

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
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DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Thompson Falls Sand and Gravel
P.O. Box 1143
Thompson Falls, MT 59873

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Air Quality Permit Number: 3010-03

Preliminary Determination Issued: June 16, 2006

Department Decision:

Permit Final:

LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

1. *Legal Description of Site:* This permit would be for the operation of a portable crushing/ screening facility to be initially located in the SW¼, NE¼, NW¼ of Section 15, Township 21 North, Range 29 West, in Sanders County. Permit #3010-03 would apply while operating at any location in Montana, except within those areas having a Department approved permitting program, and those areas considered tribal lands. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*
2. *Description of Project:* The permit application requested additional equipment to be operated at the facility. Thompson would operate a portable crushing/screening facility consisting of four crushers (up to 460 TPH combined capacity), two 3-deck screens (up to 230 TPH combined capacity) two diesel generators (up to 615 kW combined capacity), and associated equipment.
3. *Objectives of the Project:* Thompson desires to increase business and revenue for the company. This objective could be met through operating the crushing/screening facility, to generate aggregate for sale and use. Thompson would be allowed to operate under this permit at various locations throughout Montana, excluding those areas that have a Department approved permitting program.
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 Thompson 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 Permit #3010-03 and in Addendum 4 to the permit.
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
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 Resource				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 & Biological Effects:

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the areas in which the crushing/screening operations occur. However, the crushing/screening operations are portable and the impacts would be limited by the short-term nature of the operation. Furthermore, since Thompson would generally locate at a preexisting pit, additional impacts to the terrestrial and aquatic life and habitats would be minor as a result of the crushing/screening operations.

B. Water Quality, Quantity, and Distribution

Although there would be an increase in air emissions in the area where the crushing/screening would operate, 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 Permit #3010-03 and the size and nature of the facility, the maximum impacts from the air emissions from this facility would be minor.

Water would be required for dust suppression on surrounding roadways and areas of operation, but would only cause a minor disturbance to the area. Also relatively small amounts of water would be needed for adequate dust suppression. Therefore, the crushing/screening plant 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

There would be minor impacts to the geology and soil quality, stability, and moisture near the crushing/screening area due to facility construction, increased vehicle traffic, the use of water to control dust, and deposition of pollutants from the crushing/screening operation. As explained in Section 7.F. of this EA, the relatively small size and temporary nature of the operation and conditions placed in Permit #3010-03 would minimize the impacts from deposition. As a result, pollution deposition and water used to control emissions would result in only minor disturbance to the soil. The soils in the affected area

would be impacted by the crushing/screening operations due to the additional equipment and use of the crushing/screening facility. However, given the relatively small size and portable and temporary nature of the operation, any impacts would be minor.

D. Vegetation Cover, Quantity, and Quality

There would be minor impacts on the vegetative cover, quantity, and quality because small amounts of vegetation would likely be disturbed from the crushing/screening operation. Because the crushing/screening operation would be located in an existing and previously disturbed open cut pit, any physical effects on vegetation cover, quantity, and quality would be minor. In addition, pollutant deposition would occur on the surrounding vegetation. However, as explained in Section 7.F. of this EA, the Department determined that, due to the relatively small size of the operation, dispersion characteristics of pollutant emissions, and conditions placed in Permit #3010-03, any impacts from the deposition of pollutants would be minor. Also, because the water usage would be minimal (as described in Section 7.B.) and the associated soil disturbance would be minimal (as described in Section 7.C.), corresponding vegetative impacts would also be minor.

E. Aesthetics

The crushing/screening operations would be visible and would create additional noise in the area. Permit #3010-03 includes conditions to control emissions (including visible emissions) from the plant. Because the crushing/screening operations are small and temporary, any noise impacts would be minimal. Restrictions have been placed on the crushing/screening operations to protect the air quality at any location in or within 10 kilometers of certain PM₁₀ nonattainment areas. Overall, the impacts to the aesthetics of the surrounding area would be minor.

F. Air Quality

The air quality impacts from the crushing/screening operations would be minor. Permit #3010-03 includes conditions limiting the opacity from the plant, as well as requiring water spray bars to control air pollution. Additionally, the facility is considered a minor source of air pollution by industrial standards. While deposition of pollutants would occur as a result of operating the facility, the Department determined that characteristics of pollutants, the atmosphere, (wind speed, wind direction, ambient temperature, etc.) and conditions that would be placed in Permit #3010-03. The Department determined that controlled emissions from the source would not cause or contribute to a violation of any ambient air quality standard. Therefore, any impacts to air quality from the proposed facility would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program (MNHP) to identify any species of special concern associated with the initial proposed site location. Search results indicated that there are no such environmental resources in the area. Area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer. The location has been identified by Thompson as the SW $\frac{1}{4}$, NE $\frac{1}{4}$, NW $\frac{1}{4}$ of Section 15, Township 21 North, Range 29 West, in Sanders County, Montana. The proposed project would have no impact on any unique endangered, fragile, or limited environmental resources because it is an existing pit with no change to existing impacts.

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

The crushing/screening operations would require only small quantities of water, air, and energy for proper operation, due to the size of the facility. Small amounts of water would be used for dust control from the equipment, the stockpiles, and the associated haul roads. Further, 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 because of the small size and intermittent operations of the equipment. Energy demands to operate the facility would also be minor because the operation would consist of relatively small equipment and because the operations would be intermittent. Therefore, any impacts upon these environmental resources; water, 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 are no previously recorded historical or archeological sites within the designated search locale. Additionally, the crushing/screening operations would locate within previously disturbed industrial sites typically used for portable crushing/screening operations. According to past correspondence from the Montana State Historic Preservation Office, there is low likelihood of adverse disturbance to any archaeological or historic site, given previous industrial disturbance within an area. Therefore, the operation would not impact on any known historic or archaeological sites.

J. Cumulative and Secondary Impacts

The crushing/screening operations would cause minor cumulative and secondary environmental impacts to the physical and biological aspects of the human environment because the facility would generally have only seasonal, intermittent, and temporary use, and because the facility is considered a minor source of air pollutants by industrial standards. The facility would generate emissions of particulate matter (PM), PM₁₀, NO_x, CO, SO_x, and VOC. Noise would also be generated from the sites, but would cause minimal disturbance because the area of operation is sparsely populated and because other noise sources would be located in the area. There is potential for other operations to locate at these sites. 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 proposed sites. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #3010-03. Overall, cumulative and secondary impacts would be minor.

8. Potential economic and social effects: 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
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 & Social Effects:

A. Social Structures and Mores

The additional equipment at the crushing/screening operation would cause no disruption to the social structures and mores in the area because the source is small and would initially be located in a sparsely populated and remote location. The nearest community is Thompson Falls. Therefore, the additional crushing/screening of sand and gravel would have no impact upon native or traditional lifestyles or communities of the proposed areas of operation.

B. Cultural Uniqueness and Diversity

The Department determined that the operations would not impact the cultural uniqueness and diversity of this area of operation because the facility is a small source that would be operating in a sparsely populated and remote location. The area is an existing open cut pit that has been previously used for aggregate crushing/screening operations, and is privately owned. Surrounding land area would continue to be used predominantly for hay production and animal grazing and pasturing. Therefore, because the operation would not change the predominant use of the area, the Department determined there would be no impact to the cultural uniqueness and diversity of the area of operation.

C. Local and State Tax Base and Tax Revenue

The additional equipment at the crushing/screening facility would have little effect on the local and state tax base and tax revenue because the facility would be small by industrial standards. The facility is a temporary source; however, most of the crushing that Thompson does is in the vicinity of the Thompson Falls area. Although portable, the crushing/screening operations would be steady and would employ people in the area. The addition of the new equipment and the renewal of the addendum will not result in any new employment with Thompson.

D. Agricultural or Industrial Production

The proposed addition of equipment at the crushing/screening facility would be located in a previously developed gravel pit. Because of the location and topography of the area, along with the seasonal, temporary, and intermittent use of the facility, only minor effects to agricultural land would result. Thompson would be responsible to comply with state and federal environmental regulations in regard to operations at the sites. Further, the crushing/screening operations would be small by industrial standards and, thus, would have only a minor impact on local industrial production.

E. Human Health

Permit #3010-03 would include conditions to ensure that the crushing/screening operations 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 this facility would be minimized by water spray and opacity limitations established in Permit #3010-03 and Addendum 4. Therefore, any associated impacts to human health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed crushing/screening operations would not affect any access to recreational and wilderness activities because the site would be a previously developed pit which is privately owned. Minor effects on the quality of recreational activities would be created by noise from the sites; however, any impacts would be minor, intermittent, and temporary due to the portable nature of the crushing/screening operations.

G. Quantity and Distribution of Employment

The activities from the crushing/screening operations would not result in any increased employment or a change in the distribution of employment in the area. Thompson would utilize current employees for the crushing/screening operation.

H. Distribution of Population

The crushing/screening operations would not disrupt the normal population distribution in the area. Thompson employees may utilize temporary housing or hotels for the duration of projects that keep them from home. However, no distribution of population would result from the crushing/screening operations.

I. Demands of Government Services

Government services would be required for acquiring the appropriate permits from government agencies and determining compliance with those permits. There would be a slight increase in vehicle traffic resulting from the additional equipment at the crushing/screening facility. However, such demands on governmental services to regulate traffic would be minor due to the relatively small size and temporary nature of the operation. Overall, demands for government services would be minor.

J. Industrial and Commercial Activity

The addition of equipment at the crushing/screening facility would represent only a minor increase in the industrial activity in the given area because of the small size, portable, and temporary nature of the facility. No additional industrial or commercial activity would result from the operation of additional equipment at the crushing/screening facility. Therefore, there would only be minor impacts to the industrial and commercial activity of the surrounding area.

K. Locally Adopted Environmental Plans and Goals

This permit would be protective of certain PM₁₀ nonattainment areas that are covered in the State Implementation Plans (SIP). In addition to Permit #3010-03, Addendum 4 contains more restrictive limits and conditions for operation in or within 10 km of any PM₁₀ nonattainment areas during the summer months. Further, because this is an existing portable facility and would have intermittent and seasonal operations, any impacts from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

The additional equipment at the crushing/screening facility would cause minor cumulative and secondary environmental impacts to the physical and biological aspects of the human environment because the facility would generally have only seasonal, intermittent, and temporary use, and because the facility is considered a minor source of air pollutants by industrial standards. There is potential for other operations to locate at these sites. 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 this or any other site. The crushing/screening operations would be limited by Permit #3010-03 to total particulate emissions of 250 tons per year or less from non-fugitive crushing/screening operations and any other additional equipment used at the site. In addition, crushing and screening limitations have been placed in Addendum 4 to Permit #3010-03 to further protect the ambient air quality standards in or within 10 km of any Montana PM₁₀ nonattainment area during the summer.

Recommendation: No EIS is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility would be minor; therefore, an EIS is not required. In addition, the source would be applying the Best Available Control Technology (BACT) and the analysis indicates compliance with all applicable air quality rules and regulations.

Other groups or agencies contacted or which may have overlapping jurisdiction: Department of Environmental Quality - Permitting and Compliance Division (Air Resources Management Bureau and Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

Individuals or groups contributing to this EA: Department of Environmental Quality (Air Resources Management Bureau and Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

EA prepared by: Julie Merkel
Date: June 7, 2006