



Montana Department of
ENVIRONMENTAL QUALITY

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July 3, 2012

Mr. Darrell Silvan
Spion-Kop Wind Farm Aggregate
4498 Jackrabbit Lane
Bozeman, MT 59715

Dear Mr. Silvan:

Montana Air Quality Permit #4746-00 is deemed final as of July 3, 2012, by the Department of Environmental Quality (Department). This permit is for a portable crushing and screening operation. 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,

Charles Homer
Manager, Air Permitting, Compliance and Registration
Air Resources Management Bureau
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Deanne Fischer, P.E.
Environmental Engineer
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CH:DF
Enclosure

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

Issued To: Spion-Kop Wind Farm Aggregate

Montana Air Quality Permit number: 4746-00

Preliminary Determination Issued: May 30, 2012

Department Decision Issued: June 15, 2012

Permit Final: July 3, 2012

1. *Legal Description of Site:* Spion-Kop Wind Farm Aggregate (Spion-Kop) submitted an application to operate a portable crushing/screening plant to initially be located at Township18N, Range 09E, Section 09, in Judith Basin County, Montana. MAQP #4746-00 would apply while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. A *Missoula County* air quality permit would be required for locations within Missoula County, Montana. An addendum would be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.
2. *Description of Project:* The Department received an application from Spion-Kop for the operation of a portable crushing/screening facility. The Spion-Kop portable crushing/screening facility would consist of one crusher, one screening plant, one stacker conveyor, and associated equipment. The crusher, screen, and conveyor are each driven by a diesel fueled engine.
3. *Objectives of Project:* The objective of this project would be to produce revenue for Spion-Kop through the sale and use of gravel. The issuance of the permit would allow Spion-Kop to operate the permitted equipment at various locations throughout Montana, including the 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 Spion-Kop 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 #4746-00.
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

This permitting action would be expected to have minor effects on terrestrial and aquatic life and habitats, as it would disturb approximately two acres of agricultural land. There is a possibility that terrestrials would use the same area as the project. Species of concern in the area include the Bobolink which is listed as sensitive by the United States (U.S.) Bureau of Land Management and potentially at risk during breeding season by the Montana State Species Ranking System. The air emissions would likely have only minor effects on terrestrial and aquatic life because facility emissions would be well dispersed in the area of the operations (see Section 7.F of this EA) and would have intermittent and seasonal operations. Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the proposed project.

B. Water Quality, Quantity and Distribution

Water would be required for dust suppression on the mineral processing equipment and surrounding facility area, including haul roads. This water use would be expected to only cause minor, if any, impacts to water resources because the facility would be considered small and only a small volume of water would be required to be used. In addition a storm water pollution plan would be developed for the site. The closest surface water is Byrne Creek located ½ mile east of the proposed site. Furthermore, the facility would emit air pollutants, and corresponding deposition of pollutants would occur, as described in Section 7.F. of this EA. The Department determined that, due to dispersion characteristics of pollutants, and conditions that would be placed in MAQP #4746-00, any impacts from deposition of pollutants on water quality, quantity, and distribution are expected to be minor.

C. Geology and Soil Quality, Stability and Moisture

The proposed site is an existing wheat farmland with approximately 12-inches of topsoil over fractured/weathered granite bedrock. Only minor impacts from deposition of air pollutants on soils would likely result (as described in Section 7.F of this EA) and only minor amounts of water would be used for pollution control, and only as necessary, in controlling particulate emissions. Thus, only minimal water runoff would likely occur. Since only minor amounts of pollution would be expected and corresponding emissions would be widely dispersed before settling upon surrounding soils and vegetation (as described in Section 7.D of this EA), impacts would be minor. Therefore, any effects upon geology and soil quality, stability, and moisture from air pollutant emissions from equipment operations would likely be minor and short-lived.

D. Vegetation Cover, Quantity, and Quality

Deposition of pollutants may affect vegetation cover, quantity, and quality in the surrounding area. During operations, the facility would likely be a relatively minor source of emissions and the pollutants would be widely dispersed (as described in Section 7.F of this EA). MAQP #4746-00 would contain limitations and conditions to control the allowable amount of those emissions; therefore, deposition on vegetation from the proposed project would expect to be minor. Also, due to limited water usage (as described in Section 7.B of this EA) and minimal associated soil disturbance from the application of water and water runoff (as described in Section 7.C of this EA), corresponding vegetative impacts would likely be minor.

E. Aesthetics

The crushing/screening facility would be visible and would create noise (approximately 93 decibels (dba) according to the application) while operating at the proposed site. However, activity would occur within an open wheat farmland property which would be located approximately 775 feet from the closest residence. Further, MAQP #4749-00 would include conditions to control emissions, including visible emissions, from the plant. The facility would operate on an intermittent and seasonal basis, and would be a small industrial source. Therefore, any visual aesthetic impacts would be short-lived and are expected to be minor.

F. Air Quality

Air quality impacts from the proposed project would likely be minor because the facility would be relatively small and operate on an intermittent and temporary basis. MAQP #4746-00 includes conditions limiting the facility's opacity; require water and water spray bars be available on site and used to ensure compliance with opacity standards; and limit the facility's crushing production.

Further, the Department determined that this facility would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's potential to emit is below the major source threshold. Pollutant deposition from the facility would expect to be minimal because the pollutants emitted are widely dispersed (from factors such as wind speed and wind direction) and exhibit minimal deposition on the surrounding area. Therefore, air quality impacts from operating the crushing facility in this area would be expected to be minor.

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 in the initial proposed area of operation (Township 18N, Range 09E, Section 09, Judith Basin County, Montana) the Department contacted the Natural Resource Information System – Montana Natural Heritage Program. Search results concluded there is

one species of concern within the area. The search area, in this case, is defined by the section, township, and range of the proposed site, with an additional one (1) mile buffer. The known species of concern is limited to a single vertebrate animal; the Bobolink. The Bobolink has a state species status of S3B. S3 signifies that the species is potentially at risk because of limited and/or declining numbers, range and/or habitat, even though it may be abundant in some areas. B signifies that the species is at risk during breeding season, but common in the winter.

The source would have only seasonal and intermittent operations in the area. Therefore, the Department determined that any effects upon this species would likely be minor and short-lived.

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

Due to the relatively small size of the project, only small demands on environmental resources would likely be required for proper operation. Only small quantities of water are required for dust suppression of particulate emissions being generated at the site. In addition, impacts to air resources would be expected to be minor because the source would be considered a minor industrial source of emissions, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed as described in Section 7.F of this EA. Energy requirements would also be small, as the diesel engines would use small amounts of fuel. Overall, any impacts to water, air, and energy resources would likely 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/or archaeological sites that may be present in the proposed initial location of the facility. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the area surrounding proposed for initial operations. According to correspondence from the Montana State Historic Preservation Office, there would be a low likelihood that cultural properties will be impacted. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the proposed crushing/screening plant.

J. Cumulative and Secondary Impacts

The operation of the crushing facility would likely cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would be limited in the amount of emissions allowed to be released to the atmosphere. Emissions and noise generated from the equipment would likely result in only minor impacts to the area of operations because the operation of the crushing facility would be seasonal and temporary. The proposed project would be short-term in nature, and likely have minor cumulative effects upon resources within the area. These resources include water, terrestrial and aquatic life, soils, and vegetation. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would likely be minor.

8. *The following table summarizes the potential economic and social effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores			X			Yes
B	Cultural Uniqueness and Diversity			X			Yes
C	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities			X			Yes
G	Quantity and Distribution of Employment			X			Yes
H	Distribution of Population			X			Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity			X			Yes
K	Locally Adopted Environmental Plans and Goals			X			Yes
L	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The operation of the crushing facility would be expected to cause no disruption to the social structures and mores in the area because the source would be a minor industrial source of emissions and would only have temporary and intermittent operations. Further, the facility would be required to operate according to the conditions that would be placed in MAQP #4746-00, which would limit the effects to social structures and mores.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not likely be impacted by the operation of the proposed crushing facility because the facility is a portable source, with seasonal and intermittent operations. Therefore, there would not be any impacts expected to the cultural uniqueness and diversity of the proposed project site.

C. Local and State Tax Base and Tax Revenue

The operation of the crushing facility would likely have little, if any, impact on the local and state tax base and tax revenue because the facility would be a minor industrial source of emissions and would have seasonal and intermittent operations. The facility would require the approximately five employees. Thus, only minor impacts to the local and state tax base and revenue would be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue would expect to be minor because the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The initial location of the crushing facility would be an agricultural field. Because minimal deposition of air pollutants would occur on the surrounding land (as described in Section 7.F of this EA), only minor and temporary effects on the surrounding vegetation (i.e. agricultural production) would occur. The operation of the crushing facility would have only a minor impact on local industrial production since the facility would be a minor source of air emissions. In addition, the facility operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation, as described in Section 7.D of this EA.

E. Human Health

MAQP #4746-00 would incorporate conditions to ensure that the crushing/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 facility would be minimized by the use of water spray and other operational limits that would be required by MAQP #4746-00. Also, the facility would be operating on a temporary basis and pollutants would disperse from the ventilation of emissions at this site (see Section 7.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed project.

F. Access to and Quality of Recreational and Wilderness Activities

Based on information received from Spion-Kop, no recreational activities or wilderness areas are near the proposed project site would likely be affected. Therefore, no impacts to the access to and quality of recreational and wilderness activities would be expected.

G. Quantity and Distribution of Employment

The portable crushing/screening operation would only require a limited work force to operate (5 employees) 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 crushing/screening facility. Therefore, no effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The portable crushing/screening operation would be a portable industrial facility that would only require a limited number of employees (five employees). No individuals would be expected to permanently relocate to this area as a result of operating the crushing/screening facility. Therefore, the crushing/screening facility would not likely impact the normal population distribution in the initial area of operation or any future operating site.

I. Demands for Government Services

Minor increases may be seen in traffic on existing roadways in the area while the crushing/screening facility is being operated. In addition, government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be expected to be minor.

J. Industrial and Commercial Activity

The operation of the crushing facility 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.

K. Locally Adopted Environmental Plans and Goals

Spion-Kop would be allowed, by MAQP #4746-00, to operate in areas designated by Environmental Protection Agency as attainment or unclassified for ambient air quality. MAQP #4746-00 contains operational restrictions for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards, as a locally adopted environmental plan or goal for operating at this proposed site. Because the proposed crushing/screening facility would be a portable source and would likely have intermittent and seasonal operations, any impacts from the project would be expected to be minor and short-lived.

L. Cumulative and Secondary Impacts

The operation of the facility would cause only minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source would be a portable and temporary source. Minor increases in traffic would have minor effects on local traffic in the immediate area. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Thus, only minor and temporary cumulative effects would be expected to the local economy.

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 crushing/screening facility. MAQP #4746-00 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: Deanne Fischer

Date: May 22, 2012