Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
P. O. Box 200901 Helena, MT 59620-0901 (406) 444-2544 Website: www.deq.mt.gov

PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: July 22, 2009

Name of Applicant: Helena Sand & Gravel

Source: Portable rock crushing/screening facility

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 3167-04.

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 21, 2009. 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

Ed Warner
Environmental Engineer
Air Resources Management Bureau
(406) 444-2467

VW:EW
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: Helena Sand & Gravel
P.O. Box 5960
Helena, MT 59604

Montana Air Quality Permit number: 3167-04

Preliminary Determination Issued: July 22, 2009
Department Decision Issued:
Permit Final:

1. *Legal Description of Site*: Legal Description of Site: MAQP #3167-04 would apply while operating at any location in Montana, except those areas having a Department-approved permitting program and areas considered tribal lands. MAQP #3167-04 and Addendum #3 would allow the portable crushing/screening plant to operate in or within 10 km of PM_{10} nonattainment areas (Libby, Kalispell, Columbia Falls, Whitefish, Thompson Falls, and Butte) during the summer season (April 1-September 30) and within the locations listed in Section II.A of Addendum #3 during the winter season (October 1-March 31).

2. *Description of Project*: The project would consist of the addition of a cone crusher with a maximum production rate of 350 TPH, a wash plant with a maximum production capacity of 400 TPH, and the corresponding material handling equipment for the new crusher and wash plant to the facility. In addition, the project includes updates to the maximum production capacities of some of the existing equipment based on discussions between Helena Sand & Gravel and the Department. These corrections are as follows:

    - The jaw crusher has a maximum capacity of 700 TPH rather than 400 TPH
    - Both screens have a maximum capacity of 350 TPH each (700 TPH combined) rather than 350 TPH for one and 600 TPH for the other
    - The diesel engine associated with the 1,500 kW generator has a maximum power rating of 2,220 hp rather than an estimated 2,012 hp.

    The project would update the MAQP and Addendum with the corrected maximum production capacities and new equipment. These updates result in changes to the potential emissions of the facility which has the affect of reducing the allowable annual hours of operation of the diesel generator to maintain the facility's status as a minor source of emissions. In addition, the changes also result in a reduction of the allowable facility hours of operation during the winter season (October 1 – March 31) in or within 10 km of certain PM_{10} nonattainment areas in order to not cause or contribute to a violation of the NAAQS in a PM_{10} nonattainment area.

3. *Objectives of Project*: The proposed plant would create additional business and revenue for Helena Sand & Gravel and provide for varied construction activity and proposed utility infrastructure requiring sand and gravel materials, state-wide.

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 Helena Sand & Gravel 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 #3167-04 and Addendum #3.

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 would use the same area as the crushing/screening operations. The crushing/screening operations would be considered a minor source of emissions, by industrial standards, with intermittent and seasonal operations. Therefore, only minor effects on terrestrial life and habitats would be expected as a result of equipment operations or from pollutant deposition.

Impacts on aquatic life and habitats could result from storm water runoff and pollutant deposition, but such impacts would be minor as the facility would be a minor source of emissions (with seasonal and intermittent operations) and only minor amounts of water would be used for pollution control. Since only a minor amount of air emissions would be generated, only minor deposition would occur. Therefore, only minor and temporary impacts to aquatic life and habitat would be expected from the proposed crushing/screening operation.

Overall, any impacts to the terrestrial and aquatic life and habitats 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 minor. Furthermore, the crushing/screening operation is an existing permitted facility that has applied for a modification to update the permitted equipment. The net emission increases for all regulated air pollutants is relatively minor and would not have any impacts other than minor impacts to terrestrial and aquatic life and habitats.

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 equipment operations. However, water use would only cause a minor disturbance to these areas, since only relatively small amounts of water would be needed. At most, only minor surface and groundwater quality impacts would be expected as a result of using water for dust suppression because only small amounts of water would be required to control air pollutant emissions and deposition of air pollutant emissions would be minor (as described in Section 7.F of this EA).

Overall, any impacts to the water quality, quantity and distribution 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 characteristics of the area would not change as a result of the proposed project and any associated impacts would be minor. Furthermore, the crushing/screening operation is an existing permitted facility that has applied for a modification to update the permitted equipment. The net emission increases for all regulated air pollutants is relatively minor and would not have any impacts other than minor impacts to water quality, quantity and distribution.

C. Geology and Soil Quality, Stability and Moisture

The crushing/screening operations would have only minor impacts on soils in any proposed site location (due to the construction and use of the crushing/screening facility) because 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. Therefore, any impacts to geology and soil quality, stability, and moisture at any proposed operational site would be minor.

Overall, any impacts to the geology and soil quality, stability and moisture 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 characteristics of the area would not change as a result of the proposed project and any associated impacts would be minor. Furthermore, the crushing/screening operation is an existing permitted facility that has applied for a modification to update the permitted equipment. The net emission increases for all regulated air pollutants is relatively minor and would not have any impacts other than minor impacts to geology and soil quality, stability and moisture.

D. Vegetation Cover, Quantity, and Quality

Because the facility would be a minor source of emissions by industrial standards and would typically operate in areas previously designated and used for aggregate crushing and screening, impacts from the emissions from the crushing/screening facility 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 to the vegetation cover, quantity, and quality 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 characteristics of the area would not change as a result of the proposed project and any associated impacts would be minor. Furthermore, the crushing/screening operation is an existing permitted facility that has applied for a modification to update the permitted equipment. The net emission increases for all regulated air pollutants is relatively minor and would not have any impacts other than minor impacts to vegetation cover, quantity and quality.

E. Aesthetics

The crushing/screening operation would be visible and would create additional noise while in operation. However, MAQP #3167-04 and Addendum #3 would include conditions to control emissions, including visible emissions, from the plant. Also, because the crushing/screening operation is portable, 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.

Overall, any impacts to the aesthetics 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 characteristics of the area would not change as a result of the proposed project and any associated impacts would be minor. Furthermore, the crushing/screening operation is an existing permitted facility that has applied for a modification to update the permitted equipment. The difference in appearance of the operations would be negligible when comparing the existing operation to the proposed operation.

F. Air Quality

The air quality impacts from the crushing/screening operations would be minor because MAQP #3167-04 and Addendum #3 would include conditions limiting the opacity from the plant, as well as requiring water spray bars and other means to control air pollution. Further, MAQP #3167-04 would limit total emissions from the crushing/screening operation and any additional equipment owned and operated by Helena Sand & Gravel to 250 TPY or less at any given operating site, excluding fugitive emissions, and Addendum #3 would be more stringent than the MAQP to address specific NAAQS of PM_{10} nonattainment areas.

The crushing/screening plant would be used on a temporary and intermittent basis and typically operate within an area designated for such operations, thereby further reducing potential air quality impacts from the facility. Additionally, the small and intermittent amounts of deposition generated from the crushing/screening 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. Overall, any air quality impacts resulting from the proposed crushing/screening operation would be minor. Furthermore, the crushing/screening operation is an existing permitted facility that has applied for a modification to adjust the permitted equipment. The net emission increases for all regulated air pollutants is relatively minor and would not have any impacts other than minor impacts to air quality.

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, as detailed in Section V of the permit analysis, any emissions and resulting impacts from the project would be minor due to the low concentration of those pollutants emitted.

MAQP #3167-04 and Addendum #3 would cover the proposed crushing/screening operation 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 MAQP #3167-04 and Addendum #3 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 minor.

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

Due to the relatively small size of the facility, the crushing/screening 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 operation of the permitted diesel-fired electric generator and would be minor due to the relatively small amount of diesel fuel required to operate the generator. In addition, the crushing/screening plant would operate on an intermittent and seasonal basis thereby minimizing energy demands. Further, impacts to air resources would be minor because the source would be small by industrial standards, would operate on an intermittent and seasonal basis, and would generate relatively minor amounts of regulated pollutants through normal operations.

Overall, any impacts to the demands on the environmental resources of water, air and energy 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 minor. Furthermore, the crushing/screening operation is an existing permitted facility that has applied for a modification to update the permitted equipment. The demands on the environmental resources of water, air and energy would remain nearly the same as currently exists from existing permitted equipment.

I. Historical and Archaeological Sites

Typically, the crushing/screening plant would operate within a previously disturbed open-cut pit used for such purposes. According to past correspondence from the Montana Historical Society, State Historic Preservation Office (SHPO), 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 a given area of operation.

J. Cumulative and Secondary Impacts

The crushing/screening operation 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 facility 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 physical and biological aspects of the human environment 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 minor. Furthermore, the crushing/screening operation is an existing permitted facility that has applied for a modification to adjust the permitted equipment. The impacts to the physical and biological aspects of the human environment of the project area would remain nearly the same as currently exists from existing permitted equipment.

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 crushing/screening 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 typically operate in an existing industrial gravel pit used for such purposes, and would operate on a temporary and intermittent basis. Further, the facility would be required to operate according to the limits and conditions that would be included in MAQP #3167-04, which would limit the effects to social structures and mores.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the proposed crushing/screening operation because the proposed facility would be a portable source, the facility would conduct seasonal and intermittent operations, and the facility would utilize a

relatively small number of employees for normal operations. The predominant use of the surrounding area would not change as a result of this crushing/screening operation. Therefore, the cultural uniqueness and diversity of the area would not be impacted.

C. Local and State Tax Base and Tax Revenue

The crushing/screening 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, would conduct only seasonal and intermittent operations, and the facility is an existing permitted crushing/screening operation. The proposed project would not create additional employment opportunities with Helena Sand & Gravel. Thus, no impacts to the local and state tax base and revenue would be expected from employees, but minor impacts to the local and state tax base and revenue could be expected from increased facility production. Furthermore, the impacts to local tax base and revenue would be minor because the source would continue to be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The crushing/screening operations would result in only minor impacts to local industrial production since the facility would be a minor source of aggregate production and air emissions and because the facility is an existing permitted crushing/screening operation. Also, the facility would often times locate in areas adjacent to land that could be used for animal grazing and agricultural production. However, because minimal deposition of air pollutants would occur on the surrounding land, only minor and temporary impacts to the surrounding vegetation and land would occur thereby minimizing any minor impacts to surrounding agricultural land and practices in the area of operations. In addition, the facility operations would be temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts to local agricultural areas.

E. Human Health

MAQP #3167-04 and Addendum #3 would include limits and conditions to ensure that the crushing/screening 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. As described in Section 7.F. of this EA, the air emissions from the proposed facility would be minimized by the use of water spray and other process limits that would be required by MAQP #3167-04 and Addendum #3. Also, the facility would operate on a temporary and intermittent basis and pollutants would be widely dispersed (see Section 7.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed crushing/screening operations.

F. Access to and Quality of Recreational and Wilderness Activities

Noise from the facility would be minor because the crushing/screening operation would be small by industrial standards and would operate in areas typically used for such operations (i.e. existing gravel pit). As a result, the amount of noise generated from the crushing/screening operation would be minimal for the area. Also, the facility would operate on a seasonal and intermittent basis. 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.

G. Quantity and Distribution of Employment

The crushing/screening operation is an existing permitted facility and the proposed project would not require new employees. Therefore, the proposed project would not cause immigration into or emigration out of a given area of operation and the proposed project would not impact the quantity and distribution of employment.

H. Distribution of Population

The proposed project would not require any new employees to operate and the crushing/screening operation would be conducted on a seasonal and intermittent basis thereby resulting in no immigration into or emigration out of a given area. Therefore, the proposed project would not impact the distribution of population.

I. Demands for Government Services

Because the facility is an existing permitted crushing/screening operation, only minor increases would be seen in traffic on existing roadways in the area while the crushing/screening operation is in progress due to possible increased production. 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, demands for government services would be minor.

J. Industrial and Commercial Activity

Although the crushing/screening operation is an existing permitted facility, the proposed project would represent only a minor increase in the industrial activity in the proposed area of operation because the source would continue to be a relatively small industrial source that would be portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

MAQP #3167-04 and Addendum #3 would allow Helena Sand & Gravel to operate in areas designated by the EPA as attainment or unclassified for the National and Montana Ambient Air Quality Standards (NAAQS/MAAQS). MAQP #3167-04 and Addendum #3 would include limits and conditions that would protect air quality and keep facility emissions in compliance with any applicable ambient air quality standards. In addition to the air quality protection provided by MAQP #3167-04 and Addendum #3, the facility would be a portable source and would have intermittent and seasonal operations, thus, any impacts from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

The crushing/screening operations would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source would be a portable and temporary source. No 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 an existing permitted crushing/screening operation and would remain relatively small and temporary, only minor economic impacts to the local economy would be expected from the proposed project. Further, this facility may be operated in conjunction with other equipment owned and operated by Helena Sand & Gravel; however, any cumulative impacts to the social and economic aspects of the human environment would be minor and short-lived. Overall, the proposed project would result in only minor and temporary secondary and cumulative impacts to the social and economic aspects of the human environment of the operating site.

Overall, any cumulative or secondary impacts to the economic and social aspects of the human environment 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 minor.

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/screening facility. MAQP #3167-04 and Addendum #3 include 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

EA prepared by: Ed Warner
Date: June 25, 2009