



PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: October 29, 2012

Name of Applicant: JMAC Resources, Inc.

Source: Portable non-metallic mineral crusher and screening operation with wash plant

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Montana Air Quality Permit Application Number 4814-00.

Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Resources Management Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by November 13, 2012. 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,

Julie Merkel
Air Quality Permitting Supervisor
Air Resources Management Bureau
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JM:DF
Enclosure

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: JMAC Resources, Inc.
5009 139th Avenue NW
Williston, ND 58801

Montana Air Quality Permit number (MAQP): **4814-00**

Preliminary Determination Issued: 10/29/2012

Department Decision Issued:

Permit Final:

1. *Legal Description of Site:* The JMAC Resources Inc. (JMAC) portable non-metallic mineral crushing, screening, and wash plant (CO-2) would initially be located at Section 34, Township 27 North, Range 56 East in Richland County, Montana. However, MAQP #4814-00 applies while operating at any location in Montana, except those areas having a Montana Department of Environmental Quality- Air Resources Management Bureau (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana. An addendum would be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.
2. *Description of Project:* The Department received a permit application from JMAC for the operation of a portable crushing facility with a total combined maximum rated design process rate of 1,500 tons per hour (TPH) of crushing capacity and 1,000 TPH of screening capacity. JMAC proposes to utilize two portable electrical generator sets to supply electrical power to the plant.
3. *Objectives of Project:* The objective of the project would be to produce business and revenue for the company through the sale and use of aggregate. The issuance of MAQP #4814-00 would allow JMAC to operate the permitted equipment at various locations throughout Montana (as described above), including the proposed initial site location.
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 JMAC 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 #4814-00.
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

There is a possibility that terrestrials would use the same area as the project. Observations from the Montana (MT) Opencut permit (#2213) indicate the existence of deer, rodents, song birds, coyotes, foxes, raptors, insects and various other animal species. However, this permitting action would be expected to have a minor effect on terrestrial and aquatic life and habitats, as the proposed plant would operate within an existing open cut gravel pit. Furthermore, the air emissions would likely have only minor effects on terrestrial and aquatic life because facility emissions would be well dispersed in the area of operation (see Section 7.F of this EA) and would have intermittent and seasonal operations. The crushing and screening operation would be considered a minor source of emissions, by industrial standards, with intermittent and seasonal operations. Therefore, only minor and temporary effects on terrestrial and aquatic life would be expected as a result of equipment operations or from pollutant deposition.

B. Water Quality, Quantity and Distribution

Water would be required for dust suppression on the mineral processing equipment and surrounding facility area, including haul roads. This water use would be expected to cause only minor, if any, impacts to water resources because the facility is small, and only a small volume of water would be required to control air pollutant emissions and deposition of air pollutants (as described in Section 7.F of this EA). The site is in an existing open-cut pit where water runoff would be more readily controlled. However, the Department determined that, due to dispersion characteristics of pollutants and conditions that would be placed in MAQP #4814-00, any impacts from deposition of pollutants on water quality, quantity, and distribution would be minor.

C. Geology and Soil Quality, Stability and Moisture

The permit application indicated that the operation would be located on a flat terrace above Day Creek on a scoria outcropping. The eastern edge would have several draws draining eastward

to Day Creek. Onsite soils would be primarily Tinsley, Vida Clay loam, and Williams Clay Loam. No disruptions would occur that would reduce the productivity or fertility of the soil at the site based upon the MT open cut regulations of stripping topsoil and overburden separately.

Because the equipment would be operating at a facility which would be considered a minor source of emissions by industrial standards, impacts from the emissions from the crushing facility would be minor. The crushing and screening operation would have only minor impacts on soils in any proposed site location 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 affects upon geology and soil quality, stability, and moisture at any proposed operational site would be minor.

D. Vegetation Cover, Quantity, and Quality

The application states that based on MT Opencut permit observations the location of the crushing and screening plant would have a mix of range grasses and agricultural field species, grasses, yucca, creeping juniper, and shrubs. Only minor impacts would be expected to occur on vegetative cover, quality, and quantity because the facility would operate in an area where vegetation has been previously disturbed. Because the equipment would be a minor source of emissions by industrial standards, impacts from the emissions from the crushing and screening facility would also be minor. 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.

E. Aesthetics

The application states that the disturbed area for the proposed project would be approximately 25 acres, in a pasture utilized for cattle, located approximately one mile from the nearest house and approximately eight miles from the nearest town, Culbertson. The crushing and screening facility would be visible and would create noise while operating at the proposed site. However, activity would occur within an existing opencut pit and, based upon the MT opencut regulations, stripping of topsoil and overburden would occur separately and would be used to create noise buffers in the form of stockpiles along the perimeter of the site and for reclamation of the site in the future. Further, MAQP #4814-00 would include conditions to control emissions, including visible emissions, from the plant. The facility would operate on an intermittent and seasonal basis, and would be a small industrial source. Therefore, any visual aesthetic impacts would be short-lived and are expected to be minor.

F. Air Quality

Air quality impacts from the proposed project would likely be minor because the facility would be relatively small and operate on an intermittent and temporary basis. MAQP #4814-00 includes conditions limiting the facility's opacity; require water and water spray bars be available on site and used to ensure compliance with opacity standards; and limit the facility's crushing production.

Further, the Department determined that this facility would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's potential to emit would be below the major source threshold. Pollutant deposition from the facility would be expected to be minimal because the pollutants emitted are widely dispersed (from factors such as wind speed and wind direction) and exhibit minimal deposition on the surrounding area. Therefore, air quality impacts from operating the crushing facility in this area would be expected to be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The proposed project would impact the unique endangered, fragile, or limited environmental resources because emissions of PM₁₀, oxides of nitrogen (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur dioxide (SO₂) would increase in the area due to the operation of the facility. In an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the initial proposed area of operation (Section 34, Township 27 North, Range 56 East in Richland County, Montana) the Department contacted the Natural Resource Information System – Montana Natural Heritage Program (MNHP). MNHP conducted a search of the defined area which is defined by the township and range of the proposed site, with an additional one-mile buffer. Search results concluded there is one species of concern within the area. The known species of concern is the Whooping Crane.

Specific effects of operating the crushing and screening facility in this area would be minor since the facility is relatively small in size and located within an existing gravel pit. In addition the source would have only seasonal and intermittent operations in the area. Therefore, impacts to unique, endangered, fragile, or limited environmental resources would be minor.

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

Due to the size of the facility, the crushing and screening operation would require only small quantities of water, air, and energy for proper operation. Small quantities of water would be used for dust suppression and would control particulate emissions being generated at the site. The facility would have limited production, and would have seasonal and intermittent use. In addition, impacts to air resources would be minor because the source is small by industrial standards, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed. Energy requirements would also be small, as the diesel engines would use small amounts of fuel. The Department determined that any impacts to water, air, and energy resources in any given area would be minor due to the dispersion characteristics of the pollutants, the atmosphere, and the conditions contained in MAQP #4814-00.

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 initial location of the facility. According to their records there are no previously recorded sites in the area of the proposed project location and there is a low likelihood of adverse disturbance to any known archaeological or historic site. Therefore, no impacts upon historical or archaeological sites would be expected as a result of this project.

J. Cumulative and Secondary Impacts

The operation of the crushing and screening facility would likely cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would be limited in the amount of emissions allowed to be released to the atmosphere. 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 proposed project would be short-term in nature, and likely have minor cumulative effects upon resources within the area. These resources include water, terrestrial and aquatic life, soils, and vegetation. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would likely be minor.

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

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

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

A. Social Structures and Mores

The proposed project would cause minor, if any, impacts or disruptions to native or traditional lifestyles or communities (social structures or mores) in the area because the proposed project would take place in a relatively remote location and because the source is a minor source of emissions (by industrial standards) and would only have intermittent operations. Further, the facility would be required to operate according to the conditions that would be placed in MAQP #4814-00. Therefore, the existing social structures and mores would not be affected as a result of this permitting action.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not likely be impacted by the operation of the proposed crushing and screening facility because the facility is a portable source, with seasonal and intermittent operations. Therefore, there would not be any impacts expected to the cultural uniqueness and diversity of this.

C. Local and State Tax Base and Tax Revenue

The operation of the crushing and screening facility would likely have little, if any, impact on the local and state tax base and tax revenue because the facility would be a minor industrial source of emissions and would have seasonal and intermittent operations. According to the application, the facility would employ only 5 to 10 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 expected to be minor because the source would be portable and the money generated for taxes would be widespread. Therefore, the Department determined that there would be minor effects to local and state tax base and tax revenue.

D. Agricultural or Industrial Production

The equipment at the crushing and screening operation would have only a minor impact on local industrial production since the facility is a minor source of emissions (by industrial standards). There could be minor effects on agricultural land from the deposition of pollutants (as described in Section 7.F of this EA) but the facility operations would be small and temporary in nature, and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation (as described in Section 7.D of this EA). Therefore, the Department determined that there would be minor effects to agricultural or industrial production.

E. Human Health

MAQP #4814-00 would incorporate conditions to ensure that the crushing and screening facility would operate 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 this facility would be minimized by the use of water spray and other conditions that would be established in MAQP #4814-00. Therefore, only minor impacts would be expected upon human health from the proposed crushing and screening facility.

F. Access to and Quality of Recreational and Wilderness Activities

Based on information received from JMAC, no recreational activities or wilderness areas are near the proposed project site would likely be affected. Therefore, no impacts to the access to and quality of recreational and wilderness activities would be expected.

G. Quantity and Distribution of Employment

The portable crushing and screening operation would be considered small and would only require a five to ten employees to operate. The crushing and screening operation would be considered a portable source, with seasonal and intermittent operations and would not be expected to have any long-term effects upon the quantity and distribution of employment in any given area of operation. Therefore, minor effects upon the quantity and distribution of employment in these areas would be expected.

H. Distribution of Population

The portable crushing and screening operation is a portable industrial facility that would only require a limited number of employees. No individuals would be expected to permanently relocate to this area as a result of operating the crushing and screening facility. Therefore, the crushing and screening facility would not likely impact the normal population distribution in the initial area of operation or any future operating site.

I. Demands for Government Services

Minor increases may be seen in traffic on existing roadways in the area while the crushing and screening facility is being operated. 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. However, demands for government services would be expected to be minor.

J. Industrial and Commercial Activity

The crushing and screening operations would represent only a minor increase in the industrial activity in the given area because of the small size of the operations and the portable and temporary nature of the facility. Therefore, the Department determined that there would be minor effects to industrial or commercial activity as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals that would be affected by the proposed project. JMAC would be allowed, by MAQP #4814-00, to operate in areas designated by Environmental Protection Agency as attainment or unclassified for ambient air quality. MAQP #4814-00 contains operational restrictions for protecting air quality and for keeping facility emissions in compliance with any applicable ambient air quality standards as a locally adopted environmental plan or goal for operating at this proposed site. Because the proposed crushing and screening facility would be a portable source and would likely have intermittent and seasonal operations, any impacts from the project would be expected to be minor and short-lived.

L. Cumulative and Secondary Impacts

The crushing and screening 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 would be a portable and temporary source. Small 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.

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 non-metallic mineral processing facility MAQP #4814-00 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: Deanne Fischer
Date: 10/15/2012