



Montana Department of
ENVIRONMENTAL **Q**UALITY

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January 5, 2009

Jeremiah Bowser
Helena Sand & Gravel, Inc.
P.O. Box 5960
Helena, MT 59604-5960

Dear Mr. Bowser:

Air Quality Permit #4262-00 is deemed final as of January 3, 2009, by the Department of Environmental Quality (Department). This permit is for a portable drum-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,

Vickie Walsh
Air Permitting Program Supervisor
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VW:BL
Enclosure

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

Issued To: Helena Sand & Gravel, Inc.

Air Quality Permit Number: 4262-00

Preliminary Determination Issued: November 14, 2008

Department Decision Issued: December 17, 2008

Permit Final: January 3, 2009

1. *Legal Description of Site:* Section 19, Township 10 North, Range 2 West, in Lewis & Clark County, Montana.
2. *Description of Project:* Helena Sand & Gravel, Inc. owns and operates a portable drum-mix asphalt plant with a maximum production capacity of 400 TPH. The plant includes feed bins, transfer conveyors, scalping screen, drum dryer/mixer, elevating conveyor, storage silos, primary fines collector, baghouse, and associated equipment. The proposed action is to issue a Montana Air Quality Permit #4262-00 allowing the construction and operation of the plant in Lewis & Clark County, Montana, and various locations across Montana.

Construction of the existing gravel pit at this location was permitted under Montana's Open Cut Mining Program (Permit # HSG-017). Potential environmental impacts for construction of the gravel pit at large were analyzed at that time (on file at the Department), in accordance with the Montana Environmental Policy Act (MEPA). This draft environmental assessment for the asphalt plant is tiered to that conducted for the Open Cut Operating Permit analysis.

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 evaluated potential impacts of this plant at any operational location.

3. *Objectives of Project:* The objective of construction and operation of the asphalt plant at this 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 to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because HSG 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 Permit #4262-00.

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

Terrestrials could use the same area as the asphalt plant operations. However, the asphalt plant would be considered a minor source of emissions, by industrial standards, with intermittent and seasonal operations. No additional disturbance to that permitted for construction of the gravel pit is proposed; therefore, potential impacts to terrestrial life and habitats are expected to be minor due increased noise in the area and deposition of relatively minor amounts of air pollutants emitted from the portable asphalt plant.

Impacts on aquatic life and habitats could result from asphalt plant operations, but such impacts would be minor. 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 aquatic life and habitats given any previous industrial disturbance in any given area of operation. The minor amounts of water used in controlling dust emissions may have a minor impact on aquatic life and habitat by runoff. Lastly, the asphalt plant will be considered a minor source of emissions (with seasonal and intermittent operations) and, would only have minor disposition that could reach nearby water bodies. Overall, minor and temporary impacts to aquatic life and habitat would be expected from the proposed plant operation.

B. Water Quality, Quantity and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation and for emission pollution control during operations. 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, and saturated conditions will not be maintained within material or along haul roads. Therefore, potential impact to state water quality, quantity and distribution are expected to be minor.

C. Geology and Soil Quality, Stability and Moisture

The asphalt plant would typically operate within a previously disturbed open-cut pit used for such purposes. There is a low likelihood that assembly and operation of the plant in any location 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. The facility is relatively small in size, would use only relatively small amounts of water for pollution control, and would only have seasonal and intermittent operations. Any impacts to geology and soil quality, stability, and moisture at any proposed operational site would be minor.

D. Vegetation Cover, Quantity, and Quality

There is a low likelihood that assembly and operation of the plant in any location will cause significant additional impacts to vegetative cover, quantity, and quality given the likelihood of previous industrial disturbance at the given area of operation. Furthermore, the facility would be a minor source of emissions, by industrial standards, and would typically operate in areas previously designated for industrial purposes, thus impacts from the asphalt plant facility emissions would be minor and typical. As described in Section 7.F of this EA, the amount of air emissions from this facility would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, because the water usage is minimal, as described in Section 7.B, and the associated soil disturbance is minimal, as described in Section 7.C, corresponding vegetative impacts would be minor. Overall, any impacts would be minor because the proposed asphalt plant operation would typically operate within areas designated for such operations.

E. Aesthetics

The initial site location would be visible from residential neighborhoods, Lake Helena Drive, and Valley Drive. According to the Open Cut permit for that initial site, the asphalt hot plant would be placed on a pad set 15 feet below grade to reduce aesthetic and noise impacts. Stockpiled recycled asphalt would be kept adjacent to the asphalt plant on the below-grade pad and would not be visible from above grade. The open cut permit requires that HSG plant, maintain, and, if necessary, replace vegetation on berms and vegetation planted for visual screening as determined necessary by the Department to minimize visual impacts on surrounding neighborhoods to the degree practicable.

In addition Permit #4262-00 would include conditions to control emissions, including visible emissions, from the proposed equipment. At all locations the asphalt plant would typically operate within a previously disturbed open-cut pit used for such purposes. Therefore, there is a low likelihood that assembly and operation of the plant in any location will cause significant additional impacts to aesthetics given the likelihood of previous industrial disturbance at the given area of operation.

F. Air Quality

The air quality impacts from the asphalt plant operations would be minor because Permit #4262-00 would include conditions limiting the opacity from the plant, as well as requiring fabric filter baghouse, water spray as necessary, and other means to control air pollution. Further, Permit

#4262-00 would limit total emissions from the asphalt plant operation and any additional equipment owned and operated by HSG to 250 tons/year or less at any given operating site, excluding fugitive emissions.

Small amounts of deposition generated from the asphalt plant operation would be minimal because the pollutants emitted would be well controlled, widely dispersed (from such factors as wind speed and wind direction), and would result in only minor impacts to the surrounding environment. Similarly, air pollutant deposition and impacts due to emissions from the asphalt plant would be temporary because the facility is not permitted to remain in one location more than 12 months. Overall, any air quality impacts resulting from the proposed asphalt plant operation would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program (MNHP) to identify species of special concern that may be found in the area where the proposed plant will initially locate. Search results concluded that there are 3 species of concern in the area. The area, in this case, is defined by the section, township, and range of the proposed site, with an additional 1-mile buffer. The species of special concern are the gray wolf, the bald eagle, and the wedge-leaved saltbush.

Since the gray wolf is regional, it is unlikely that the installation of the asphalt plant in a semi-developed area would have any impact on these animals. Likewise, the bald eagle should not be impacted since it is primarily a species of riparian habitats, although it can have a range of several miles from its nest. Lastly, the saltbush, a vascular plant, covers a region that begins about 1 mile from the area and extends west away from the asphalt plant. There is no evidence that this plant will be impacted by the asphalt plant.

At all locations the asphalt plant would typically operate within a previously disturbed open-cut pit used for such purposes. Therefore, there is a low likelihood that assembly and operation of the plant in any location will cause significant additional impacts to unique, endangered, fragile or limited resources given the likelihood of previous industrial disturbance at the given area of operation. Given the temporary and portable nature of the operations, any impacts would be minor and short-lived. In addition, operational conditions and limitations in the permit would be protective of these resources by limiting overall impacts to the surrounding environment.

H. Demands on Environmental Resource 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 operation 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 use of electricity obtained via land line power. In addition, the asphalt plant operation would be temporary as it is not permitted to remain at this location for more than 12 months. Further, impacts to air resources would be minor because the source would be small by industrial standards, and would generate relatively minor amounts of regulated pollutants through normal operations.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society, State Historic Preservation Office (SHPO) to identify cultural resources recorded in the area proposed for the HSG asphalt plant. SHPO identified one cultural resource recorded in the area: Site 24LC1062, the Helena Valley

Irrigation Canal, located on the northern border of the property. According to the Open Cut Mining Program EA, the canal is located well over 1000 feet away from the proposed asphalt operations area. HSG is not proposing to discharge any water to the canal or change the drainage patterns, so it is unlikely this resource would be adversely impacted.

At all locations the asphalt plant would typically operate within a previously disturbed open-cut pit used for such purposes. Therefore, there is a low likelihood that assembly and operation of the plant in any location will cause significant additional impacts to historical and archaeological sites given the likelihood of previous industrial disturbance at the given area of operation.

J. Cumulative and Secondary Impacts

The asphalt plant would cause minor cumulative and secondary impacts to the proposed area of operation because the facility would generate emissions of regulated air pollutants and noise. This facility will be operated in conjunction with other equipment owned and operated by HSG as part of a sand and gravel operation that is permitted under the Open Cut Mining Program. The other equipment, which will be permitted separately by the Department, may include a crusher, a wash plant, and a concrete batch plant. However, the asphalt plant facility, in combination with the other emissions from equipment operations at the operational site, would not be permitted to exceed 250 tons per year of non-fugitive emissions.

Department believes the cumulative impacts to air quality will not violate applicable air quality standards. At all locations the asphalt plant would typically operate within a previously disturbed open-cut pit and in conjunction with other portable operations used for such purposes. Therefore, there is a low likelihood that assembly and operation of the plant in any location will cause significant additional cumulative and secondary impacts given the likelihood of previous industrial disturbance at the given area of operation.

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 proposed project would not have any effect on social structures and mores of the proposed area of operation. The project is temporary, seasonal, and small by industrial standards and operations would initially and typically take place in an existing industrial location. The predominant use of the surrounding area would not change as a result of the proposed project. Further, the facility would be required to operate according to the conditions that would be placed in Permit #4262-00, which would limit the effects to social structures and mores because air emissions would be limited from compliance with the established permit conditions.

B. Cultural Uniqueness and Diversity

The asphalt plant operation would cause no disruption to the 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 initially and 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 the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

Previous MEPA analysis for the permitted gravel pit in which the asphalt plant would initially locate concluded potential impacts to agricultural or industrial production would be minor and temporary. As no additional land disturbance is proposed by this action no 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

The proposed project would result in the emission of air pollutants. However, Permit #4262-00 would include limits and conditions to ensure that the facility would be operated in compliance with all applicable air quality rules and standards. HSG would be required to use BACT and maintain compliance with all ambient air quality standards (including secondary standards). These standards are designed to be protective of human health. Overall, any health impacts resulting from the proposed project would be minor.

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 proposed asphalt plant would require only a few employees to operate the equipment. Furthermore, the proposed project would be relatively small, and would have seasonal and intermittent operations requiring no permanent immigration in to, or emigration out of, a given area. Therefore, the proposed project would have no significant effects upon the quantity and distribution of employment in this area.

H. Distribution of Population

The proposed operations would not disrupt the normal population distribution in any given area. The proposed asphalt plant would require only a few employees to operate the equipment. Because operations are temporary and seasonal, no individuals would be expected to permanently relocate to any area as a result of operating the facility.

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 proposed project would have only minor impacts on local industrial and commercial activity because the proposed project would initially and typically operate in an existing industrial location and would not require any additional industrial construction or result in any additional industrial production. The asphalt plant operation 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.

K. Locally Adopted Environmental Plans and Goals

Permit #4262-00 allows HSG to operate in areas designated by the EPA as attainment or unclassified for ambient air quality. Permit #4262-00 would contain limits for protecting air quality and for ensuring facility emissions are in compliance with any applicable ambient air quality standards. However, since HSG may operate at various locations across Montana, HSG is required to apply for and receive an addendum to operate in or within 10 km of certain PM₁₀

nonattainment areas. 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 as proposed at its initial location 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 operations are relatively small by industrial standards.

The source would be a portable and temporary source. Few, if any, other industrial operations would be expected to result from the permitting and operation of this facility. 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.

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: No Environmental Impact Statement (EIS) is required. Permit #4262-00 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.

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, Industrial and Energy Minerals Bureau; Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Brent Lignell

Date: October 28, 2008