

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

Issued To: A. M. Welles, Inc.
P.O. Box 2808
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Air Quality Permit number: 2691-05

Preliminary Determination Issued: August 7, 2006
Department Decision Issued:
Permit Final:

LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

1. Legal Description of Site: Permit #2691-05 applies to the source while operating at any location in Montana except within those areas having a Department approved permitting program, those areas considered tribal lands, or areas in or within 10 kilometers (km) of certain PM₁₀ nonattainment areas. A Missoula County air quality permit will be required for locations within Missoula County, Montana. An addendum will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.
2. Description of Project: The permit action is to add a primary jaw crusher (400 TPH), three screens (400 TPH, 200 TPH, 200 TPH), and a secondary cone crusher (200 TPH) to the existing facility. In addition, Welles proposes to upgrade the existing generator from 650 kW to 1000 kW. Permit #2691-05 was also updated to reflect the current permit language and rule references used by the Department. A complete list of permitted equipment is contained in Section I.A. of the Permit Analysis.
3. Objectives of Project: The objective of this project would be to produce business and revenue for Welles through the sale and use of aggregate. The issuance of the permit would allow Welles to operate the permitted equipment at various locations throughout Montana, including the proposed initial site location.
4. Alternatives Considered: In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Welles 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 Permit #2691-05.
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

There is a possibility that terrestrials would use the same area as the crushing and screening operation. Impacts on terrestrials and aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor, as the crushing and screening operations would be considered a minor source of emissions and would have intermittent and seasonal operations. Furthermore, the air emissions would have only minor effects on terrestrial and aquatic life because facility emissions would have good pollutant dispersion in the area of operations (see section 7.F). 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 will be required for dust suppression on the surrounding roadways, at areas of operation, and pollution control for equipment operations. However, pollutant deposition and water use would cause minor impacts, if any, to water resources in these areas because the facility is small with seasonal and intermittent operations, and only a small volume of water would be used. Overall, the additional equipment would have minor impacts to water quality, quantity, and distribution in the area of operations.

C. Geology and Soil Quality, Stability and Moisture

The proposed project would have minor impacts on geology, soil quality, stability, and moisture of soils. Minor impacts from deposition of air pollutants on soils would result (as described in Section 7.F of this EA) and minor amounts of water would be used for pollution control--only as necessary in controlling particulate emissions. Thus, minimal water runoff would occur. Since a small amount of pollution would be generated and corresponding

emissions would be widely dispersed before settling upon vegetation and surrounding soils (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 and operation would be minor and short-term.

D. Vegetation Cover, Quantity, and Quality

The facility would be considered a minor source of emissions by industrial standards and would typically operate in remote areas previously designated and used for this type of operation. The overall footprint of the facility will be small, so the affect to quantity and quality of vegetative cover in the area would be minimal. There are no known species of concern within the project area. However, the Dwarf Purple Monkeyflower (vascular plant), the Small Dropseed (vascular plant), and the Slender Wedgegrass are located within three miles of the site and are considered a sensitive species of concern by the Montana Natural Heritage Program. As proposed, this project and the location will not impact any of these vascular plants.

In addition, water use at the facility, soil disturbance from water application, and the associated runoff would also be minimal. Overall, impacts to vegetation from the project would be minor.

E. Aesthetics

Permit #2691-05 will include conditions to control emissions--including visible emissions from the operation. The crushing and screening operation would be portable, would operate on an intermittent and seasonal basis, and would be considered a small industrial source.

For the proposed project, the pit is currently located between the interstate (I-90) and the railroad tracks and another commercial pit owned by others to the west. There are very few houses around the pit area and the nearest house (1000 feet to the East) is shielded by a 20 foot berm. The owner restricts pit hours to lessen the noise impacts on neighbors. Therefore, any disturbance to the aesthetic value of the area would be minor.

F. Air Quality

Air quality impacts from the proposed project would be minor because the facility would be relatively small and operate on an intermittent basis. Permit #2691-05 would include conditions limiting the facility's opacity and the facility's crushing and screening production. The permit will also limit total emissions from the crushing and screening facility and any additional equipment operated at the site to 250 tons per year or less--excluding fugitive emissions.

Further, the Department determined that the crushing and screening facility would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's PTE was below the major source threshold level of 100 tons per year for any regulated pollutant. Additional pollutant deposition from the project would be minimal because the pollutants emitted would be well controlled, 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 the project in this area would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the proposed area of operation (Section 18, Township 1 South, Range 5 East in Gallatin County, Montana) contacted the Montana Natural Heritage Program (MNHP). Search results concluded there are three known vascular plant species (see Section 7.D of this EA) and a Stonefly (invertebrate animal) located within three miles of the facility. The search area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer. The vascular plants are all considered a sensitive species in the area, but none of the species are located on the project site. The Stonefly could potentially be located at the site, but any impacts would be minimal.

Given the fact that all species of concern will not likely be located within the operational area of the project and the portable nature of the crushing and screening operation--any effects would be minimal.

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

The proposed equipment would require an additional small quantity of water, air, and energy for the project. A minimal volume of water would be required for dust suppression of emissions being generated at the site. Impacts to air resources would be minor because the source is considered a minor industrial source of emissions, with intermittent and seasonal operations. Energy requirements would also be relatively small, as the facility would be powered by an industrial diesel generator engine. In addition, the permit requires restrictions on the generator's hours of operation to minimize the effects to air quality. Therefore, impacts to water, air, and energy resources 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 archaeological sites that may be present in the proposed area of construction and operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the proposed area. According to the State Historic Preservation Office, there would be a low likelihood of adverse disturbance to any known archaeological or historic site. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the proposed crushing and screening plant.

J. Cumulative and Secondary Impacts

The additional equipment would cause minor cumulative or secondary impacts to the physical and biological aspects of the human environment because the equipment would generate relatively small amounts of emissions of PM, PM₁₀, (NO_x), (CO), volatile organic compounds (VOC) (including HAPs), and (SO_x). Emissions and noise generated from the equipment would, at most, result in only minor impacts to the area of operations because the crushing and screening plant would be relatively small, seasonal, and temporary. The proposed project would be short-term in nature, and have minor cumulative effects upon resources within the area. 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 proposed project would not cause any disruption to the social structures and mores in the area because the source would be a minor industrial source of emissions, and would only have temporary and intermittent operations. Further, the facility would be required to operate according to the conditions placed on Permit #2691-05 that would limit the effects to social structures and mores.

B. Cultural Uniqueness and Diversity

The facility is located on private land, the footprint of the project will be minor, and predominant use of the area would remain the same. The cultural uniqueness and diversity of this area would not be impacted by the proposed project because the facility would be a portable source, with seasonal and intermittent operations. Therefore, the cultural uniqueness and diversity of the area would not be affected.

C. Local and State Tax Base and Tax Revenue

The proposed project would result in minor, if any, impacts to the local and state tax base and tax revenue because the proposed project would not require additional employees. In addition, only minor amounts of construction would be required to complete the project, and the facility would be a minor industrial source of emissions with seasonal and intermittent operations. Welles currently operates a smaller facility on site and the expansion of the project will not change tax base or revenue for local or State government.

D. Agricultural or Industrial Production

The proposed project would have a minor impact on local industrial production since the facility would increase aggregate production and air emissions slightly. The facility is located on private land and the mining process is currently contained to 30 acres. Because minimal deposition of air pollutants would occur on the surrounding land (as described above in Section 7.F), only minor and temporary effects on the surrounding vegetation or 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 above. According to the owner most of the surrounding area is farm land; therefore, impacts to the surroundings will be minor.

E. Human Health

Conditions would be incorporated into Permit #2691-05 to ensure that the crushing and screening facility would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 7.F of this EA, the air emissions from this project would be minimized by the use of water spray and other process limits that would be required of Permit #2691-05. Further, the facility would operate on an intermittent and seasonal basis and only minor impacts would be expected on human health from the proposed facility.

F. Access to and Quality of Recreational and Wilderness Activities

Access to recreational opportunities will not be limited by this facility. The project location for this action is near the Interstate and railroad. All recreational opportunities, if available in the area, will still be accessible. Noise from the facility would be minimal to surroundings because of the facility size, hours of operation, and rural location. The facility would operate on a seasonal and intermittent basis on private land and would be a minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at this site would be minor.

G. Quantity and Distribution of Employment

The portable crushing and screening operation would be relatively small. As proposed, Welles will not employ any additional people so impacts to employment will be minimal. In addition, the project would have seasonal and intermittent operations. There would be no known effects upon the quantity and distribution of employment in this area.

H. Distribution of Population

The portable crushing and screening operation would be small with few (2-4) employees. No individuals would be relocated to the area of operation as a result of the project because Welles does not plan to hire additional employees. Therefore, the facility would not impact the normal population distribution in the area of operation or any future operating site.

I. Demands for Government Services

There would be no increase in traffic on existing roadways and highways in the area from the proposed project. 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 due to the relatively small size and seasonal nature of the crushing and screening facility.

J. Industrial and Commercial Activity

The proposed project would represent only a minor increase in the industrial activity in the proposed area of operation because the facility would continue to be a small industrial source, portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation. Therefore, any impacts to the industrial and commercial activity would be minor.

K. Locally Adopted Environmental Plans and Goals

Welles would be allowed by Permit #2691-05 to operate in areas designated by EPA as attainment or unclassified for ambient air quality. An addendum would be required to operate in or within 10 km of a PM₁₀ nonattainment area. Permit #2691-05 would contain production and opacity limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards. Because the facility is small and portable, any impacts from the project would be minor and short-lived.

L. Cumulative and Secondary Impacts

Overall, the proposed project 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 continue to be portable, and the footprint of the facility would remain relatively small. Further, no other industrial operations are expected to result from this permitting action. Any increase in traffic would have minor effects on local traffic in the immediate area.

This facility may be operated in conjunction with other equipment owned and operated by Welles, but any cumulative impacts or secondary impacts would be minor and short-term. In conclusion, the source is relatively small, the facility emissions will be minimal, and the project would have only minor cumulative and secondary impacts.

Recommendation: No EIS is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis:

The current permitting action is to add equipment to an existing portable crushing/screening operation. Permit #2691-05 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Jenny O'Mara
Date: August 2, 2006