



Montana Department of  
**ENVIRONMENTAL QUALITY**

Brian Schweitzer, Governor

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July 27, 2010

Mr. Jeremiah B. Bowser  
Helena Sand and Gravel, Inc.  
P.O. Box 5960  
Helena, MT 59604-5960

Dear Mr. Bowser:

The Department of Environmental Quality (Department) has made its decision on the Montana Air Quality Permit application for a portable crushing and screening operation. The application was given permit number 4555-00. The Department's decision may be appealed to the Board of Environmental Review (Board). A request for hearing must be filed by August 11, 2010. This permit shall become final on August 12, 2010, 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,

Vickie Walsh  
Air Permitting Program Supervisor  
Air Resources Management Bureau  
(406) 444-9741

Shawn Juers  
Environmental Engineer  
Air Resources Management Bureau  
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VW:SJ  
Enclosure

**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:* Helena Sand and Gravel, Inc.

*Montana Air Quality Permit number:* 4555-00

*Preliminary Determination Issued:* 6/25/2010

*Department Decision Issued:* 7/27/2010

*Permit Final:*

1. *Legal Description of Site:* Section 19, Township 10 North, Range 2 West in Lewis and Clark County, Montana
2. *Description of Project:* HS&G proposes to operate a portable crushing and screening plant
3. *Objectives of Project:* The objectives of the project are to crush and sort sand and gravel like materials for various uses.
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 HS&G 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 #4555-00.
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			XX			Yes
B	Water Quality, Quantity, and Distribution			XX			Yes
C	Geology and Soil Quality, Stability and Moisture			XX			Yes
D	Vegetation Cover, Quantity, and Quality			XX			Yes
E	Aesthetics			XX			Yes
F	Air Quality			XX			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			XX			Yes
H	Demands on Environmental Resource of Water, Air and Energy			XX			Yes
I	Historical and Archaeological Sites			XX			Yes
J	Cumulative and Secondary Impacts			XX			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 may use the same area as the crushing and screening operation. The proposed project would be considered a minor source of emissions by industrial standards. Limitations and conditions would be placed in MAQP #4555-00 to minimize these emissions. Minor effects on terrestrial life would be expected.

Impacts on aquatic life may result from storm water runoff and pollutant deposition, but such impacts would be minor as the facility would be a minor source of emissions. Since only a minor amount of air emissions would be generated, only minor deposition would occur. Furthermore, this project would typically operate in an area designated for such activities. Therefore, only minor effects to aquatic life and habitat would be expected from the proposed screening operation.

B. Water Quality, Quantity and Distribution

Water would be required for pollution control for equipment operation. However, pollutant deposition and water use would cause minor impacts as only a small volume of water would be expected to be used and only a small amount of pollution deposition would be expected. Overall, the equipment would be expected to have minor impacts to water quality, quantity, and distribution in the area of operation.

C. Geology and Soil Quality, Stability and Moisture

The facility would be a minor source of emissions by industrial standards and would typically operate in areas previously designated and used for crushing/screening operations. Therefore, impacts from the emissions from the crushing and screening operation would be expected to be minor.

The project would have only minor impacts on soils in any proposed site location because the facility is relatively small in size, would use relatively small amounts of water for pollution control, and would be expected to have seasonal and intermittent operations. Therefore, any affects upon geology and soil quality, stability, and moisture at any proposed operational site would be expected to be minor.

D. Vegetation Cover, Quantity, and Quality

Because the equipment at the facility would be a minor source of emissions by industrial standards and would typically operate in areas previously designated and used for crushing/screening operations, impacts from the emissions of the screening operation would be minor. The amount of allowable air emissions from this project would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor.

E. Aesthetics

The project would be visible and would create additional noise while operating. However, MAQP #4555-00 would include conditions to control emissions, including visible emissions, from the plant. Also, because the screening operation would be portable, would be expected to operate on an intermittent and seasonal basis, and would typically locate within an area designated for such activities, any visual and noise impacts would be expected to be minor and short-lived.

F. Air Quality

The air quality impacts from the crushing and screening operation would be expected to be minor because the facility would be relatively small and be required to operate using appropriate air pollution controls. MAQP #4555-00 would include conditions limiting the opacity from the plant, as well as requiring water spray bars as necessary to control air pollution. Furthermore, this facility would be expected to be used on a temporary and intermittent basis, thereby further reducing potential air quality impacts from the facility. Air quality impacts would be expected to be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

Emissions from the proposed project may impact unique, endangered, fragile, or limited environmental resources located in a given proposed project area. However, allowable emissions and resulting impacts from the project would be minor due to the low concentration of those pollutants emitted.

MAQP #4555-00 and Addendum #1 would cover the proposed crushing/screening operation while located at various locations throughout the state. Most operations would be expected to 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 expected to be minor and short-lived. In addition, operational conditions and limitations in MAQP #4555-00 and Addendum #1 would be protective of these resources by limiting overall impacts to the surrounding environment.

The Department has previously contacted the Montana Natural Heritage Program (MNHP) to identify species of special concern that may be found in the area where the proposed plant would initially locate. Search results concluded that there were 3 species of concern in the area. The area, in this case, was defined by the section, township, and range of the proposed site, with an additional 1-mile buffer. The species of special concern were 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 crushing and screening equipment would have any impact on these animals, as this site already contains industrial activity. 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. The plant is estimated to be outside of Zone III, which represents most of a home range used by eagles during the nesting season. Zone III usually includes all suitable foraging habitat within 2.5 mi (4 km) of all nest sites in the breeding area that have been active within 5 years. Lastly, the saltbush, a vascular plant, covers a region that begins about 1 mile from the area and extends west away from the area. As allowable emissions are limited, and deposition is expected to be minimal, minimal, if any, effects to the saltbush would be expected.

At all locations the crushing/screening operation 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 would 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 expected to 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.

Overall, any impacts to the unique endangered, fragile, or limited environmental resources of the project area would be minor because the proposed crushing/screening operation 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 expected to be minor.

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

The project would require only small quantities of water, air, and energy for proper operation. Water would be used for dust suppression and would control particulate emissions being generated at the site. However the total usage would be expected to be relatively small. Energy requirements would be required, and consist mostly of on-site diesel fired generators. Any impacts to water, air, and energy resources in any given area would be expected to be minor.

#### I. Historical and Archaeological Sites

The Department had previously contacted the State Historic Preservation Office (SHPO) to request a cultural resource file search for the project location to aid the Department in the assessment of impacts to historical and archeological sites. 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 1,000 feet away from the proposed operations area. HS&G 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.

Crushing and screening operations generally occur within areas designated for such purposes, such as areas for which an open cut permit has been obtained. There would be a low likelihood of disturbance to any known archaeological or historical site given any previous industrial disturbance in any given area of operation. Therefore, it is unlikely that the proposed crushing/screening plant would impact any historical or archaeological sites in any given area of operation.

J. Cumulative and Secondary Impacts

The proposed project would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate emissions. Noise would also be generated from the site. Emissions and noise would cause minimal disturbance because the equipment is small and the facility would be expected to operate in areas designated and used for such operations. The potential impacts to the individual physical and biological considerations above were minor. Collectively, any cumulative or secondary impacts to the physical and biological aspects of the human environment would be expected to 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			XX			Yes
B	Cultural Uniqueness and Diversity			XX			Yes
C	Local and State Tax Base and Tax Revenue			XX			Yes
D	Agricultural or Industrial Production			XX			Yes
E	Human Health			XX			Yes
F	Access to and Quality of Recreational and Wilderness Activities			XX			Yes
G	Quantity and Distribution of Employment			XX			Yes
H	Distribution of Population			XX			Yes
I	Demands for Government Services			XX			Yes
J	Industrial and Commercial Activity			XX			Yes
K	Locally Adopted Environmental Plans and Goals			XX			Yes
L	Cumulative and Secondary Impacts			XX			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 result in minor, if any, impacts to social structures and mores. The project would typically operate in an area designated for crushing and screening activities. Furthermore, the operations are expected to be intermittent and seasonal.

B. Cultural Uniqueness and Diversity

The proposed project would result in minor, if any, impacts to cultural uniqueness and diversity. The project would typically operate in an area designated for such activities. Furthermore, operations are expected to be intermittent and seasonal. Only minor changes in employment would be expected.

C. Local and State Tax Base and Tax Revenue

The proposed project would result in minor, if any, impacts to the local and state tax base and tax revenue. The equipment proposed would not be expected to require any more than a few additional employees.

D. Agricultural or Industrial Production

The equipment would typically operate in areas previously designated and used for crushing/screening operations. The proposed project would have a minor impact on local industrial production since the project would increase air emissions slightly.

Conditions and limitations placed in MAQP #4555-00 would ensure only a minor increase in allowable air emissions, with minimal deposition of air pollutants. Therefore, deposition on the surrounding land and vegetation would be expected to be minor. Any affects to agricultural production would be expected to be minor.

E. Human Health

Conditions would be incorporated into MAQP #4555-00 to ensure that the facility would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to protect human health. The air emissions from this project would be required to be minimized by the use of water spray.

F. Access to and Quality of Recreational and Wilderness Activities

This facility would typically be located on previously disturbed property and would not be expected to impact access to recreational and wilderness activities. Minor impact on the quality of recreational activities might be created by noise. Visible air emissions would be minimized as a result of limitations placed in the MAQP and the expected temporary and portable nature of the operation.

G. Quantity and Distribution of Employment

This facility would be a small, portable operation. Therefore, this project would not be expected to have any more than a minor effect to the quantity and distribution of employment in any given area of operation.

H. Distribution of Population

The facility would be small and temporary in nature with very few employees. Therefore, the facility would be expected to have little, if any, impact on the normal population distribution in the area of operation or any future operating site.

I. Demands for Government Services

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, demands for government services would be minor.

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, and be portable and temporary in nature.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals. The proposed project would be allowed by its Montana Air Quality Permit to operate in areas designated by EPA as attainment or unclassified for ambient air quality. An addendum would be required to operate in or within 10 km of a PM<sub>10</sub> nonattainment area. The permit would contain maximum capacity and opacity limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards. Because the facility would be small and portable, any impacts from the project would be minor.

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.

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 a portable crushing and screening operation. MAQP #4555-00 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: Shawn Juers

Date: 6/11/2010