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: April 29, 2009

Name of Applicant: Gallatin County

Source: Portable Crushing Operation

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 2523-02.

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 May 14, 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

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

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Air Quality Specialist
Air Resources Management Bureau
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VW:TG
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: Gallatin County
205 Baxter Lane West
Bozeman, MT 59718

Montana Air Quality Permit number: 2523-02

Preliminary Determination Issued: 4/29/09
Department Decision Issued:
Permit Final:

1. *Legal Description of Site*: Gallatin operates a portable crushing plant located in SE ¼ of Section 35, Township 1 South, Range 4 East, in Gallatin County, Montana. MAQP #2523-02 would apply while operating at any location in Montana, except within those areas having a Department-approved permitting program, those areas considered to be tribal lands, or those areas in or within 10 km of certain PM_{10} nonattainment areas. An addendum to this air quality permit would be required if Gallatin intends to locate in or within 10 km of certain PM_{10} nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*

2. *Description of Project*: The permit applicant proposes the operation of a jaw crusher as well as increases the maximum design capacity of the existing cone crusher. Currently on site is a portable crushing plant that consists of a cone crusher (up to 230 TPH), a diesel-powered engine/generator (up to 430 tph), and associated equipment.

3. *Objectives of Project*: The object of the project would be to produce road construction material for the county creation of crushed rock. The issuance of MAQP #2523-02 would allow Gallatin to operate the permitted equipment at various locations throughout Montana.

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 Gallatin 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 #2523-02.

6. *Regulatory Effects on Private Property*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined 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

Emissions from the crushers and diesel-powered engine/generator would have only minor impacts upon the terrestrial and aquatic life and habitats in areas where Gallatin may operate. Although air pollutant deposition would occur in the areas where Gallatin operates, the size and temporary nature of the operation, dispersion characteristics of pollutants, and conditions placed in MAQP #2523-02 would result in minor impacts. In addition, the crushers and engine/generator would be relatively small and located at previously disturbed sites. Therefore, the operation of the crushers and engine/generator would present only minor impacts to the terrestrial and aquatic life and habitats in areas of potential operation.

B. Water Quality, Quantity and Distribution

There would only be minor impacts on the water quality, quantity, and distribution because of the relatively small size and temporary nature of the operation. While deposition of pollutants would occur, the Department determined that any impacts from deposition of pollutants would be minor. As described in 7.F. of the EA, due to the conditions placed in MAQP #2523-02 and the size a nature of the facility, the maximum impacts from the air emissions from this facility would be minor. Therefore, the crushers and diesel-powered engine/generator would have only minor impacts to water quality, quantity, and distribution in the proposed area of operation.

C. Geology and Soil Quality, Stability and Moisture

As a result of the operation of the portable crushers and diesel-powered engine/generator, there would be minor impacts to the geology and soil quality, stability, and moisture near the equipment's operational area because of the increased vehicle traffic and deposition of pollutants from operations. As explained in Section 7.F. of this EA, the facility's size,

operational requirements, temporary nature of the operation, and conditions placed in MAQP #2523-02 would minimize the impacts from deposition. In addition, the crushers and engine/generator would be relatively small in size and located at previously disturbed sites, which would also reduce the potential impact to the local geology and soil quality, stability, and moisture.

D. Vegetation Cover, Quantity, and Quality

Because small amounts of pollutant deposition would occur on the surrounding vegetation, there would be minor impacts on the local vegetative cover, quantity, and quality. The crushers and engine/generator would also be relatively small in size and located at previously disturbed sites. As explained in Section 7.F. of this EA, the Department determined that, as a result of the size and temporary nature of the operation and conditions placed in MAQP #2523-02, any impacts on vegetative cover, quantity, and quality from the deposition of pollutants would be minor.

E. Aesthetics

The crushers and diesel-powered engine/generator would be visible and may create some additional noise in the area of operation. The engine/generator would be relatively small and would be used to power the portable facility at previously disturbed sites. Therefore, any aesthetic impact to a given area would generally be minor and temporary.

F. Air Quality

The air quality emission impacts from the diesel-powered engine/generator and crushers would be minor because MAQP #2523-02 would include conditions for protecting air quality. Because of the size and temporary nature of the operation and conditions placed in MAQP #2523-02, impacts from the deposition of pollutants would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to unique, endangered, fragile, or limited environmental resources in the initial proposed area of operation, contacted the Montana Natural Heritage Program (MNHP). Search results concluded there are two occurrences of one such environmental resource found within the defined area. The defined area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer.

Canis Lupus (Gray Wolf) and *Spenopholis intermedia* (Slender Wedgegrass) are species of concern in the area. Only minor and temporary effects to these species of concern would be expected from the proposed operation because pollutants would be dispersed before reaching this species. Also, this operation is located within the same area previously permitted and in an area previously used for aggregate crushing. Given the temporary and portable nature of the operations, any impacts would be minor and short-lived. Additionally, operational conditions and limitations within MAQP #2523-02 would aid in the protection of these resources by protecting the surrounding environment.

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

The operation of the generator/engine and crushers would require only small demands on water, air, and energy as a result of the relatively small size and temporary nature of the facility.

While small amounts of water would be used for dust control on the surrounding roadways and job site, no water would be needed to operate the generator. Furthermore, as described in Section 7.F. of this EA, pollutant emissions generated from the facility would have minimal impacts on air quality in the immediate and surrounding area. The engine/generator would consume energy in the form of diesel fuel, a non-renewable resource. Overall, the equipment is relatively small and would have operational restrictions placed in MAQP #2523-02. Demands and impacts to the environmental resource of air and energy would be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. According to the response from SHPO, there has been one previously recorded site within the designated search locale. Site 24GA0743 is the historic Spain Ferris Ditch. The absence of more cultural properties in the area does not mean that they do not exist but rather may reflect the absence of any previous cultural resource inventory in the area.

As long as there will be no disturbance or alteration to structures over fifty years of age SHPO indicated there is a low likelihood cultural properties will be impacted. SHPO does not recommend a cultural resource inventory. However, should structures need to be altered or if cultural materials be inadvertently discovered during this project SHPO asks that their office be contacted and the site investigated. The crushers and engine/generator would be located within a previously disturbed industrial site. Therefore, the operation of the generator could have a minor not impact on any known historical or archeological sites.

J. Cumulative and Secondary Impacts

The crushers and diesel-powered engine/generator would cause minor impacts on the physical and biological environment because the generator would result in emissions of PM, PM_{10}, NO_x, volatile organic compounds (VOC), carbon monoxide (CO), and sulfur oxides (SO_x). Additional noise impacts from the engine/generator would also be minor. As a result of the temporary or seasonal nature of the facility and conditions and limitations contained within MAQP #2523-02, impacts would be minimized. There is potential for other operations to locate at this site; however, any operations would have to apply for and receive the appropriate permits from the Department prior to operation. These permits would address the environmental impacts associated with the operations at the site.

8. *The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				X		Yes
B	Cultural Uniqueness and Diversity				X		Yes
C	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities			X			Yes
G	Quantity and Distribution of Employment				X		Yes
H	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity			X			Yes
K	Locally Adopted Environmental Plans and Goals			X			Yes
L	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The operation of the crushers and engine/generator would cause no disruption to the social structures and mores in the area because the source is a minor source of emissions (by industrial standards) and would only have intermittent operations. Additionally, the equipment would be expected to operate in an area previously designated and used for aggregate crushing. Further, the facility would be a minor source of air pollution and would be required to operate according to the conditions that would be placed in MAQP #2523-02. Therefore, no impacts are expected upon social structures or mores as a result.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of these areas would not be impacted by the proposed addition of engine/generator and crushers because these sites are expected to be previously designated and used for aggregate crushing. Additionally, the facility would be considered a portable/temporary source with seasonal and intermittent operations. Therefore, predominant use of the surrounding areas would not change as a result of this project.

C. Local and State Tax Base and Tax Revenue

The operation of the engine/generator and crushers would have little, if any, impact on the local and state tax base and tax revenue because the facility is a relatively small industrial source (minor source) and would be used on a seasonal and intermittent basis. No additional full time or permanent employees are expected to be added as a result of issuing MAQP #2523-02. Thus, only minor, if any, impacts to the local and state tax base and revenue could be expected. Furthermore, the impacts to local tax base and revenue would be minor because the source would also be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The engine/generator and crushers would be used at previously disturbed industrial areas; therefore, the Department does not expect that the permitted operation would impact or displace agricultural production. Furthermore, only minor impacts on any local industrial production would be expected because the operation of the facility (and generators/engines) would be temporary and would be relatively small in size.

E. Human Health

MAQP #2523-02 would incorporate conditions to ensure that the engine/generator and crushers would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. Therefore, only minor impacts would be expected upon human health from the proposed crushing facility.

F. Access to and Quality of Recreational and Wilderness Activities

The engine/generator and crushers would typically operate within the confines of an existing open-cut pit. Therefore, only minor impacts upon the access to and quality of recreational and wilderness activities would result. Also, the facility would operate on a seasonal and intermittent basis and would be relatively small by industrial standards. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at a given site would be expected to be minor and intermittent.

G. Quantity and Distribution of Employment

As a result of the relatively small size and temporary nature of the operation, the quantity and distribution of employment in the area would not be impacted. No full time, permanent employees would be expected to be employed as a result of issuing MAQP #2523-02 for the operation of the crushers and diesel-powered engine/generator.

H. Distribution of Population

No individuals would be expected to permanently relocate to a given area of operation as a result of MAQP #2523-02. Also, the facility has only intermittent and seasonal operations. Therefore, the addition of engine/generator and crushers would not disrupt the normal population distribution in a given area of operation.

I. Demands for Government Services

Although minor increases would be observed in the local traffic on existing roads in the area where the facility operates, the operation of the crushers and diesel-powered engine/generator would not result in a need for new, altered, or additional government services.

J. Industrial and Commercial Activity

The operation of the crushers and engine/generator would represent only a minor increase in the industrial activity in any given area because of the small size and the portable and temporary nature of the facility; therefore, only minor additional industrial or commercial activity would result from the generator operations.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals that would affect Gallatin. The facility would be allowed, by permit, to operate in areas designated by EPA as attainment or unclassified. MAQP #2523-02 would contain limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards. Because the facility would be a small and portable source, and would have intermittent and seasonal operations, any effects from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

The operation 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 on local traffic in the immediate areas, thus, having a direct effect on the social environment. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Thus, only minor and temporary cumulative effects would result to the local economy.

Recommendation: No 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 crushing plant and associated equipment. MAQP #2523-02 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: Trista Glazier
Date: April 22, 2009