



PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: March 25, 2009

Name of Applicant: Bay Materials, LLC

Source: Portable Crusher and Screen 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 4361-00.

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 April 24, 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,

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VW:PS
Enclosures

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, MT 59620
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DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Bay Materials, LLC

Air Quality Permit number: 4361-00

Preliminary Determination Issued: March 25, 2009

Department Decision Issued:

Permit Final:

1. *Legal Description of Site:* Two miles north northwest of Kevin within Section 22, Township 35 North, Range 3 West, Toole County, Montana.
2. *Description of Project:* BML proposes to operate a crushing and screening plant to produce aggregate sub-base and pit run construction materials. The aggregate processing equipment consists of two self-contained plants, a Hewitt-Robins Crusher and Screen and a Nordberg Powerscreen, which can be set up in parallel or series to provide a wide array of processed aggregate products. For a typical operational setup, unprocessed material is loaded into the Nordberg Powerscreen where it is separated into to product piles by the double deck screen while the throughput proceeds in series to the Hewitt-Robins apparatus for further screening, crushing and blending processes.
3. *Objectives of Project:* At its initial location the project objective is to produce aggregate sub-base and pit-run construction materials in support of county road maintenance efforts and other construction activities in Toole County, 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 BML 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 #4361-00.
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:

No additional disturbance to the area permitted for construction of the gravel pit is proposed; therefore, potential impacts to terrestrial and aquatic life and habitats would be minor due increased noise in the area and deposition of relatively minor amounts of air pollutants emitted from the portable crushing and screening plant.

B. Water Quality, Quantity and Distribution:

Water would be used for dust suppression on the surrounding roadways and areas of operation and for emission pollution control during operations. Water use would be relatively minor, therefore impacts on water quantity are expected to be minor. No impacts to ground water quality from pollutant infiltration are expected because PM suppression would be on an as-needed basis, saturated conditions would not be maintained within material or along haul roads. The facility has not proposed to discharge industrial waste water to state surface water, furthermore storm water run-off from the facility would be subject to control and permitting under the Montana Pollutant Discharge Elimination System as applicable. Therefore, potential impacts to state water quality, quantity and distribution would be minor.

C. Geology and Soil Quality, Stability and Moisture:

The crushing and screening operation is proposed to initially be located within an existing gravel pit and disturbed areas. No additional disturbance would be anticipated by the proposed action; therefore, no impacts are expected.

D. Vegetation Cover, Quantity, and Quality:

Since no additional land disturbance beyond that for the gravel pit is included in this proposed action, potential impacts to these species habitats or quantity would be minor due to potential deposition of relatively minor amounts of air pollutions emitted from this facility.

E. Aesthetics:

The proposed facility may be visible from County and/or local roads. However, visible portions of the plant would be difficult to discern from other construction equipment and implements associated with existing gravel pit and local disturbance at large. Furthermore, MAQP #4361-00 contains provisions that control visible emissions from the facility. Therefore potential visual impacts to aesthetics would be minor.

The proposed action contains equipment which would create noise pollution during operation. Sounds studies of similar aggregate processing plants revealed average sound level of 93 decibels at 100 feet (ft) from the respective equipment (Application Materials). The nearest inhabited structure is located 1.5 miles south of the proposed crushing and screening operations. Therefore, potential impacts to aesthetics due to noise would be minor.

F. Air Quality:

The air quality impacts from the crushing and screening plant operations would be minor because MAQP #4361-00 would include conditions limiting the opacity from the plant, as well as requiring, water spray as necessary, and other reasonable precautions to control air pollution. Further, MAQP #4361-00 would limit total emissions from the crushing and screening plant operation and any additional equipment owned and operated by BML up to 250 tons per year or less at any given operating site, excluding fugitive emissions.

Air pollutant deposition caused by the crushing and screening plant 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. Similarly air pollutant deposition and impacts due to emissions from the crushing and screening plant would likely be temporary because these types of facility generally do not remain in one location more than 12 months. Overall, any air quality impacts resulting from the proposed crushing and screening plant operation would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources:

The area for the proposed project is in or within 1 mile of the potential species hunting, foraging and occurrence range associated with observed nesting sites of the Ferruginous Hawk (*Buteo regalis*), the McCown's Longspur (*Calcarius mccownii*), and/or the Chestnut-collared Longspur (*Calcarius ornatus*). This means the proposed crushing and screening operation would be in or within a pre-designated buffer distance from observed nests or nesting sites, given the uncertainty associated with the reported nesting site location.

The Ferruginous Hawk has a State rank of S3B indicating that the breeding population of the species is potentially at risk because of limited and/or declining numbers, range, habitat, even though it may be abundant in some areas. The hawk has a Global rank of G4 meaning it is uncommon but not rare, and usually widespread; apparently not vulnerable in most of its range, but possibly cause for long-term concern. The U.S. Bureau of Land Management (BLM) status of the hawk is Sensitive, meaning it has been defined by the BLM 6840 Manual as those that

normally occur on BLM administered lands for which BLM has the capability to significantly affect the conservation status of the species through management. The State Director may designate additional categories of special status species as appropriate and applicable to the state's needs. The sensitive species designation, for species other than federally listed, proposed, or candidate species, may include such native species as those that:

1. could become endangered in or extirpated from a state, or within a significant portion of its distribution in the foreseeable future,
2. are under status review by FWS and/or NMFS,
3. are undergoing significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution,
4. are undergoing significant current or predicted downward trends in population or density such that federally listed, proposed, candidate, or State listed status may become necessary,
5. have typically small and widely dispersed populations,
6. are inhabiting ecological refugia, specialized or unique habitats, or
7. are State listed but which may be better conserved through application of BLM sensitive species status.

It is recommended that such species should be managed to the level of protection required by State laws or under the BLM policy for candidate species, whichever would provide better opportunity for its conservation.

The McCown's Longspur has a State rank of S2B indicating that the breeding population of the species is at risk because of very limited and potentially declining numbers and/or making it vulnerable to extirpation in the state. The McCown's Longspur has a Global rank of G4 meaning it is uncommon but not rare, and usually widespread; apparently not vulnerable in most of its range, but a possible cause for long-term concern. The U.S. Bureau of Land Management (BLM) status of this species is Sensitive.

The Chestnut-collared Longspur has a State ranking of S3B indicating that the breeding population of the species is potentially at risk because of limited and/or declining numbers, range, habitat, even though it may be abundant in some areas. This species has a global ranking of G5 indicating it is common, widespread, and abundant. Not vulnerable in most of its range. The Chestnut-collared Longspur has also been given a status of Sensitive by BLM.

Direct impacts to species of concern are expected to be minor as the current land use at the proposed project location is disturbed and an existing gravel pit that does not provide suitable hunting or foraging habitat for the individual organisms. Furthermore, the proposed project site is not near the center of species range polygons presented (MT National Heritage Program, February 9, 2009) indicating that direct or secondary impacts to nesting sites from dust, noise or other environmental disruptions will be minor. Minor impacts to habitat and/or organisms foraging or hunting within habitat adjacent the gravel pit would be expected as noise or dust may disrupt use of these areas or cause avoidance.

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

Due to the relatively small size of the facility and relatively low potential to emit regulated air pollutants, the crushing and screening plant 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 use three compression ignition engines that supply power to drive hydraulic engines and mechanical direct-drive systems. In addition, the crushing and screening plant operation would be temporary as it is not permitted to remain at this location for more than twelve months. Further, impacts to air resources would be minor because the source would be small by industrial standards, and would generate relatively minor amounts of regulated pollutants through normal operations.

Overall, any impacts to the above-cited physical and biological resource of the human environment of the project area would be minor because the proposed crushing and screening plant operation would initially and 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.

I. Historical and Archaeological Sites:

At this time no previously recorded sites are within the designated project area and the likelihood cultural properties would be impacted by this project is low. Therefore, a recommendation for a cultural resource inventory would be unwarranted at this time. However, should cultural materials be inadvertently discovered during this project the State Historic Preservation Offices should be contacted and the site investigated.

J. Cumulative and Secondary Impacts:

The proposed facility would be expected to move from place to place operating as a stand-alone operation or in support of other similar types of operations both in its initially proposed location and in locations throughout the state. The crushing and screening plant operation would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment of a given area of operation because the facility would emit regulated air pollutants, have some visible profile 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 initially and typically operate in areas designated and used for such industrial operations. Additionally, this facility, in combination with the other emissions from equipment operations at the operational site, would not be permitted to exceed 250 tons per year of non-fugitive emissions.

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
- B. Cultural Uniqueness and Diversity:

The crushing and screening plant operation would cause no disruption to the above-cited social structure or cultural uniqueness and diversity of the human environment in any given area of operation because the source would be a minor industrial source of emissions, would initially and typically operate in an existing industrial site used for such purposes, and would operate on a temporary basis. The predominant use of the surrounding area would not change as a result of the proposed project.

- C. Local and State Tax Base and Tax Revenue:

The crushing and screening plant 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 and would conduct only seasonal and intermittent operations. The facility would require the use of approximately 8 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 minor because the source would be portable and the money generated for taxes would be widespread.

Overall, any impacts to the above-cited economic and social resource of the human environment of any given project area would be minor because the proposed crushing and screening plant operation would initially and typically operate within areas designated for such operations. Therefore, the overall local and state tax base and tax revenue of any given area would not change as a result of the proposed project and any associated impacts would be minor.

D. Agricultural or Industrial Production:

As no additional land disturbance is proposed by this action no additional impacts to agricultural production would be expected. Minor impacts to industrial production would be expected as the facility described in the proposed action produces a construction material. However, the proposed operation remains relatively small by industrial standards. Overall, potential impacts to agricultural and industrial production are expected to be minor.

E. Human Health:

MAQP #4361-00 includes limits and conditions to ensure that the crushing and screening plant 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.

F. Access to and Quality of Recreational and Wilderness Activities:

The western half of the section the facility would be located within is public land administered by the BLM. Some impact to recreation experience on these public lands may occur due to noise; however, impacts would be minor because the crushing and screening plant operation is small by industrial standards and would initially operate in an area of an existing gravel operation. Furthermore, upon moving the operation can be expected to always operate within areas of existing gravel mining or processing facilities. Therefore, overall potential impacts to access to and quality of recreational and wilderness activities are expected to be minor.

G. Quantity and Distribution of Employment:

H. Distribution of Population:

The proposed crushing and screening plant operation would require approximately 8 employees to operate thereby resulting in little, if any, permanent immigration into or emigration out of a given area. Therefore, the proposed project would not impact the above-cited economic and social resources of the human environment at the initially proposed or any other given operating site.

I. Demands for Government Services:

Minor increases in traffic may be experienced seen on existing roadways in the area while the crushing and screening plant operation is in progress. As the plant initially would operate in support of county road maintenance efforts, its products would enable government entities to meet its demands for road maintenance. 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, any demands for government services would be minor.

J. Industrial and Commercial Activity:

The crushing and screening plant operation would represent only a minor increase in the industrial activity in the proposed initial or any future area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature. No significant additional industrial or commercial activity would be expected as a result of the proposed operation crushing and screening operation.

Overall, any impacts to industrial and commercial activity of the human environment from the project area would be minor because the proposed crushing and screening plant operation would initially and 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.

K. Locally Adopted Environmental Plans and Goals:

The Department is not aware of any locally adopted environmental plans or goals in the proposed initial area of operation or any future operating site since MAQP #4361-00 would allow for operations at various locations throughout the state (and unknown at this time). However, if the plant moved to an area classified as non-attainment for PM₁₀, the operation would be required to apply for and receive an addendum to MAQP #4361-00 prior to operation at the site. The addendum would include more restrictive requirements to protect the non-attainment area from further degradation. The state standards would be protective of any proposed area of operation.

L. Cumulative and Secondary Impacts:

The crushing and screening plant operations as proposed at its initial location would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation.

The source would be a portable and temporary source. Few, if any, 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 relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility.

Overall, the proposed crushing and screening plant operation would result in only minor and temporary secondary and cumulative impacts to the social and economic aspects of the human environment of the initially proposed and any future operating site.

Recommendation: No EIS is required. MAQP #4361-00 includes conditions and limitations to ensure the facility will operate in compliance with all applicable air quality rules and regulations. In addition, all impacts associated with the proposed action are expected to be insignificant or minor.

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: Paul Skubinna

Date: February 19, 2009