Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
P. O. Box 200901 Helena, MT 59620-0901 (406) 444-2544 Website: www.deq.mt.gov

November 16, 2010

Dan Hutchings
Valley Sand & Gravel, LLC
7510 Applegate Drive
Helena, Montana 59602

Dear Mr. Hutchings:

The Department of Environmental Quality (Department) has made its decision on the Montana Air Quality Permit application for Valley Sand & Gravel, LLC. The application was given permit number 3192-02. The Department's decision may be appealed to the Board of Environmental Review (Board). A request for hearing must be filed by 12/1/10. This permit shall become final on 12/2/10, unless the Board orders a stay on the permit.

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 before the final date stated above. 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, Montana 59620.

Conditions: See attached.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-9741

Ed Warner
Environmental Engineer
Air Resources Management Bureau
(406) 444-2467

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*: Valley Sand & Gravel

*Montana Air Quality Permit number:* 3192-02

*Preliminary Determination Issued:* 10/15/10
*Department Decision Issued:* 11/16/10
*Permit Final:*

1. *Legal Description of Site*: VSG operates a portable gravel crushing and screening facility with a homepit location in the SE¼ of Section 13, Township 11 North, Range 4 West, in Lewis and Clark County, Montana. However, MAQP #3192-02 applies while operating at any location in Montana, except within those areas having a Department approved permitting program, those areas considered tribal lands, or those areas in or within 10 km of certain $PM_{10}$ nonattainment areas. An addendum to this air quality permit will be required if VSG intends to locate in or within 10 km of certain $PM_{10}$ nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County.*

2. *Description of Project*: VSG is consolidating equipment that was formerly listed in other MAQPs held by VSG (a 250 TPH crusher formerly included in MAQP #3196-01 and a 200 TPH combined crushing and screening plant formerly permitted in MAQP #3161-03) into MAQP #3192-02. Additionally, 743-bhp and 207-bhp diesel generator engines have been added to the MAQP and a 515-bhp diesel generator engine has been removed. VSG proposes to use this crushing and screening facility to screen and sort sand and gravel materials for use in various construction operations. For a typical operational setup, materials are loaded into the crushing/screening plant by a feeder, transferred by conveyor, and passed through the crusher. Materials are crushed by the crusher and sent to the screens. Materials are screened, separated, and sent to the wash plant via a conveyor belt. Materials are washed by the wash plant, separated, and conveyed to a stockpile for sale and use in construction operations.

3. *Objectives of Project*: This facility would be used to supply aggregate to various construction projects and would allow Valley to operate the portable equipment at various locations throughout Montana.

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 VSG 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 #3192-02.

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

Terrestrials would use the same area as the aggregate crushing and screening operations. The facility operations would be considered a minor source of emissions, by industrial standards, with intermittent and seasonal operations. Therefore, only minor effects on terrestrial life would be expected as a result of equipment operations or from pollutant deposition.

Impacts on aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor as the facility would be a minor source of emissions (with seasonal and intermittent operations) and only minor amounts of water would be used for pollution control. Also, the nearest water body (an unnamed stream is over 100 meters away) from the proposed operation. At such distances, only minor and temporary effects to aquatic life would be expected from the proposed operation because only minor amounts of pollutants would be emitted. Pollutant emissions would be well dispersed in the area of operation before reaching the water body and only minor deposition would occur. Therefore, only minor and temporary effects to aquatic life and habitat would be expected from the proposed operation.

B. Water Quality, Quantity and Distribution

Water would be used for pollution control for equipment operations and may be utilized for dust suppression on the surrounding roadways and areas of operation. However, water use would only cause a minor surface disturbance to this proposed operational site, since only minor amounts of water would be required to be used for pollution control. Therefore, at most, only minor surface and groundwater quality impacts would be expected as a result of using

water for dust suppression because only small amounts of water would be required to control air pollutant emissions and deposition of air pollutants upon surrounding water bodies would be minor (as described in Section 8.F of this EA).

C. Geology and Soil Quality, Stability and Moisture

The additional equipment would only have minor impacts on soils for the homepit or any proposed site location due to the construction and use of the proposed facility because the facility is relatively small in size, would use only relatively small amounts of water for pollution control, and would only have seasonal and intermittent operations. Further, the facility would generate relatively small amounts of air pollutants that would be widely dispersed before depositing upon the surrounding soils, typically soils within a previously disturbed open-cut pit. Therefore, any affects upon geology and soil quality, stability, and moisture at any proposed operational site would be minor.

D. Vegetation Cover, Quantity, and Quality

Because the additions to the facility would be a minor source of emissions by industrial standards and would initially (and typically) operate in areas previously designated and used for aggregate crushing and screening, impacts from the emissions upon vegetative cover, quality, and quantity would be minor.

As described in Section 8.F of this EA, the amount of air emissions from this project would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, because the water usage is minimal, as described in Section 8.B, and the associated soil disturbance is minimal, as described in Section 8.C, corresponding vegetative impacts would be minor.

E. Aesthetics

The additional aggregate crushing and screening equipment would be visible and would create additional noise while operating in the homepit location and other permitted operational sites. However, MAQP #3192-02 would include conditions to control emissions, including visible emissions from the plant. Therefore, because the facility is portable, would operate on an intermittent and seasonal basis, and would typically locate within an open-cut pit, any visual and noise impacts would be minor and short-lived.

F. Air Quality

The air quality impacts from the proposed project would be minor because the facility would be relatively small, would operate on an intermittent and temporary basis, and would typically locate in a previously disturbed site. MAQP #3192-02 would include conditions limiting the opacity from the plant, as well as requiring water spray bars and other means to control air pollution. Further, MAQP #3192-02 would limit total emissions from the aggregate crushing and screening operations and any additional VSG equipment operated at the site to 250 TPY or less, excluding fugitive emissions, and limit each component of the aggregate crushing and screening operation. Thus, because only small and intermittent amounts of air pollutants would be generated and deposited upon any given area of the surrounding environment from this facility, all associated air quality impacts would 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, the Department previously contacted the Montana Natural Heritage Program (MNHP) to identify any species of concern associated with the homepit site location (SE¼ of Section 13, Township 11 North, Range 4 West, in Lewis and Clark County, Montana). Search results concluded that the Black-tailed Prairie Dog, a mammal species designated as sensitive by U.S fish & Wildlife Service, has recorded occurrences within the defined area. The defined area, in this case, is defined by the township and range of the homepit site, with an additional one-mile buffer. Based on the small size and temporary nature of the equipment operations, the fact that the facility operations would typically take place in a previously disturbed area, and the minimal disturbance expected to the environment (water, air, and soils), the Department determined that minor impacts to any unique endangered, fragile, or limited environmental resources would occur.

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

Due to the relatively small size of the proposed project, the aggregate crushing and screening operations would only require small quantities of water, air, and energy for proper operation. Small quantities of water would be used for dust suppression and would control particulate emissions being generated at the site. Energy requirements would also be small because the energy demands of the facility would typically be provided by the portable diesel generators and the facility would not be used continuously. The facility would have limited hours of operation, limited production, and would have seasonal and intermittent use. In addition, 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 be widely dispersed. Therefore, any impacts to water, air, and energy resources in any given area 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 homepit location. Search results concluded that there is one previously recorded historical mining site within the same section as the homepit location. According to the SHPO, there would be a low likelihood that cultural properties would be impacted by the project. Therefore, minor impacts upon historical or archaeological sites would be expected as a result of proposed operation in the homepit or other locations due to the small size and temporary nature of the equipment operations, the fact that the facility operations would typically take place in a previously disturbed area, and the minimal disturbance expected to the environment (water, air, and soils).

J. Cumulative and Secondary Impacts

The proposed additional equipment would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate emissions of PM, $PM_{10}$, $PM_{2.5}$, $NO_x$, VOC, CO, and $SO_x$. Emissions and noise would cause minimal disturbance because the equipment is small and the facility would be expected to operate in areas designated and used for such operations. Additionally, this facility, in combination with other emissions from equipment operations at the operational site, would not be permitted to exceed 250 TPY of non-fugitive emissions. Overall, any cumulative or secondary impacts to the physical and biological aspects of the human environment would be minor.

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

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

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

A. Social Structures and Mores

The additional equipment would not cause disruption to the social structures and mores in the area because the source would be a minor source of air emissions (by industrial standards) and would only have intermittent operations. Additionally, the equipment would be expected to operate in an area previously designated and used for aggregate production and in an area removed from the general population. Further, the facility would be a minor source of air pollution and would be required to operate according to the conditions that would be placed in MAQP #3192-02. Thus, no native or traditional communities would be affected by the proposed project operations and no impacts upon social structures or mores would result.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the proposed additional equipment because the homepit has already been used for aggregate mining, is a bermed pit, and the facility would be a portable source with seasonal and intermittent operations. Therefore, the predominant use of the surrounding area would not change as a result of this project and the cultural uniqueness and diversity of the area would not be affected.

C. Local and State Tax Base and Tax Revenue

The additional equipment would have little, if any, impact on the local and state tax base and tax revenue because the proposed project would be a relatively small industrial source (minor source) and would operated on a seasonal and intermittent basis. The proposed project would require the use of a few existing employees. Thus, only minor, if any impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impact to local tax base and revenue would be minor because the source would also be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The additional equipment would have only a minor impact on local industrial production since the proposed project is a minor source of emissions (by industrial standards) and would typically locate in an existing open-cut pit. There could be minor effects on agricultural land but the proposed project 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 8.D of this EA). Additionally, pollution control would be utilized for equipment operations and crushing/screening/washing production limits would be established.

E. Human Health

MAQP #3192-02 would incorporate conditions to ensure that the aggregate crushing and screening operations 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 proposed project would be minimized by the use of water spray and other conditions that would be established in MAQP #3192-02. Further, the facility would be operating on a temporary and intermittent basis. Therefore, only minor impacts would be expected upon human health from the proposed facility.

F. Access to and Quality of Recreational and Wilderness Activities

The additional equipment would initially (and typically) operate within the confines of an existing open-cut pit. Therefore, only minor impacts upon access to and quality of recreational and wilderness activities would result. Additionally, noise from the proposed project would be minor because the facility would typically operate within the confines of an existing and bermed open-cut pit. Also, the proposed project would operate on a seasonal and intermittent basis and would be relatively small by industrial standards. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at a given site would be expected to be minor and intermittent.

G. Quantity and Distribution of Employment

The aggregate crushing and screening operation remains a small portable source with seasonal and intermittent operations and would not be expected to have any long-term affects upon the quality and distribution of employment in any given area of operation. Therefore, no effects upon the quantity and distribution of employment in these areas would be expected.

H. Distribution of Population

The additional equipment would only require a few existing employees to operate. Also, no individuals would be expected to permanently relocate to a given area of operation as a result of operating the crushing and screening facility, which would have only intermittent and seasonal operations. Therefore, the aggregate crushing and screening operations would not disrupt the normal population distribution in any given area of operation.

I. Demands for Government Services

Minor increases would be seen in traffic on existing roadways in the area while the aggregate crushing and screening operations is in progress due to the increased potential production. 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 minor, due to the relatively small size and seasonal nature of the aggregate crushing and screening operations.

J. Industrial and Commercial Activity

The additional equipment would represent only a minor increase in the industrial activity in any given area because the source would be a minor source (relatively small in size by industrial standards) and would be portable and temporary in nature.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals that would affect VSG. VSG would be allowed, by permit, to operate in areas designated by EPA as attainment or unclassified. MAQP #3192-02 would contain conditions for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards. Because the facility would be a small and portable source, and would have intermittent and seasonal operations, any effects from the proposed project would be minor and short-lived.

L. Cumulative and Secondary Impacts

The additional equipment would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area because the source is a portable, temporary source. Further, no other industrial operations are expected to result from the permitting of this proposed project. 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 proposed project. Further, this proposed project may be operated in conjunction with other equipment owned and operated by VSG, 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: 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 #3192-02 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: 9/29/10