



PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: April 22, 2010

Name of Applicant: Two Rivers Sand & Gravel, Inc.

Source: Portable Gravel Crushing and Screening Facility

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 4533-00.

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 May 7, 2010. 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:EW
Enclosures

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, MT 59620
(406) 444-3490

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Two Rivers Sand & Gravel, Inc.

Montana Air Quality Permit number: 4533-00

Preliminary Determination Issued:

Department Decision Issued:

Permit Final:

1. *Legal Description of Site:* Two Rivers proposes to operate a crushing and screening facility initially located in Section 18, Township 2 North, Range 20 West, in Ravalli County. MAQP #4533-00 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 PM₁₀ nonattainment area.
2. *Description of Project:* Two Rivers proposes to operate a portable rock crushing and screening facility with a maximum potential production capacity of 50 tph at various locations throughout Montana. The plant would run on electricity provided by a diesel engine/generator with a maximum rated design capacity of 200 hp. A separate diesel engine with a maximum rated design capacity of 275 hp would power the jaw and roll of the crushing plant. The proposed action is to issue MAQP #4533-00 allowing the construction and operation of the plant in Ravalli County, Montana, and other locations across the state.
3. *Objectives of Project:* The objective of the construction and operation of the rock crushing and screening facility is to produce business and revenue by selling aggregate to support construction projects. The issuance of MAQP #4533-00 would allow Two Rivers to operate the permitted equipment at various locations throughout Montana, including the home pit 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 Two Rivers 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 #4533-00.
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

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 because the crushing and screening operations would be considered a minor source of emissions. The applicant has indicated that the source would operate on an intermittent and seasonal basis; therefore, actual emissions may be lower than accounted for in the PTE calculations. There may be water run off from the pollution control of the crushing/screening operation may end up in an on-site pond. 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 would be required for dust suppression on the surrounding roadways, at areas of operation, and pollution control for equipment operations. There exists the potential that water used at the proposed facility for dust suppression purposes could make its way to a pond located within the gravel pit. Application of water spray for dust suppression typically results in the water being evaporated to the atmosphere shortly after its application. Water's dust suppressing capacity is very temporary because of evaporation. Heavy applications of water could create soft mud or penetrate a road to the sub-base which can cause major road failure; therefore, heavy applications are typically not utilized. Consequently, several light applications are preferable to one heavy application. The Department feels that pollutant deposition and water use would cause minor impacts, if any, to water resources in these areas because the facility is a minor source of air emissions and only a relatively small volume of water would be used. While the Department has recommended using water as the primary dust controlling substance, the applicant would have the option of using additional chemical dust suppressants if

necessary to control fugitive emissions. Chemical dust suppressants are designed to stay mostly at one place after application and are typically applied to road surfaces. Although some dust suppressant is washed into the environment after application, the quantities are expected to be relatively small. Overall, the 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 and 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.

D. Vegetation Cover, Quantity, and Quality

The facility would be considered a minor source of emissions by industrial standards and would typically operate in areas previously designated and used for this type of operation. The overall footprint of the facility would be small, so the affect to quantity and quality of vegetative cover in the area would be minimal. There are no known plant species of concern within the project area.

E. Aesthetics

The equipment associated with this project would be visible and audible during operation. MAQP #4533-00 would include conditions to control emissions, including visible emissions, from the operation. The crushing and screening operation would be considered a minor industrial source. The facility would be portable and would operate on an intermittent and seasonal basis; therefore, any aesthetic impacts would be minor and short-lived.

For the proposed project, the facility home pit would be located in an existing gravel pit privately owned by the permittee. The nearest home to the immediate borders of the gravel pit area belongs to the permittee. The site of the gravel pit is on land that was formerly used as a lumber mill. Any disturbance to the aesthetic value of the area would be minor because of its location within an existing pre-disturbed industrial site. The permittee intends to reclaim the land after the project is complete and restore it with landscaping and a pond.

F. Air Quality

Air quality impacts from the proposed project would be minor because the facility would be relatively small and comparable in nature to other similar sources permitted by the Department. MAQP #4533-00 would include conditions limiting the facility's opacity and crushing and screening production. The permit would also limit total emissions from the crushing and screening facility and any additional equipment operated at the site by the same owner 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 TPY for any regulated pollutant. Pollutant deposition from the project would be minimal because the emissions 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. The applicant has indicated that the source would operate on an intermittent and seasonal basis; therefore, actual emissions may be lower than accounted for in the PTE calculations.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources, the Department contacted the Montana National Heritage Program (MNHP). Search results concluded there are 10 known vertebrate animal species of concern 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 MNHP concluded that the threatened species of bull trout and Canada Lynx could be potentially located near the current site location. Sensitive animal species of concern were the western toad, flammulated owl, westslope cutthroat trout, gray wolf, fisher, wolverine, western skink, and Coville's Rush.

Given the fact that most of the species of concern would not likely be located within the operational area of the project and the nature of similar permitted crushing and screening operations, any effects on the local populations are expected to be minimal. In addition, initial and typical operations would take place within a previously disturbed industrial site, further limiting the potential for impact to any unique endangered, fragile, or limited environmental resource.

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 air emissions. Energy requirements would also be relatively small because the facility would be powered by an industrial diesel engine generator. 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 operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the area proposed for initial operation. According to correspondence from the SHPO, there would be a low likelihood of adverse disturbance to any known archaeological or historic site given previous industrial disturbance to the area. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the crushing and screening plant. However, if cultural materials are discovered during this project, or any future project location, the Montana Historical Society should be contacted.

J. Cumulative and Secondary Impacts

Overall, the cumulative and secondary impacts from this project on the physical and biological environment in the immediate area would be minor due to the relatively small size and potential environmental impact of the operation. The Department believes that this facility would be expected to operate in compliance with all applicable rules and regulations as outlined in MAQP #4533-00.

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 proposed project location is within an existing industrial site. The source would be a minor industrial source of emissions and is expected to have intermittent operations. The facility would be required to operate according to the conditions placed on MAQP #4533-00 that would limit the effects to social structures and mores.

B. Cultural Uniqueness and Diversity

The proposed facility would be located on private land in a site that was previously a lumber mill. The footprint of the project equipment would be small and contained within the gravel pit 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 expected 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 impacts to the local and state tax base and tax revenue because the proposed project would require two full time seasonal employees and up to three additional employees during peak operating season. 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 expected seasonal and intermittent operations.

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 would be located on private land in a gravel pit that is 8 acres. Because minimal deposition of air pollutants would occur on the surrounding land, only minor effects on the surrounding vegetation or agricultural production would occur. In addition, the facility operations would be small and temporary in nature. Pollutant deposition from the project would be minimal because the emissions would be well controlled, widely dispersed (from factors such as wind speed and wind direction), and would have minimal deposition on the surrounding area.

E. Human Health

Conditions would be incorporated into MAQP #4533-00 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. The air emissions from this project would be minimized by the use of water spray bars to control the particulate matter. Furthermore, the applicant has stated that they plan to operate on an intermittent and seasonal basis and therefore 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 would not be limited by this facility. The equipment would be initially and typically located within a preexisting industrial site. All recreational opportunities, if available in the area, would still be accessible. Noise from the facility would be minimal to surroundings because of the facility size and expected hours of operation. The applicant has stated that the facility would operate on a seasonal and intermittent basis. The pit is on private land and the Department has determined that the project 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 are expected to be minor.

G. Quantity and Distribution of Employment

The portable crushing and screening operation would be relatively small. As proposed, Two Rivers would employ two full-time seasonal workers and up to three more employees during peak production season, so impacts to local employment would be minor. In addition, the project is expected to have seasonal and intermittent operations.

H. Distribution of Population

The portable crushing operation would be small and temporary in nature with few employees. Therefore, the facility would be expected to have little, if any impact the normal population distribution in the area of operation or any future operating site.

I. Demands for Government Services

There would be a very small 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.

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, and be portable and temporary in nature. Very little 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

Two Rivers would be allowed by MAQP #4533-00 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. MAQP #4533-00 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 would be small and portable, any impacts from the project are expected to 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 be portable and the footprint of the facility would remain relatively small. Furthermore, 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 Two Rivers, but any cumulative impacts or secondary impacts are expected to 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 Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of a portable gravel crushing and screening facility. MAQP #4533-00 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: Ed Warner

Date: April 12, 2010