2008. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

Departmental Action: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the above address. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

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 by the date stated in the Department's Decision on this permit. 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, MT 59620.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-3490

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Environmental Engineer, P.E.
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VW: kd
Enclosures

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

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Northern Improvement Company

Air Quality Permit Number: 4236-00

Preliminary Determination Issued: July 15, 2008

Department Decision Issued:

Permit Final:

1. *Legal Description of Site:* NE ¼ of Section 7, Township 21 North, Range 59 East, in Richland County, MT.
2. *Description of Project:* NIC owns and operates a portable drum mix asphalt plant with a maximum production capacity of 400 TPH. The plant includes a drum dryer with venturi scrubber, burner, weigh/load-out silo, raw aggregate storage piles, 4-bin aggregate feed system, slat conveyor, 650 hp diesel-fired generator, oil tank heater, heated and un-heated storage tanks, and associated material handling and transfer equipment and operations.

The proposed action is to issue a Montana Air Quality Permit #4236-00 allowing construction/assembly of the plant initially located at an existing gravel pit near Sidney, MT. Construction of the existing gravel pit at this location was permitted under Montana's Open Cut Mining Program in 2007. Potential environmental impacts for construction of the gravel pit, at large, were analyzed at that time (Open Cut Operating Permit #FSC-089, on file with the Department), in accordance with the Montana Environmental Policy Act (MEPA).

The proposed asphalt production facility is a portable operation; therefore, it can be expected to move and operate at various locations throughout Montana. This MEPA analysis is intended to evaluate the potential impacts of this plant at any operational location.

3. *Objectives of Project:* The objective of construction and operation of the asphalt plant at its initial location is to provide material for support of construction projects in the area.
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 for the proposed asphalt plant. The "no-action" alternative is to deny the proposed air quality permit disallowing construction and operation of the asphalt plant and would result in existing site conditions, including the permitted gravel pit. However, the Department does not consider the "no-action" alternative to be appropriate because NIC has demonstrated compliance with all applicable rules and regulations as required for air quality 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 Best Available Control Technology (BACT) analysis, would be included in Permit #4236-00.

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

MEPA analysis for the permitted gravel pit (permit number FSC-089) identified 3 occurrences of the Meadow Jumping Mouse (Montana Natural Heritage Program), and that deer, upland game birds, and waterfowl use this site seasonally. The permitted gravel pit determination was that no habitat for special species occurs on this site and that no special species would be impacted. It was also determined there would be a minimal impact on wildlife in the area and no impact on aquatic species. Minimal disturbance is proposed for the asphalt plant; therefore, only minor effects on terrestrial and aquatic life and habitats would be expected as a result of new equipment operations or from pollutant deposition from the portable asphalt plant.

At all locations the asphalt plant would typically operate within a previously disturbed open-cut pit used for such purposes. Therefore, there would be a low likelihood of additional disturbance to any known terrestrial and aquatic life and habitats given any previous industrial disturbance in any given area of operation. It is unlikely that the proposed asphalt plant would have significant impacts in a given area of operation.

B. Water Quality, Quantity, and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation and for pollution control for the proposed equipment operation. Water use would be relatively small; therefore, impacts on water quantity are expected to be minor. No impacts to ground water quality from pollutant infiltration are expected because PM suppression will be on an as-needed basis; saturated conditions will not be maintained within material or along haul roads. NIC proposes to utilize scrubber effluent ponds and their intent to obtain a storm water permit for the facility. Storm water runoff from the facility would be subject to control and permitting under the Montana Pollutant Discharge Elimination System, as applicable. Potential impacts to state water quality, quantity, and distribution are expected to be minor.

C. Geology and Soil Quality, Stability, and Moisture

Potential impacts to geology and soil quality, stability and moisture were previously analyzed for permitting of construction of a gravel pit. The proposed asphalt plant would have only minor impacts on soils in any proposed site location because the facility would remain a relatively small industrial operation, would continue to use only relatively small amounts of water for pollution control, and would only have seasonal or intermittent operations. Therefore, there is a low likelihood that assembly and operation of the plant in any locations that will cause significant additional impacts to geology and soil quality, stability, and moisture given the likelihood of previous industrial disturbance at the given area of operation.

D. Vegetation Cover, Quantity, and Quality

Previous MEPA analysis for the permitted gravel pit identified this site as an irrigated alfalfa hayfield with no shrubs or trees present. The analysis for permitting of the gravel pit concluded potential impacts to this site were insignificant and short-term. The proposed asphalt plant site is a plowed field and currently in a fallowed state. Because minimal land disturbance is included in this proposed action, potential impacts to vegetation cover, quantity, and quality are minor due to potential deposition of relatively minor amounts of air pollutions emitted from the asphalt plant operations.

E. Aesthetics

The proposed asphalt plant would be visible and would create additional noise while in operation. However, Permit #4236-00 would include conditions to control emissions, including visible emissions, from the proposed equipment. Also, because the asphalt plant would be portable and would operate on an intermittent and seasonal basis and would typically locate within a previously permitted open-cut pit, any visual and noise impacts would be minor and short-lived.

F. Air Quality

The air quality impacts from the asphalt plant would be minor because Permit #4236-00 would include conditions limiting the opacity from the plant, as well as requiring water spray, as necessary, and other means to control air pollution. Furthermore, Permit #4236-00 would limit total emissions from the proposed equipment, and any additional equipment owned and operated by NIC, to 250 TPY or less at any given operating site, excluding fugitive emissions.

G. Unique Endangered, Fragile, or Limited Environmental Resources

Previous MEPA analysis for the permitted gravel pit identified three occurrences of the Meadow Jumping Mouse, the State Champion cottonwood tree (*Populus deltoides*) across the river from the site, and six fish species in the river. The analysis for permitting of the gravel pit

concluded that no habitat for these species occurs on this site and no special species would be impacted. Research for this analysis did not identify additional endangered, fragile or limited species of concern.

Permit #4236-00 would regulate the proposed asphalt plant while located at various locations throughout the state. Most operations would take place within existing and previously disturbed industrial gravel pits thereby resulting in only minor impacts to the industrial area. Further, given the temporary and portable nature of the operations, any impacts would be minor and short-lived. In addition, operational conditions and limitations in Permit #4236-00 would be protective of these resources by limiting overall impacts to the surrounding environment. Because minimal land disturbance is proposed beyond that already permitted for the gravel pit in this proposed action, no potential impacts are likely to occur.

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

Due to the relatively small size of the facility and relatively low potential to emit regulated air pollutants, the asphalt plant would result in only minor demands on the environmental resources of water, air, and energy for normal operations. Small quantities of water would be used for dust suppression and would control particulate emissions generated through equipment operations and vehicle traffic at the site. Energy requirements would be accommodated through the operation of the proposed diesel-fired generator and would be minor due to the relatively small amount of fuel required to operate the generator. In addition, the asphalt plant would operate on an intermittent and seasonal basis thereby minimizing energy demands. Further, impacts to air resources from the new equipment would be minor because the source would remain small by industrial standards, would operate on an intermittent and seasonal basis, and would generate relatively minor amounts of regulated pollutants through normal operations.

I. Historical and Archaeological Sites

No historical or archaeological sites were identified during MEPA analysis for permitting of the gravel pit or during research conducted for this analysis. Minimal ground disturbance is proposed for this action; therefore, it is unlikely that the proposed asphalt plant would impact any historical or archaeological sites.

If, during operations, resources were to be discovered, activities would be halted, or possibly temporarily moved, to another area until the Montana Historical Society - State Historic Preservation Office (SHPO) was contacted and the importance of the site determined.

J. Cumulative and Secondary Impacts

The proposed asphalt plant would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment of a given proposed area of operation because the proposed equipment would generate emissions of regulated air pollutants and noise would be generated from equipment operations. Emissions and noise would cause minor disturbance to a given area because the equipment is relatively small by industrial standards and the facility would be expected to operate in areas designated and typically used for such operations. Additionally, this facility, in combination with the other emissions from equipment operations at the operational site, would not be permitted to exceed 250 TPY of non-fugitive emissions.

Overall, any cumulative or secondary impacts to the above-cited physical and biological resource of the human environment of any given project area would be minor because the proposed asphalt plant would typically operate within areas designated for such operations.

Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts 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 asphalt plant operation would cause no disruption to the social structures and mores in the area because the source would be a minor industrial source of emissions, would be operating at an area previously operating under open-cut permit #FSC-089 for the mining of aggregate, would be separated from the general population, and would only have temporary and intermittent operations. Additionally, the equipment would be required to operate according to the conditions placed in Permit #4236-00. Thus, no impacts upon social structures or mores are expected to result.

B. Cultural Uniqueness and Diversity

The asphalt plant operation would cause no disruption to the above-cited economic and social resources or cultural uniqueness and diversity of the human environment in any given area of operation because the source would be a minor industrial source of emissions, would typically operate in an existing industrial site used for such purposes, and would operate on a temporary basis. The predominant use of the surrounding area would not change as a result of the proposed project.

C. Local and State Tax Base and Tax Revenue

The asphalt plant operations would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a minor industrial source and would conduct only seasonal and intermittent operations. The facility would require the use of only a few employees. Thus only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue would be minor because the source would be portable and money generated for taxes would be widespread.

D. Agricultural or Industrial Production

Previous MEPA analysis for gravel pit construction permitted concluded potential impacts to agricultural or industrial production would be minor and temporary. As minimal (approximately 5 acres) disturbance is proposed by this action, minimal impacts to agricultural production are expected. Minor impacts to industrial production are expected as the facility described in the proposed action produces a construction material. However, the proposed operation remains relatively small by industrial standards. Overall, potential impacts to agricultural and industrial production are expected to be minor.

E. Human Health

Permit #4236-00 would include limits and conditions to ensure that the asphalt plant facility would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. The air emissions from this facility would be minimized by the use of water spray and other process limits. Therefore, only minor impacts would be expected on human health from the proposed asphalt plant facility.

F. Access to and Quality of Recreational and Wilderness Activities

Noise from the facility would be minor because the asphalt plant operation would be small by industrial standards and would initially and typically operate in areas used for such operations. As a result, the amount of noise generated from the asphalt plant operation would be minimal for the area. Therefore, any impacts to the quality of recreational and wilderness activities created by the proposed project would be expected to be minor and short-lived. Similarly, the asphalt plant operation would initially and typically operate within areas designated for such operations; therefore, impacts to access to recreational and wilderness areas are expected to be minor or insignificant. Overall potential impacts to access to and quality of recreational and wilderness activities are expected to be minor.

G. Quantity and Distribution of Employment

The asphalt plant operation is a small, portable source, with seasonal and intermittent operations and would have only minor impacts upon the quantity and distribution of employment in this area of operation. NIC would be expected to utilize only a few employees for the project. Therefore, only minor effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The proposed asphalt plant operation is small and would only require a few employees to operate thereby resulting in little, if any, permanent immigration into or emigration out of a given area. Therefore, the proposed project would not impact the above-cited economic and social resources of the human environment at the initially proposed or any other given operating site.

I. Demands for Government Services

Minor increases would be seen in traffic on existing roadways in the area while the asphalt plant operation is in progress. In addition, 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. Overall, any demands for government services would be minor.

J. Industrial and Commercial Activity

The asphalt plant would represent only a minor increase in the industrial activity in the proposed initial or any future area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature. Very little, if any, additional industrial or commercial activity would be expected as a result of the proposed operation.

Overall, any impacts to industrial and commercial activity of the human environment from the project area would be minor because the proposed asphalt plant operation would initially, and typically, operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals in the initial area of operation or any future operating site since Permit #4236-00 would allow for operations at various unknown locations throughout the state. Permit #4236-00 would contain limits 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 facility would be a small and portable source, and would have intermittent and seasonal operations, any impacts from the facility would be minor and short-lived. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

However, if the plant moved to an area classified as nonattainment for PM₁₀, the operation would be required to apply for and receive an addendum to Permit #4236-00 prior to operation at the site. The addendum would include more restrictive requirements to protect the nonattainment area from further degradation. The state standards would be protective of any proposed area of operation.

L. Cumulative and Secondary Impacts

The asphalt plant operations would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate areas of operation because the source is a portable and temporary source. Minor increases in traffic would have minor effects of 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.

Overall, the proposed asphalt plant operation would result in only minor and temporary secondary and cumulative impacts to the social and economic aspects of the human environment of the initially proposed and any future operating site.

Recommendation: An Environmental Impact Statement (EIS) is not required. Permit #4236-00 includes conditions and limitations to ensure the facility will operate in compliance with all applicable air quality rules and regulations. In addition, all impacts associated with the proposed action are expected to be insignificant or minor.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor; therefore, an EIS is not required.

Other groups or agencies contacted or which may have overlapping jurisdiction: Department of Environmental Quality – Industrial and Energy Minerals Bureau (Permit #FSC-089), Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Heritage Program.

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

EA prepared by: K. Doran

Date: 07/08/08