



Montana Department of
ENVIRONMENTAL **Q**UALITY

Brian Schweitzer, Governor

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May 5, 2009

Karl Conner
Conner's Concrete Inc
PO Box 801
Big Timber, MT 59011

Dear Mr. Conner:

Air Quality Permit #4362-00 is deemed final as of May 5, 2009, by the Department of Environmental Quality (Department). This permit is for a portable rock crushing facility. 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,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
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Ed Warner
Environmental Engineer
Air Resources Management Bureau
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VW:EW
Enclosure

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

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Conner's Concrete Incorporated
P.O. Box 801
Big Timber, MT 59011

Air Quality Permit number: #4362-00

Preliminary Determination Issued: March 16, 2009

Department Decision Issued: April 17, 2009

Permit Final: May 5, 2009

1. *Legal Description of Site:* The initial site location is in the SW¼ of Section 7, Township 1 North, Range 15 East, in Sweet Grass County, Montana.
2. *Description of Project:* Conner proposes to construct and operate a portable rock crushing and screening facility with a maximum potential production capacity of 250 TPH at various locations across Montana. The plant will run on electricity provided by a diesel engine/generator with a maximum rated design capacity of 1,000 hp. Conner may utilize two diesel engines/generators simultaneously; however, the combined maximum rated design capacity of the engines cannot exceed 1,000 hp. The proposed action is to issue MAQP #4362-00 allowing the construction and operation of the plant in Sweet Grass 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 #4362-00 would allow Conner 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 Conner 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#4362-00.
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. Water run off from the pollution control of the crushing/screening operation may end up in an on-site pond which is used for the wash plant. This pond functions as a settling pond, although overflow may leave the property during high water periods. This water run off from the facility may be subject to control and permitting under the Montana Pollutant Discharge Elimination System. 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. There exists the potential that water used at the proposed facility for dust suppression purposes could make its way to a settling pond located within the gravel pit. Water that can discharge from this pond may end up in downstream irrigation canals which eventually flow into the nearby Yellowstone River. However, typical 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 can 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. Water that does not evaporate and becomes run off would flow to an on-site settling pond. The purpose of the settling pond is to allow sediments entrained in the water to settle to the bottom of the pond leaving cleaner water near the surface. Any water discharged from this pond may be subject to control and permitting under the Montana Pollutant Discharge Elimination System. Settled sediments are dredged periodically from the pond. 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 has 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 will 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.

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

MAQP #4362-00 will include conditions to control emissions, including visible emissions, from the operation. The crushing and screening operation would be considered a minor industrial source.

For the proposed project, the facility will be located in an existing gravel pit privately owned by the permittee and adjacent to railroad tracks. There are no houses around the immediate borders of the gravel pit area. There is a residential subdivision development approximately ¼-mile to the southwest and other residential homes approximately ¼-mile to the north of the gravel pit. The pit has a sloped dirt berm and highwall along its northern and eastern edges and

volunteer cottonwood trees along the northern edge. Any disturbance to the aesthetic value of the area would be minor because of its location within an existing pre-disturbed industrial site.

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 #4362-00 would include conditions limiting the facility's opacity and 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. 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

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the proposed initial area of operation (Section 7, Township 1 North, Range 15 East in Sweet Grass County, Montana) contacted the Montana Natural Heritage Program (MNHP). Search results concluded there are seven 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 endangered species of gray wolf and threatened species of bald eagle could be potentially located near the initial site location. The peregrine falcon, greater sage-grouse, Yellowstone cutthroat trout, and greater short-horned lizard were listed as sensitive species potentially occupying the same area as the proposed site location. The bobolink was also identified as a species of concern but has no federal agency status.

The gray wolf has a listed state conservation status of S3, signifying a state-level rank of "vulnerable." "Vulnerable" is defined by NatureServe.org as at moderate risk of extinction or elimination in the jurisdiction due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation. The global conservation status is G4, signifying a global-level rank of "apparently secure." "Apparently secure" is defined by NatureServe.org as uncommon but not rare; some cause for long-term concern due to declines or other factors. In the mid-to-late 1980s, in an effort to restore wolf populations, the gray wolf was reintroduced into three recovery areas – Northwestern Montana, Central Idaho, and the Greater Yellowstone. Although the initial project area is within the wolf recovery area, the wolf exhibits no particular habitat preference except wolves usually occupy areas with few roads and human disturbance, so it is unlikely that wolves would be impacted by this project.

The bald eagle has a listed state conservation status of S3, signifying a state-level rank of "vulnerable." The global conservation status is G5, signifying a global-level rank of "secure." "Secure" is defined by NatureServe.org as common; widespread and abundant. The bald eagle

is found primarily in forested areas along rivers and lakes, especially during breeding season. However, nesting site selection is dependent upon food availability and disturbance from human activity. The initial location for the crushing and screening facility would be located in an existing gravel pit near the Boulder and Yellowstone Rivers. To determine the impact on the local bald eagle population, the Department consulted the U.S. Department of Interior, Bureau of Reclamation Montana Bald Eagle Management Plan (MBEMP). With the identified nests being approximately 0.5 mile or more away from the proposed Conner facility, the site would fall into an MBEMP “Zone III” Classification, representing home range for bald eagles. Zone III is classified as the area from 0.5 mile to 2.5 miles in radius from the nest site (Zone II from 0.25 to 0.5 miles, Zone I from 0 to 0.25 miles). Zone III represents most of the home range used by eagles during nesting season, usually including all suitable foraging habitat within 2.5 miles of all nest sites in the breeding area that have been active within 5 years.

The objectives in Zone III areas include maintaining suitability of foraging habitat, minimizing disturbance within key areas, minimizing hazards, and maintaining the integrity of the breeding area. The nest locations would remain unchanged by the facility operation, except for a possible cumulative minor impact by air pollutants (by the facility as a whole), as described in Section 7.F of this EA. The proposed change would not impact the nest area except as described above from a possible impact from the slight increase in air pollutants. Therefore, the impact on bald eagles is expected to be minor. Conner has also stated that crushing operations are expected to be seasonal with the primary crushing season occurring from October to April which is not during the typical bald eagle nesting season.

The peregrine falcon has a listed state conservation status of S2B, signifying a state-level rank of “imperiled” for the breeding population. “Imperiled” is defined by NatureServe.org as rarity due to very restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation from jurisdiction. The peregrine falcon has a listed global conservation status of G4, signifying a global-level rank of “apparently secure.” The peregrine falcon prefers to nest on ledges of vertical cliffs in undisturbed areas near water with a wide view and close to their prey. Rock quarries have been identified as possible man-made substitute nest sites; however, no peregrine falcon nest sites have been identified within the existing gravel pit where this facility will be located. Therefore, the installation and operation of this facility is not expected to interfere with the local peregrine falcon population.

The greater sage-grouse has a listed state conservation status of S2, signifying a state-level rank of “imperiled.” The global conservation status is G4, signifying a global-level rank of “apparently secure”. They prefer a sagebrush habitat; therefore, the installation and operation of this facility is not expected to interfere with the local greater sage-grouse population because the preferred habitat is not prolific within the gravel pit or one-mile buffer.

The bobolink is a small bird with a listed state conservation status of S2B, signifying a state-level rank of “imperiled” for the breeding population. The global conservation status is G5, signifying a global-level rank of “secure”. They nest in tall grasses and mixed-grass prairies and prefer “old” hay fields with high grass to legume ratios. The Department feels that the potential minor impacts from air emissions will not interfere with the local bobolink population.

The greater short-horned lizard has a listed state conservation status of S3, signifying a state-level rank of “vulnerable.” The global conservation status is G5, signifying a global-level rank of “secure.” The greater short-horned lizard could potentially be located within the operational area of the project due to its preferred habitat of sandy/gravelly soils, but any impacts to the species habitat would be minimal due to the small overall footprint and portable nature of the facility.

The Yellowstone cutthroat trout has a listed state conservation status of S2, signifying a state-level rank of “imperiled.” The global conservation status is G4T2, signifying a global-level rank of “apparently secure” with a subspecies variety rank of “imperiled.” Yellowstone cutthroat are a Montana Fish of Special Concern. Much of their spawning habitat in tributaries of the upper Yellowstone River has been lost to irrigation withdrawals which dewater the streams before spawning and egg-incubation are completed in July and August. There exists the potential that water used at the proposed facility for dust suppression purposes could make its way to the surrounding Boulder and Yellowstone Rivers. However, typical application of water spray for dust suppression 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 can create soft mud or penetrate a road to the sub-base, causing major road failure. Consequently, several light applications are preferable to one heavy application. Water that does not evaporate and becomes run off would flow to an on-site settling pond. The proposed facility is a minor source of emissions; therefore, the Department does not expect any impact to the local Yellowstone cutthroat trout population.

Given the fact that most of the species of concern will 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 emissions. Energy requirements would also be relatively small, as the facility would be powered by an industrial diesel engine generator. 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 SHPO, 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 facility equipment would cause minor cumulative or secondary impacts to the physical and biological aspects of the human environment because it would generate relatively small amounts of emissions of PM, PM₁₀, NO_x, CO, VOC (including HAPs), and SO_x. Emissions and noise would cause minor disturbance to the project area because the equipment is relatively

small by industrial standards and the facility would initially and typically operate in areas designated and used for such industrial operations.

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 is expected to have intermittent operations. The facility would be required to operate according to the conditions placed on MAQP #4362-00 that would limit the effects to social structures and mores.

B. Cultural Uniqueness and Diversity

The facility is located on private land in a site that has been a ballast and gravel pit for many decades. The footprint of the project equipment will 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, 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 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 is located on private land and the mining process is currently contained to 28 acres. Because minimal deposition of air pollutants would occur on the surrounding land (as described above in Section 7.F), only minor 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. The surrounding area to the north and east is used for farm animal grazing. 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 #4362-00 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. 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 MAQP #4362-00. 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 will not be limited by this facility. The project location for this action is near the Boulder and Yellowstone Rivers and adjacent to a railroad. The equipment will be located within a preexisting industrial site that has been established for similar use for several decades. 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, expected hours of operation, and rural location. 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, Conner will not employ any additional people so impacts to employment will be minimal. In addition, the project is expected to 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 (1-4) employees. No individuals would be relocated to the area of operation as a result of the project because Conner does not plan to hire additional employees as a result of this permitting action. 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

Conner would be allowed by MAQP #4362-00 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 kilometers (km) of a PM₁₀ nonattainment area. MAQP #4362-00 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 is 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 Conner, 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 rock crushing and screening facility. MAQP #4362-00 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: February 17, 2009