

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

Issued To: LHC, Inc.  
P.O. Box 7338  
Kalispell, MT 59904

**RECEIVED**

AUG 21 2006

Air Quality Permit number: 3860-00

LEGISLATIVE ENVIRONMENTAL  
POLICY OFFICE

Preliminary Determination Issued: August 2, 2006

Department Decision Issued: August 18, 2006

Permit Final:

1. Legal Description of Site: Permit #3860-00 would apply 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 km of certain PM<sub>10</sub> nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana. Addendum #1 would apply while operating at any locations in or within 10 km of certain PM<sub>10</sub> nonattainment areas. The LHC "home-pit", where the permitted portable facility would initially operate, is located approximately 5 km north of Kalispell, MT, in the Northeast ¼ of Section 26 and the Northwest ¼ of Section 25, Township 29 North, Range 22 West, in Flathead County, MT.
2. Description of Project: LHC would operate a portable non-metallic mineral processing plant including a crushing unit with a maximum material throughput capacity of 450 TPH, a screen with a maximum material throughput capacity of 450 TPH, and associated material handling equipment. The crushing/screening plant would be powered by a diesel-fired generator with a maximum rated design capacity of 545 kW. Typical operations would begin by loading the sand and gravel material to be processed into the crusher. From the crusher, materials would be sent to the screen for sizing and ultimately conveyed to a stockpile(s) for use in various construction activities.
3. Objectives of Project: The proposed plant would create business and revenue for LHC and provide for varied construction activity and proposed utility infrastructure requiring sand and gravel materials, state-wide.
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 LHC 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 and determination, would be included in Permit #3860-00.

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

Terrestrials would use the same area as the crushing/screening operations. The crushing/screening operations would be considered a minor source of emissions, by industrial standards, with intermittent and seasonal operations. Therefore, only minor effects on terrestrial life and habitats would be expected as a result of equipment operations or from pollutant deposition.

Impacts on aquatic life and habitats could result from storm water runoff and pollutant deposition, but such impacts would be minor as the facility would be a minor source of emissions (with seasonal and intermittent operations) and only minor amounts of water would be used for pollution control. Since only a minor amount of air emissions would be generated, only minor deposition would occur. Therefore, only minor and temporary impacts to aquatic life and habitat would be expected from the proposed crushing/screening operation.

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/screening operation would 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.

B. Water Quality, Quantity, and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, water use would only cause a minor disturbance to these areas, since only relatively small amounts of water would be needed. At most, only minor surface and groundwater quality impacts would be expected as a result of using water for dust suppression because only small amounts of water would be required to control air pollutant emissions and deposition of air pollutant emissions would be minor (as described in Section 7.F of this EA).

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/screening operation would 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.

C. Geology and Soil Quality, Stability, and Moisture

The crushing/screening operations would have only minor impacts on soils in any proposed site location (due to the construction and use of the crushing/screening facility) 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 impacts to geology and soil quality, stability, and moisture at any proposed operational site would be minor.

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/screening operation would 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.

D. Vegetation Cover, Quantity, and Quality

Because the facility would be a minor source of emissions, by industrial standards, and would typically operate in areas previously designated and used for aggregate crushing and screening, impacts from the emissions from the crushing/screening facility would be minor and typical. 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. Also, because the water usage is minimal, as described in Section 8.B, and the associated soil disturbance is minimal, as described in Section 8.C, corresponding vegetative impacts would be minor.

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/screening operation would 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.

E. Aesthetics

The crushing/screening operation would be visible and would create additional noise while in operation. However, Permit #3860-00 would include conditions to control emissions, including visible emissions, from the plant. Also, because the crushing/screening operation is portable and would operate on an intermittent and seasonal basis and would typically locate within a previously permitted open-cut pit, any visual and noise impacts would be minor and short-lived.

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/screening operation would 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.

#### F. Air Quality

The air quality impacts from the crushing/screening operations would be minor because Permit #3860-00 and Addendum #1 to Permit #3860-00 would include conditions limiting the opacity from the plant, as well as requiring water spray bars and other means to control air pollution. Further, Permit #3860-00 would limit total emissions from the crushing/screening operation and any additional equipment owned and operated by LHC to 250 tons/year or less at any given operating site, excluding fugitive emissions.

The LHC crushing/screening plant would be used for operations in locations in or within 10 kilometers of certain PM<sub>10</sub> nonattainment areas in Montana. While operating at these sites, LHC would be subject to the requirements included in Addendum #1 to Permit #3860-00, which provides more restrictive operating conditions to protect the affected PM<sub>10</sub> nonattainment area from further adverse impact and air quality degradation.

Finally, the crushing/screening plant would be used on a temporary and intermittent basis and typically operate within an area designated for such operations, thereby further reducing potential air quality impacts from the facility. Additionally, the small and intermittent amounts of deposition generated from the crushing/screening 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. Overall, any air quality impacts resulting from the proposed crushing/screening operation would be minor.

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

Emissions from the proposed project may impact unique, endangered, fragile, or limited environmental resources located in a given proposed project area. However, as detailed in Section V of the permit analysis and Section I and V of the analysis for Addendum #1, any emissions and resulting impacts from the project would be minor due to the low concentration of those pollutants emitted.

Permit #3860-00 and Addendum #1 would cover the proposed crushing/screening operation while located at various locations throughout the state. Most operations would take place within existing and previously disturbed industrial gravel pits thereby resulting in only minor impacts to the industrial area. Further, given the temporary and portable nature of the operations, any impacts would be minor and short-lived. In addition, operational conditions and limitations in Permit #3860-00 would be protective of these resources by limiting overall impacts to the surrounding environment.

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/screening operation would 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.

## H. Demands on Environmental Resources of Water, Air, and Energy

Due to the relatively small size of the facility, the crushing/screening 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 operation of the permitted diesel-fired electric generator and would be minor due to the relatively small amount of diesel fuel required to operate the generator. In addition, the crushing/screening plant would operate on an intermittent and seasonal basis thereby minimizing energy demands. Further, impacts to air resources would be minor because the source would be small by industrial standards, would operate on an intermittent and seasonal basis, 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/screening operation would 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

Typically, the crushing/screening plant would operate within a previously disturbed open-cut pit used for such purposes. According to past correspondence from the Montana Historical Society, State Historic Preservation Office (SHPO), there would be a low likelihood of disturbance to any known archaeological or historical site given any previous industrial disturbance in any given area of operation. Therefore, it is unlikely that the proposed crushing/screening plant would impact any historical or archaeological sites in a given area of operation.

## J. Cumulative and Secondary Impacts

The crushing/screening operation would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment of a given proposed area of operation because the facility would generate emissions of regulated air pollutants 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 be expected to operate in areas designated and typically used for such 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.

Overall, any cumulative or secondary impacts to the physical and biological aspects of the human environment of the project area would be minor because the proposed crushing/screening operation would 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.

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 crushing/screening operation would cause no disruption to the social structures and mores in the area because the source would be a minor industrial source of emissions, would initially and typically operate in an existing industrial gravel pit used for such purposes, and would operate on a temporary and intermittent basis. Further, the facility would be required to operate according to the limits and conditions that would be included in Permit #3860-00 and Addendum #1, which would limit the effects to social structures and mores.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the proposed crushing/screening operation because the proposed facility would be a portable source, the facility would conduct seasonal and intermittent operations, and the facility would utilize a relatively small number of employees for normal operations. The predominant use of the surrounding area would not change as a result of this crushing/screening operation. Therefore, the cultural uniqueness and diversity of the area would not be impacted.

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 minor industrial source and would conduct only seasonal and intermittent operations. The facility would require the use of only a few 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 the project area would be minor because the proposed crushing/screening operation would 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.

D. Agricultural or Industrial Production

The crushing/screening operations would result in only minor impacts to local industrial production since the facility would be a minor source of aggregate production and air emissions. Also, the facility would locate in an area adjacent to land that could be used for animal grazing and agricultural production. However, because minimal deposition of air pollutants would occur on the surrounding land, only minor and temporary impacts to the surrounding vegetation and land would occur thereby minimizing any minor impacts to surrounding agricultural land and practices in the proposed area of operations. In addition, the facility operations would be temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts to local agricultural areas.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the proposed crushing/screening operation would 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.

E. Human Health

Permit #3860-00 and Addendum #1 would include limits and conditions to ensure that the crushing/screening 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. As described in Section 7.F. of this EA, the air emissions from the proposed facility would be minimized by the use of water spray and other process limits that would be required by Permit #3860-00 and Addendum #1. Also, the facility would operate on a temporary and intermittent basis and pollutants would be widely dispersed (see Section 7.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed crushing/screening operations.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the proposed crushing/screening operation would 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.

F. Access to and Quality of Recreational and Wilderness Activities

Noise from the facility would be minor because the crushing/screening operation would be small by industrial standards and would operate in areas typically used for such operations (i.e. existing gravel pit). As a result, the amount of noise generated from the crushing/screening operation would be minimal for the area. Also, the facility would operate on a seasonal and intermittent basis. Therefore, any impacts to the quality of recreational and wilderness activities created by the proposed project would be expected to be minor and short-lived.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the proposed crushing/screening operation would 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.

G. Quantity and Distribution of Employment

The crushing/screening operation would require only a few employees to operate and would be conducted on a seasonal and intermittent basis thereby resulting in little, if any, permanent immigration into or emigration out of a given area of operation. Therefore, the proposed project would not impact the quantity and distribution of employment in the proposed area of operation.

H. Distribution of Population

The proposed crushing/screening operation would require only a few employees to operate and would be conducted on a seasonal and intermittent basis thereby resulting in little, if any, permanent immigration into or emigration out of a given area. Therefore, the proposed project would not impact the distribution of population at the initially proposed or any other given operating site.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the crushing/screening operation is in progress. 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. Overall, demands for government services would be minor.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the proposed crushing/screening operation would 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.

J. Industrial and Commercial Activity

The crushing/screening operation 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. No additional industrial or commercial activity would be expected as a result of the proposed operation.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the proposed crushing/screening operation would 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

Permit #3860-00 would allow LHC to operate in areas designated by EPA as attainment or unclassified for the National and Montana ambient air quality standards. In addition, Addendum #1 to Permit #3860-00 would allow for operations in or within 10 km of certain PM<sub>10</sub>

nonattainment areas. The Montana SIP provides that the state must improve the air quality in these areas to the point of compliance with the PM<sub>10</sub> standard. Permit #3860-00 and Addendum #1 to Permit #3860-00 would include limits and conditions that would protect air quality and keep facility emissions in compliance with any applicable ambient air quality standards thereby protecting the existing PM<sub>10</sub> nonattainment areas from further degradation. In addition to the air quality protection provided by Permit #3860-00 and Addendum #1, the facility would be a portable source and would have intermittent and seasonal operations, thus, any impacts from the facility would be minor and short-lived.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the proposed crushing/screening operation would 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.

#### L. Cumulative and Secondary Impacts

The crushing/screening operations would cause 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. No 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. Further, this facility may be operated in conjunction with other equipment owned and operated by LHC; however, any cumulative impacts to the social and economic aspects of the human environment would be minor and short-lived. Overall, the proposed crushing/screening 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.

Overall, any cumulative or secondary impacts to the economic and social aspects of the human environment of the project area would be minor because the proposed crushing/screening operation would 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.

*Recommendation:* An EIS is not 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 are minor; therefore, an EIS is not required.

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

*EA prepared by:* M. Eric Merchant, MPH

*Date:* July 31, 2006