



Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor

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April 11, 2006

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LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

Thompson River Redi-Mix
Attn: Stephen Buck
P.O. Box 2269
Thompson Falls, MT 59873

Dear Mr. Buck:

Air Quality Permit #3791-00 is deemed final as of April 11, 2006, by the Department of Environmental Quality (Department). This permit is for the operation of a concrete batch plant. All conditions of the Department's decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

David L. Klemp
Air Permitting Supervisor
Air Resources Management Bureau
(406) 444-3490

DK:dds
Enclosure

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

Issued For: Thompson River Redi-Mix
P.O. Box 2269
Thompson Falls, MT 59873

Air Quality Permit Number: 3791-00

Preliminary Determination Issued: March 8, 2006

Department Decision Issued: March 24, 2006

Permit Final: April 11, 2006

1. *Legal Description of Site:* This permit is for the operation of a portable truck mix concrete batch plant and associated equipment to be originally located in Section 14, Township 26 North, Range 33 West, in Sanders County, Montana. Permit #3791-00 would apply while operating at any location in Montana, except within 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. An addendum to this air quality permit would be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.*
2. *Description of Project:* Thompson River submitted a permit application for the construction and operation of a concrete batch plant, which includes an electric powered 1988 Ross 100 concrete batch plant (maximum capacity of 82 cubic yards per hour (yd³/hr)), a 2004 Besser Model DLS-260 Baghouse, a White 298-horsepower (hp) diesel generator, and associated equipment. A fabric filter controls particulate emissions from the cement silo. A rubber boot load-out spout controls particulate emissions from the cement batcher.
3. *Objectives of the Project:* Thompson River, in an effort to increase business and revenue for the company through the construction of the proposed truck mix concrete batch plant and associated equipment, submitted a complete application for the proposed equipment. The concrete batch plant would be used to supply wet mix concrete for sale and use in various construction operations and would allow Thompson River to operate the portable equipment at various locations throughout Montana, including the proposed initial site location.
4. *Additional Project Site Information:* In many cases, the truck mix concrete batch plant operation may move to a general site location, or open cut pit, which has been previously permitted through the Industrial and Energy Minerals Bureau (IEMB). If this were the case, a more extensive EA for the site would have been conducted and would be found in the Mined Land Reclamation Permit for that specific site.
5. *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 Thompson River demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

6. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a BACT analysis, would be contained in Permit #3791-00.
7. *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 would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.
8. *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 Resource			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 and aquatic life would use the areas in which the concrete batch plant would operate. While deposition of particles would occur, as explained in Section 8.F. of this EA, due to the relatively small size and temporary nature of the operation, dispersion characteristics of particles and the area, and conditions placed in Permit #3791-00, any impacts would be minor. Further, air emissions would have only minor effects on terrestrial life because facility emissions would be well dispersed in the area of operations (see Section 8.F of this EA) and the plant sites are generally graveled to reduce fugitive emissions. Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the proposed facility operations.

B. Water Quality, Quantity, and Distribution

Although there would be an increase in air emissions in the area where the concrete batch plant would operate, there would be little, if any impacts on water quality, quantity, and distribution because of the relatively small size and temporary nature of the operation. While deposition from air emissions would occur, the Department determined that any impacts from deposition would be minor. As described in Section 8.F. of this EA, due to the small amount of emissions, dispersion characteristics of particles and the area, and conditions placed in Permit #3791-00, the impacts on water quality from the air emissions from the concrete batch plant would be minor.

Further, water would be required for making the concrete and for dust suppression. However, as a result of the relatively small size and temporary nature of the operation, any impacts from the operation of the concrete batch plant on water quantity and distribution would be minor. Any accidental spills or leaks from equipment would be required to be handled according to the appropriate environmental regulations in an effort to minimize any potential adverse impact on the immediate and surrounding area. Overall, the concrete batch plant operations would result in only minor impacts to water quality, quantity, and distribution.

C. Geology and Soil Quality, Stability, and Moisture

There would be minor impacts to the geology and soil quality, stability, and moisture near the plant's operational area due to facility construction, increased vehicle traffic, the use of water to control dust, and deposition of pollutants from concrete batch operations. As explained in Section 8.F. of this EA, the relatively small size and temporary nature of the operation, dispersion characteristics of particles and the area, and conditions placed in Permit #3791-00 would minimize the impacts from deposition.

D. Vegetation Cover, Quantity, and Quality

There would be minor impacts on the vegetative cover, quantity, and quality because small amounts of vegetation would likely be disturbed from the concrete batch operation. In addition, particle deposition would occur on the surrounding vegetation. However, as explained in Section 8.F. of this EA, the Department determined that, due to the relatively small size and temporary nature of the operation, dispersion characteristics of particles and the area, and conditions placed in Permit #3791-00, any impacts from deposition would be minor. Also, because the water usage would be minimal (as described in Section 8.B. of this EA) and the associated soil disturbance would be minor, corresponding vegetative impacts would also be minor.

E. Aesthetics

The proposed plant would be a relatively small industrial facility. The facility would be visible, including visible emissions from the plant. However, Permit #3791-00 would include conditions to control emissions, including visible emissions, from the plant. Operating the facility would also result in additional noise in the area. However, any increases upon existing noise levels in the area are expected to be minor and intermittent. Additionally, the facility would operate on an intermittent and seasonal basis. Therefore, any associated impacts upon aesthetics from the construction and use of the facility would be minor and short-lived.

F. Air Quality

Air quality impacts from the proposed project would be minor because Permit #3791-00 would limit the facility's opacity, as well as would require a fabric filter dust collector and a rubber boot load-out spout to control facility emissions. Furthermore, Permit #3791-00 would limit total emissions from Thompson River's facility and any additional Thompson River equipment operated at the site to 250 tons/year or less, excluding fugitive emissions. Also, the plant would be operated intermittently and would have a facility production limit (thereby further reducing potential air quality impacts from the facility), and could operate at other locations.

The Department has determined that the proposed facility would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's PTE was limited below the major source threshold level of 100 tons per year for any regulated pollutant (excluding fugitives, per the major source definition). 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. Pollutants would be well dispersed before reaching any water resource, aquatic life in the water resource, terrestrial life and soils surrounding the proposed operational site, humans working and living in the surrounding area, and agricultural production in the surrounding area. Therefore, air quality impacts from operating the proposed facility in this area would be intermittent and minor to the existing resources in the area of operation.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to unique endangered, fragile, or limited environmental resources in this initial proposed area of operation, previously contacted the Montana Natural Heritage Program (MNHP). MNHP search results concluded there are such environmental resources found within the surrounding area. The defined area of concern, in this case, includes the Section, Township, and Range where the proposed facility would locate with an additional 1-mile buffer.

Seven species of concern were identified to have the potential of being within the defined 1-mile radius of the proposed operational site. However, the possible existence has been generalized from many miles of potential habitat. The species of concern include the *Plethodon idahoensis* (Coeur d'Alene Salamander), the *Haliaeetus leucocephalus* (Bald Eagle), the *Ribes cognatum* (Shinyleaf Gooseberry), the *Polystichum scopulinum* (Mountain Holly-fern), the *Lynx canadensis* (Lynx), the *Salvelinus confluentus* population 2 (Bull Trout – Columbia River), and the *Ursus arctos horribilis* (Grizzly Bear). Due to the relatively low levels of pollutants that would be emitted, dispersion characteristics of pollutants and the atmosphere, conditions that would be placed in Permit #3791-00, the Department determined that the chance of the project impacting any species of special concern would be minor.

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

Due to the size of the facility, the concrete batch plant would only require small quantities of water, air, and energy for proper operation. Small quantities of water would be used for dust suppression and for the concrete batching operations. Approximately 20 gallons of water would be needed for every cubic yard of concrete produced. Water would also be used for dust suppression. Impacts to air resources would be minor because the source is small by industrial standards, with intermittent and seasonal operations, and because air pollutants generated by the facility would disperse. Ambient concentrations of air contaminants would comply with ambient standards. Energy would be provided by electrical power. Therefore, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department previously contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. Through those efforts, the Department concluded that there are no previously recorded historical or archaeological resources of concern within the proposed area of operations. Also, according to past correspondence from the Montana State Historic Preservation Office, given the previous disturbance in the area, 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 concrete batch plant.

J. Cumulative and Secondary Impacts

The proposed facility would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate minor amounts of PM and PM₁₀ emissions. Noise would also be generated from the site. Emissions and noise would cause minimal disturbance because the site is located in an area that has good ventilation and is a relatively quiet industrial operation that would be located near a high traffic area. However, noise would be considered as having cumulative increases in noise, but minor increases on noise in the existing area. Additionally, this facility may be used in conjunction with other equipment operated by Thompson River, but the combined emissions of these operations would be limited to 250 tons per year of any pollutant (excluding fugitive emissions) at the site. Overall, any impacts to the physical and biological aspects of the human environment would be minor.

9. *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 Department has prepared the following comments.

A. Social Structures and Mores

The facility would cause no disruption to the social structures and mores in the area because of the location of the source, size of the source, portable and temporary nature of the source, and intermittent and seasonal operations of the source. The facility would be located on private land in a rural setting. Additionally, the facility would be a minor source of air pollution, would be a relatively small sized industrial operation, and would be required to operate under the conditions in Permit #3791-00. Also, the predominant use of the surrounding areas would not change as a result of this project. Thus, no impacts upon social structures or mores would result.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of the area would not be impacted by the proposed facility because the proposed site is separated from the general population. Additionally, the facility would be portable/temporary in nature and would have seasonal and intermittent operations. Therefore, the predominant use of the surrounding area would not change as a result of this project.

C. Local and State Tax Base and Tax Revenue

The proposed facility would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a relatively small industrial source and would operate seasonally and intermittently. The facility operations would require the use of three employees for this project. 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 are expected to be minor because the source would also be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The facility would have only a minor impact on local industrial production since the facility would be a minor source of aggregate production, concrete 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. Therefore, because minimal deposition of air pollutants would occur on the surrounding land (see Section 8.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 temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation.

E. Human Health

Permit #3791-00 would incorporate conditions to ensure that the permitted 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 8.F. of this EA, the air emissions from this facility would be minimized by the use of a fabric filter dust collector, a rubber boot load-out spout, water and water spray, and facility production limits that would be required by Permit #3791-00. Also, the facility would be operating on an intermittent basis and pollutants would be dispersed. Therefore, only minor impacts would be expected on human health from the proposed facility.

F. Access to and Quality of Recreational and Wilderness Activities

Noise from the facility would be minor because the facility would be small and would operate in an area removed from the general population. As a result, the amount of noise from the facility operations would not create any additional impacts upon the quality of recreational and wilderness activities than was already created from the existing highway. Also, the facility would operate on a seasonal and intermittent basis on private land and would be a relatively 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 expected to be minor and intermittent.

G. Quantity and Distribution of Employment

The proposed facility would require nine employees to operate and would have seasonal and intermittent operations. No individuals would be expected to permanently relocate to this area of operation as a result of operating the proposed facility. Therefore, no effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The facility is a portable industrial facility that would require nine employees to operate. Therefore, any impacts upon the normal population distribution in the initially proposed area of operation or any future operating site would be minor and short-lived.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the facility operations are 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. Demands for government services would be minor.

J. Industrial and Commercial Activity

The facility 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. Any additional industrial or commercial activity as a result of the proposed operation is expected to be minor and short-lived.

K. Locally Adopted Environmental Plans and Goals

Thompson River would be allowed, by permit, to operate in areas designated by EPA as attainment or unclassified. The permitted production limits and opacity limits would be protective of air quality while the facility is operating. Because the facility would be a small and portable source and because the facility would have intermittent and seasonal operations, any effects on locally adopted environmental plans and goals from operating the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

The facility 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 is portable/temporary in nature. Further, no other industrial operations are expected to result from the permitting 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 Thompson River, 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 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: 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
Date: February 22, 2006