

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
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FINAL ENVIRONMENTAL ASSESSMENT (EA)

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

Air Quality Permit number: 3860-01

Preliminary Determination Issued: April 16, 2008

Department Decision Issued: May 2, 2008

Permit Final: May 20, 2008

1. *Legal Description of Site:* Permit #3860-01 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 PM₁₀ nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.* Addendum #2 would apply while operating at any locations in or within 10 km of certain PM₁₀ 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 will replace the currently permitted generator (maximum design capacity up to 545 kW with a larger generator (maximum design capacity of 1,081 hp).
3. *Objectives of Project:* The plant creates business and revenue for LHC and provides 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 Best Available Control Technology (BACT) analysis and determination, would be included in Permit #3860-01.
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 have a minor effect on terrestrial and aquatic life and habitats, as the proposed project would affect an existing, industrial property that has already been disturbed. Furthermore, the air emissions would 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 surrounding roadways and general plant area. This water use would only cause minor, if any, impacts to water resources 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 Permit #3860-01, any impacts from deposition of pollutants on water quality, quantity, and distribution would be minor.

C. Geology and Soil Quality, Stability, and Moisture

Only minor impacts from deposition of air pollutants on soils would result (as described in Section 7.F of this EA) and only minor amounts of water would be used for pollution control, and would be used, only as necessary, in controlling particulate emissions. Thus, only minimal water runoff would occur. Since only minor amounts of pollution would be generated 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 be minor and short-lived.

D. Vegetation Cover, Quantity, and Quality

Minor impacts would occur on vegetative cover, quality, and quantity because the facility would operate in an area where vegetation has been previously disturbed. During operations, the facility would be a relatively minor source of emissions and the pollutants would be greatly dispersed (as described in Section 7.F of this EA); therefore, deposition on vegetation from the proposed project would be minor. Also, because the water usage would be minimal (as described in Section 7.B of this EA), and the associated soil disturbance from the application of water and water runoff would be minimal (as described in Section 7.C of this EA), corresponding vegetative impacts would be minor.

E. Aesthetics

The diesel engine powered generator would be visible and would create noise while operating at the existing mining site. The diesel engine powered generator would be portable, would operate on an intermittent and seasonal basis, and would be a small industrial source. Therefore, any visual aesthetic impacts would be short-lived and minor.

F. Air Quality

Air quality impacts from the proposed project would be minor because this new source would operate on an intermittent and temporary basis. Permit #3860-01 would include conditions limiting the hours of operation of the diesel engine powered generator. In addition, Permit #3860-01 would require water be used to control particulate emissions from the surrounding roadways and general plant area. Additionally, Addendum #2 would apply while the facility is operating in or within 10 km of a certain PM₁₀ nonattainment areas and would impose more stringent requirements for operations within those areas.

Further, the Department determined that this diesel engine powered generator would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's potential to emit would be limited below the major source threshold level of 100 tons per year for any regulated pollutant. Pollutant deposition from the facility would be minimal because the pollutants emitted would be widely dispersed (from factors such as wind speed and wind direction) and would have minimal deposition on the surrounding area. Therefore, air quality impacts from operating the diesel engine powered generator in this area 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 #2, any emissions and resulting impacts from the project would be minor due to the low concentration of those pollutants emitted.

Permit #3860-01 and Addendum #2 would cover the operation of the proposed operation of the diesel engine powered generator 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 #3860-01 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 project, only small demands on environmental resources would be required for proper operation. Only small quantities of water would be required for dust suppression of particulate emissions being generated at the site. In addition, impacts to air resources would be minor because the source is 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 Section 7.F of this EA. Energy requirements would also be small, as the diesel engine powered generator would use small amounts of fuel. Overall, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

Typically, the diesel engine powered generator 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 operation of the diesel engine powered generator would impact any historical or archaeological sites in a given area of operation.

J. Cumulative and Secondary Impacts

The operation of the diesel engine powered generator would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would be limited in the amount of PM₁₀, oxides of Nitrogen (NO_x), carbon monoxide (CO), Volatile Organic Compounds (VOC), and oxides of Sulfur (SO_x) emissions to be generated. Emissions and noise generated from the equipment would, at most, result in only minor impacts to the area of operations because the diesel engine powered generator would be seasonal and temporary. The proposed project would be short-term in nature, and have minor cumulative effects upon resources within the area. These resources include water, terrestrial and aquatic life, soils, and vegetation. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would 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 diesel engine powered generator would cause no disruption to the social structures and mores in the area because the source would be a minor industrial source of emissions 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 #3860-01 and Addendum #2, 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 operation of the diesel engine powered generator because the proposed facility would be a portable source and the facility would conduct seasonal and intermittent operations. The predominant use of the surrounding area would not change as a result of the operation of the diesel engine powered generator. Therefore, the cultural uniqueness and diversity of the area would not be impacted.

C. Local and State Tax Base and Tax Revenue

The operation of the diesel engine powered generator 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. 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 operation of the diesel engine powered generator would have only a minor impact on local industrial production since the facility would be a minor source of air emissions. 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 and limitations that would minimize impacts upon surrounding vegetation, as described in Section 7.D of this EA.

E. Human Health

Permit #3860-01 and Addendum #2 would include limits and conditions to ensure that the diesel engine powered generator 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 #3860-01 and Addendum #2. 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.

F. Access to and Quality of Recreational and Wilderness Activities

Noise from the proposed project would be minor because the operation of the diesel engine powered generator would be small by industrial standards and would operate in areas typically used for such crushing/screening operations (i.e. existing gravel pit). As a result, the amount of noise generated 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.

G. Quantity and Distribution of Employment

The operation of the diesel engine powered generator would not require additional employees to operate and results 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 operation of the diesel engine powered generator would not require additional employees to operate and results in little, if any, permanent immigration into or emigration out of a given area of operation. 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 may be seen in traffic on existing roadways in the area while the diesel engine powered generator is being operated. In addition, government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be minor.

J. Industrial and Commercial Activity

The operation of the diesel engine powered generator 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.

K. Locally Adopted Environmental Plans and Goals

Permit #3860-01 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 #2 to Permit #3860-01 would allow for operations in or within 10 km of certain PM₁₀ nonattainment areas. The Montana SIP provides that the state must improve the air quality in these areas to the point of compliance with the PM₁₀ standard. Permit #3860-01 and Addendum #2 to Permit #3860-01 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 PM₁₀ nonattainment areas from further degradation. In addition to the air quality protection provided by Permit #3860-01 and Addendum #2, 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.

L. Cumulative and Secondary Impacts

The operation of the diesel engine powered generator 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 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, but any cumulative impacts upon the social and economic aspects of the human environment would be minor and short-lived. Thus, only minor and temporary cumulative effects would result to the local economy.

Recommendation: An Environmental Impact Statement (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: Trista Glazier

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