



Montana Department of  
**ENVIRONMENTAL QUALITY**

Brian Schweitzer, Governor

P.O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • www.deq.mt.gov

January 3, 2006

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LEGISLATIVE ENVIRONMENTAL  
POLICY OFFICE

Scott Schuman  
United Materials of Great Falls, Inc.  
P.O. Box 1690  
Great Falls, MT 59403

Dear Mr. Schuman:

Air Quality Permit #2941-02 is deemed final as of December 31, 2005, by the Department of Environmental Quality (Department). This permit is for the modification of plant operations. Specifically, the current permit action adds a Nordberg 6' x 20' 3-deck screen (1000 ton per hour (tph)), a Nordberg HP300 cone crusher (1000 tph), and various material handling conveyors. In addition, the current permit action removes an existing Nordberg HP200 cone crusher (1000 tph) from permitted operations. 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* for

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

DK:lr  
Enclosure

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

FINAL ENVIRONMENTAL ASSESSMENT (EA)

*Issued For:* United Materials of Great Falls, Inc.  
P.O. Box 1690  
Great Falls, MT 59403-1690

*Air Quality Permit Number:* #2941-02

*Preliminary Determination Issued:* November 14, 2005

*Department Decision Issued:* December 15, 2005

*Permit Final:* December 31, 2005

1. *Legal Description of Site:* Permit #2941-02 would apply while operating in any location in the state of Montana, except within those areas having a Department approved permitting program, areas considered tribal lands, or areas in or within 10 km of certain PM<sub>10</sub> nonattainment areas. A Missoula County air quality permit will be required for locations within Missoula County, Montana. An addendum to Permit #2941-02 will be required for operations located in or within 10 km of certain PM<sub>10</sub> nonattainment areas.
2. *Description of Project:* On November 3, 2005, United submitted a complete permit application to modify plant operations. Specifically, the current permit action would add a Nordberg 6' x 20' 3-deck screen (1000 ton per hour (tph)), a Nordberg HP300 cone crusher (1000 tph), and various material handling conveyors to the previously permitted operation. In addition, the current permit action would remove an existing Nordberg HP200 cone crusher (1000 tph) from permitted operations.

Further, potential uncontrolled emissions from modified United operations would exceed the applicable major source Title V Operating Permit program threshold. However, in an effort to avoid Title V Operating Permit program applicability, United proposed a synthetic-minor (SM) limit on facility operations. After consultation with the Department, United proposed an enforceable plant-wide production limit of 2,000,000 tons during any rolling 12-month time period. Limiting production to a maximum of 2,000,000 tons per year would result in allowable plant-wide emissions at a level less than 80% of the applicable Title V operating permit program emission threshold and would thereby allow United to avoid Title V SM-80 regulatory status.

3. *Objectives of Project:* United desires to increase business and revenue for the company. This objective could be met through operating the additional crushing/screening equipment to generate aggregate for sale and use.

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 United 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 permit and a permit analysis, including a BACT analysis, would be contained in Permit #2941-02.
6. *Regulatory Effects on Private Property Rights:* 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.

Potential Physical and Biological Effects							
		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 would use the same areas that the crushing/screening operations would occupy; therefore, the operations would impact this resource. However, addition of the proposed new crushing/screening equipment to existing crushing/screening operations would result in only minor and typical additional impacts to terrestrial life in the area.

B. Water Quality, Quantity, and Distribution

Water would be required for dust suppression on the proposed new crushing/screening equipment, but would cause only minor additional disturbances to the area because only relatively small amounts of water would be needed and because existing permitted operations already use water for pollution control practices. No additional surface water or ground water quality impacts would be expected as a result of using water for dust suppression, or from other accidental spills or equipment leaks. Overall, any impacts to water quality, quantity, and distribution would be minor and typical.

C. Geology and Soil Quality, Stability, and Moisture

The soils in any given affected area would be impacted by the addition of the proposed crushing/screening equipment due to the nature of the proposed new equipment. However, given that United operations would typically take place within a previously disturbed open-cut pit, and existing crushing/screening equipment already results in similar impacts, any potential impacts would be minor and typical.

D. Vegetation Cover, Quantity, and Quality

Existing vegetative cover, quantity, and quality would be impacted by the emissions from the proposed new crushing/screening equipment because the new equipment would result in additional processing of materials. However, given that United operations would typically take place within a previously disturbed open-cut pit, and existing crushing/screening equipment already results in similar impacts, any potential impacts would be minor and typical.

E. Aesthetics

The proposed new crushing/screening equipment would be visible and would create additional noise in the area. However, Permit #2941-02 would include conditions to control emissions, including visible emissions, from the proposed new equipment. The addition of the proposed new crushing/screening equipment to existing crushing/screening operations would result in only minor and typical additional impacts to any aesthetic resource in a given area of operations.

F. Air Quality

The air quality impacts from the proposed new crushing/screening equipment would be minor because Permit #2941-02 would include conditions limiting the opacity from the affected equipment, as well as requiring water spray bars and other means to control air pollution. Further, any additional impacts from the proposed new equipment would be limited by BACT determined control requirements for the specific affected equipment and production limits placed on total plant operations. Overall, any additional air quality impacts realized by the addition of the proposed new crushing/screening equipment would be minor and typical.

G. Unique Endangered, Fragile, or Limited Environmental Resources

Addition of the proposed new crushing/screening equipment would result in only minor impacts to any unique endangered, fragile, or limited environmental resources that would be located in any given area of operation because the additional equipment would result in additional emissions and other minor impacts discussed in previous sections of this EA. Overall, any additional impacts realized by the addition of the proposed new crushing/screening equipment would be minor and typical.

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

The new proposed crushing/screening equipment would result in only a minor increased demand for water, air and energy resources given that the proposed operations would require only small additional quantities of water, air, and energy for conditional operation. Small quantities of water would be used for dust suppression activities associated with the new crushing/screening equipment. Further, addition of the new equipment would result in a minor increase in energy requirements from the existing and previously permitted diesel generator. Air resources would also realize minor impacts associated with a minor increase in allowable air emissions of regulated pollutants. Overall, any additional impacts realized by the addition of the proposed new crushing/screening equipment would be minor and typical.

I. Historical and Archaeological Sites

The proposed new crushing/screening equipment and the existing and previously permitted crushing/screening plant would typically operate within a previously disturbed and permitted open cut pit. According to the State Historical Preservation Office (SHPO), given previous industrial disturbance to a given area, there would be a low likelihood of disturbance to any archaeological or historical site. Therefore, addition of the proposed crushing/screening equipment to plant operations would not impact any historical or archaeological site.

J. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from the proposed project on the physical and biological resources of the human environment in the immediate area of proposed crushing/screening operations would be minor because the predominant use of the surrounding area would not change as a result of the proposed project. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #2941-02.

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

Potential Social and Economic Effects							
		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 SOCIAL AND ECONOMIC EFFECTS:**

The following comments have been prepared by the Department.

- A. Social Structures and Mores
- B. Cultural Uniqueness and Diversity

The proposed project would not impact the social structures and mores or the cultural uniqueness and diversity of the proposed area of operation because the project would include adding equipment to the permitted plant to facilitate operations similar to existing operations at the facility. The predominant use of any given area of operation would not change as a result of the proposed project; therefore, no impacts to the above-cited resources would be expected as a result of the current permit action.

- C. Local and State Tax Base and Tax Revenue

The proposed project would result in only a minor impact on any given local and the state tax base and tax revenue because the project would only slightly change current practices. Any economic impact to a given area would be minor because the proposed project would not change typical operations. Further, the project would require only a limited amount of new construction and only a limited number of existing employees/operators and likely no new employees would be required for normal operations of the proposed equipment. Overall, any impact to local and state tax base and tax revenue would be minor as a result of the installation and operation of the proposed new equipment at the facility.

D. Agricultural or Industrial Production

The proposed project would not impact or displace any land used for agricultural production because the proposed project would typically operate within an existing open cut pit. Further, the proposed project would result in only a minor amount of additional, but similar, industrial production through operation of the new equipment. Otherwise, the current permit action would not alter the general nature of industrial activities at any given site.

E. Human Health

Permit #2941-02 would incorporate conditions to ensure that the proposed new crushing/screening equipment would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. Therefore, only minor impacts would be expected on human health from the proposed project.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed project would add and remove equipment at the facility but would not impact any access to or quality of any recreation or wilderness activities in any given area because the proposed project would typically operate within an existing open cut pit, which normally accommodates operations of this kind. Therefore, no additional impacts to the access and quality of recreational and wilderness activities would be realized as a result of the current permit action.

G. Quantity and Distribution of Employment

H. Distribution of Population

The installation and operation of the proposed new equipment would utilize existing United personnel for operations and would likely not require any new or only a limited amount of new employment. Therefore, the proposed project would have little or no impact on the quantity and distribution of employment and population in the area.

I. Demands of Government Services

Government services would be required for acquiring the appropriate permits from government agencies. In addition, the permitted source of emissions would be subject to periodic inspections by government personnel. Overall, demands for government services would be minor.

J. Industrial and Commercial Activity

The proposed project would result in only minor impact on local industrial and commercial activity because the proposed project would be similar to existing activity and would typically operate within an existing industrial open cut pit. Further, the proposed project would require only a small amount of new construction and would not result in additional industrial production. Overall, any potential impact to the industrial and commercial activity in a given area of operation would be minor.

K. Locally Adopted Environmental Plans and Goals

The crushing/screening plant would operate in various locations throughout the state; therefore, the Department is unaware of any locally adopted environmental plans or goals that may be affected by the proposed project. The state standards included in the air quality permit would be protective of any proposed project area.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from the proposed project on the economic and social resources of the human environment in the immediate area would be minor because the predominant use of the surrounding area would not change as a result of the proposed project. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #2941-02.

Recommendation: No EIS is required.

*If an EIS is not required, explain why the EA is an appropriate level of analysis:* Since this plant is a relatively small source and the impacts from the plant will be minor, an EIS is not necessary.

*Other groups or agencies contacted or that may have overlapping jurisdiction:* Department of Environmental Quality – Permitting and Compliance Division (Air Resources Management Bureau and Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and State Historic Preservation Office (Montana Historical Society).

*Individuals or groups contributing to this EA:* Department of Environmental Quality – Permitting and Compliance Division (Air Resources Management Bureau and Industrial and Energy Minerals Bureau), Montana Natural Heritage Program, State Historic Preservation Office (Montana Historical Society).

EA prepared by: M. Eric Merchant, MPH

Date: November 2, 2005