



PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: May 07, 2012

Name of Applicant: Jewett Excavating, Inc

Source: Portable Crushing and Screening 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 4738.

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 23, 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,

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Air Resources Management Bureau
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VW:TL
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: Jewett Excavating, Inc.
23 Pioneer Drive
East Helena, MT 59635

Montana Air Quality Permit number (MAQP): 4738-00

Preliminary Determination Issued: May 4, 2012

Department Decision Issued:

Permit Final:

1. *Legal Description of Site:* Jewett proposes to operate a portable non-metallic mineral crushing/screening plant, which will initially be located in Section 2 and 3, Township 11N, Ranger 6 W, in Lewis and Clark County, Montana. However, MAQP #4738-00 applies while operating at any location in Montana, except those areas having a 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 will 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 Jewett for the operation of a portable crushing/screening facility with a combined maximum rate design process of 80 tons per hour (TPH) of crushing/screening capacity. A diesel engine with a maximum design capacity of 166 horsepower (hp) is part of the crushing/screening unit and supplies the electric power for the plant.
3. *Objectives of Project:* The object of the project would be to produce business and revenue for the company through the sale and use of aggregate. The issuance of MAQP #4738-00 would allow Jewett 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 Jewett 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 Best Available Control Technology (BACT) analysis, would be included in MAQP #4738-00.
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

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 old, existing mine tailings in a rural area. 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 the operations (see Section 7.F of this EA) and would have intermittent and seasonal operations. Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the proposed project.

B. Water Quality, Quantity and Distribution

Water would be required for dust suppression on the mineral processing equipment and surrounding facility area. This water use would be expected to only cause minor, if any, impacts to water sources because the facility is small and only a small volume of water would be required to be used. In addition, the facility would emit air pollutants, and corresponding deposition of pollutants would occur, as described in Section 7.F. of this EA. However, the Department determined that, due to dispersion characteristics of pollutants and conditions that would be placed in MAQP #4738-00, any impacts from deposition of pollution on water quality, quantity, and distribution expected would be minor.

C. Geology and Soil Quality, Stability and Moisture

Only minor impacts from deposition of air pollutants on soil would likely results (as described in 7.F of this EA) and only minor amounts of water would be used for pollution control, and only as necessary, in controlling particulate emissions. Thus, only minimal water runoff would likely occur. Since only minor amounts of pollution would be expected and corresponding emissions would be widely dispersed before settling upon surrounding soils and vegetation (as

described in Section 7.D of this EA), impacts would be minor. Therefore, any effects upon geology and soil quality, stability, and moisture from air pollutant emissions from equipment operations would likely be minor and short-lived.

D. Vegetation Cover, Quantity, and Quality

Only minor impacts would be expected to occur on vegetative cover, quality, and quantity because the facility would operate in any area where vegetation has been previously disturbed by an industrial site. During operations, the facility would likely be a relatively minor source of emissions and the pollutants widely dispersed (as described in 7.F of this EA) therefore, deposition on vegetation from the proposed project would expect to be minor. Also, due to limited water usage (as described in Section 7.F of this EA) and minimal associated soil disturbance from the application of water and water run-off (as described in Section 7.B of this EA), corresponding vegetative impacts would likely be minor.

E. Aesthetics

The crushing/screening facility would be approximately 4.07 acres total, however, only 0.54 acres of an abandoned mine site will be disturbed. Activity within the facility will create noise while operating at the proposed site. The application states that the nearest residence and structure not associated with the facility is three miles from the project area, therefore visual and noise impacts would be minor and short-lived. The facility would operate on an intermittent and seasonal basis, and would be small industrial source.

F. Air Quality

Air quality impacts from the proposed project would likely be minor because the facility would be small and operate on an intermittent and temporary basis. MAQP #4738-00 includes conditions limiting the facility's opacity and requiring water spray bars to be available on site to ensure compliance with opacity standards. These conditions would limit fugitive emissions. Pollutant deposition from the facility would expect 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 facility in this area would be expected to be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program (MNHP) in an effort to identify any species of concern that may be found in the area where the proposed crushing/screening facility will occur. Search results have concluded that there are five species of concern in the area. Area, in this case, will be defined by the township and range of the proposed site, with an additional 1-mile buffer. The species of concern are the Cassin's finch, the Westslope Cutthroat Trout, the Fisher, the Gray Wolf, and the Canada Lynx.

Since the gray wolf is regional, it is unlikely that the installation of a crushing/screening facility in a previously disturbed industrial site would have any impact on these animals. Likewise, the Westslope Cutthroat Trout would have minor to no impact as the proposed plant would operate within old, existing mine tailings. Furthermore, the air emissions would likely have only minor effects, because facility emissions would be well dispersed in the area of operations. The Cassin's Finch and Fisher's habitat are commonly found in conifer forests. The Canada lynx can be found in many subalpine conifer forests and avoid large openings and often hunt along edges in areas of dense cover. Therefore, the crushing/screening facility would have minor to no impacts considering its operations will occur in a previously disturbed industrial area.

MAQP# 4738-00 would cover the proposed crushing/screening facility operation while located at various locations throughout the state. 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 #4738-00 would be protective of these resources by limiting overall impacts to the surrounding environment.

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

Due to the relatively small size of the project, only small demands on environmental resources would likely be required for proper operation. Only small quantities of water are required for dust suppression of particulate emissions being generated at the site. In additions, impacts of air resources would be expected to be minor because the source would be considered a minor industrial source of emissions, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed as described in 7F. of this EA. Energy requirements would also be small, as the diesel engine would use small amounts of fuel. Overall, any impacts to water, air, and energy resources would likely 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 and operation. According to the response from SHPO, as long as there is no new ground disturbance or any alteration to structures over fifty years of age, there is a low likelihood cultural properties will be impacted. Given the crushing/screening facility will be located in a previously disturbed industrial site; there is a low risk of disturbance or alteration of historical and archaeological sites. Therefore, the operation of the crushing/screening plant would not impact any known historical or archaeological sites.

J. Cumulative and Secondary Impacts

The operation of the crushing facility would likely cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate air 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 on a temporary and seasonal basis. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as outlined in MAQP #4738-00. Overall, any cumulative and or secondary impacts to the physical and biological aspects of the human environment would 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 operation of the crushing facility would expect to cause minor disruption to the social structures and mores in the area because the source would be a minor industrial source in a relatively remote location. The facility would only have intermittent operations. Further, the facility would be required to operate according to the conditions that would be placed in MAQP #4738-00. Therefore, the existing social structures and mores would not be affected as a result of this permitting action.

B. Cultural Uniqueness and Diversity

The impact to cultural uniqueness and diversity of these areas would be minor from the proposed equipment because the site will be located on old, existing mine tailings in a rural area with limited residential properties. Additionally, the facility would be considered a portable source with seasonal and intermittent operations. Therefore, the Department determined that there would be minor effects to cultural uniqueness and diversity.

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 temporary source and small by industrial standards. The facility would require the use of four 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.

D. Agricultural or Industrial Production

The operation of the crushing/screening facility would have only a minor impact on local industrial production since the facility would be a minor source of air emissions (by industrial standards). Because minimal deposition of air pollutants would occur on the surrounding land (as described in Section 7.F of this EA), only minor and temporary effects on the surrounding vegetation (i.e. agricultural production) would occur. In addition, the facility operations would be small and temporary in nature and would be permitted with operational conditions that would minimize impacts upon surrounding vegetation, as described in Section 7.D of this EA.

E. Human Health

MAQP #4738-00 would incorporate conditions to ensure the crushing 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 the facility would be minimized by the use of water spray and other conditions established in MAQP #4738-00. Therefore, only minor impacts would be expected upon human health from the proposed crushing/screening facility.

F. Access to and Quality of Recreational and Wilderness Activities

Based on the information received from Jewett, no recreational activities or wilderness areas are near the proposed project site. 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/screening operation would only require a few employees to operate and would have seasonal and intermittent operations. The crushing and screening operation would be considered a portable source and would not be expected to have long-term effects upon the quantity and distribution of employment in any given area of operation. The application states that 4 employees are would be employed as a result of the crushing/screening operation. Therefore, minor effects upon the quantity and distribution of employment in these areas would be expected.

H. Distribution of Population

The application states that the nearest residence and structure not associated with the crushing and screening operation is approximately three miles from the crushing/screening facility. The portable crushing/screen operation would be considered small by industrial standards and would only require a few employees for operation. Also, no individuals would be expected to permanently relocate to a given area of operation as a result of operating the crushing/screening facility, which would have only intermittent and seasonal operations. Therefore, the crushing/screening facility would not disrupt the normal population distribution in the initial area of operation or any future operating site.

I. Demands for Government Services

Minor increase would be seen in traffic on existing roadways in the area while the crushing/screening operates. In addition, government services would be required for acquiring the appropriate permits from government agencies. Demands for government services would be minor.

J. Industrial and Commercial Activity

The operation of the crushing/screening facility would represent only a minor increase in the industrial activity in the proposed area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature. Furthermore, the industrial activity associated with this plant will occur within a previous industrial site. Therefore, only limited additional industrial or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

Jewett would be allowed, by MAQP #4738-00, to operate in areas designated by Environmental Protection Agency as attainment or unclassified for ambient air quality. MAQP #4738-00 contains operational restrictions for protecting air quality and to keep facility emissions in compliance with any applicable air quality standards, as a locally adopted environmental plan or goal for operating at this proposed site. Because the proposed crushing/screening facility would be a portable source and would likely have intermittent and seasonal operations, any impact from the project would be expected to be minor and short-lived.

L. Cumulative and Secondary Impacts

The operation of the facility would cause only 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. Minor increase 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. The Department believes that this plant could be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #4738-00.

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 portable crushing/screening facility. MAQP #4738-00 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: Tashia Love

Date: April 9, 2012