

ENVIRONMENTAL ASSESSMENT

On an Application for an

OPENCUT MINING PERMIT or AMENDMENT

This Environmental Assessment (EA) is required under the Montana Environmental Policy Act (MEPA). An EA functions to identify, disclose, and analyze the impacts of a proposed action. This document may disclose impacts that have no legislatively required mitigation measures, or over which there is no regulatory authority.

The state law that regulates gravel mining operations in Montana is the Opencut Mining Act. This law and the rules adopted hereunder place operational guidance and limitations on a project during its lifetime, and provides for the reclamation of land affected by opencut mining operations.

Local governments and other state agencies may have authority over different resources and activities under their regulations. Approval or denial of this Opencut Application will be based on a determination of whether or not the proposed operation complies with the Opencut Mining Act and the Rules adopted hereunder.

Applicant: Warren Transport, Inc.

SITE NAME: JDW Industrial Park 2

LOCATION: Section 18 & 19, T1N, R27E

COUNTY: Yellowstone

DATE: May 27, 2009

PROPOSAL: Warren Transport, Inc. proposes to mine and crush about 300,000 cubic yards of gravel from a 21.5-acre site along Johnson Lane. The mining area would be about 12 acres and the stockpile and crusher area would be about 9.5 acres. The stockpile area is part of an area that was developed and graveled as a truck and equipment storage area.

The final reclamation would include a pond, wetland, house, and equipment storage area to be completed by June 2013. The facility area would remain graveled for reclamation to an equipment storage site. The reclamation bond would be \$35,071.

The application contains all items required by the Opencut Act and Rules. The applicant commits to properly conducting opencut operations and would be legally bound by the permit.

IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:	<p>The site is on the first terrace above the Yellowstone River. The northwest corner is within the 100-year flood plain.</p> <p>The alluvial gravels have been very recently deposited. This is high quality gravel.</p> <p>The soil is about 3 to 12 inches deep. Some of it is fine sand and silt, and some is clayey wetland soil.</p> <p><i>Impacts:</i> Irreversible and irretrievable removal of gravel from the site. There would be a small impact to the quantity and quality of soils from salvaging, stockpiling, and resoiling activities, but this would not impair the capacity of the soils to support full reclamation. Some soil would be replaced in the wetlands area of the pond, and some would be used around the house site. The parking area would remain graveled.</p> <p>There are no unusual topographic, geologic, soil, or special reclamation considerations that would lead to reclamation failure.</p> <p><i>Cumulative Impacts:</i> This plain has been mined by many operators over many years. Presently, five operators are active along Johnson Lane.</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>2. WATER QUALITY, QUANTITY AND DISTRIBUTION</p>	<p><i>Surface water:</i> The northwest corner of the site is in the 100-year flood plain, and the rest of the site is only a few inches above it. A roadside ditch lies along Johnson Lane, and a drain ditch crosses the site. The plan calls for a berm to be built along Johnson Lane at the road's elevation. The drain ditch would be temporarily diverted along the east edge of the permit. At final reclamation it would be rerouted into the pond and out the north end into its original channel.</p> <p><i>Groundwater:</i> The average water table in this area is about 5 feet. The applicant has a discharge permit issued by the DEQ Water Protection Bureau, so that it can more easily mine the site to about 18 feet deep. Mining would be conducted with an excavator.</p> <p><i>Impacts:</i> The Army Corps of Engineers, DEQ Water Protection Bureau, and the county floodplain administrator have been notified of these proposed actions. A joint public notice was published in March 2009. These agencies are charged with making the decisions concerning wetland mitigation covered by Section 404, water quality certification under Section 401, both in the Clean Water Act, and floodplain regulations.</p> <p>The dewatering discharge would be placed in the temporarily rerouted ditch. Through previous mining experience it is known that the flow through this aquifer is very large. Mining to 18 feet would allow good groundwater flow through the reclamation pond. Dewatering would have no effect on any local wells.</p> <p>If the wash plant were installed, the dewatering water would be used in its operation. The drain water would flow into a small settling pond and either flow back into the drain ditch or infiltrate into the ground. Proposed activities would have a minimal effect on the quantity and quality of the surface and groundwater resources.</p> <p><i>Cumulative Impacts:</i> All the pits in this area have been or are being reclaimed to ponds because of the very high water table.</p>
<p>3. AIR QUALITY</p>	<p>Air quality standards are based upon the Clean Air Act of Montana and pursuant rules, and are administered by the DEQ Air Resources Management Bureau (ARMB). Its program is approved by the Environmental Protection Agency (EPA). These rules and standards are designed to be protective of human health and the environment.</p> <p>Air quality permits would be required on the processing equipment before installment. Machinery, such as generators, crushers and asphalt plants, are individually permitted for allowable emissions. Best Available Control Technology (BACT) is the usual standard applied.</p> <p>Fugitive dust is that which blows off the pit floor, stockpiles, gravel roads, farm fields, etc. It is considered to be a nuisance but not harmful to health.</p> <p>The proposed crusher and diesel/natural gas generators may require individual air permits.</p> <p><i>Impacts:</i> Air quality standards as set by the federal government and enforced by the ARMB would allow minimal detrimental air impacts.</p>
<p>4. VEGETATION COVER,</p>	<p>The facility area is not vegetated. The mining areas include wetland</p>

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QUANTITY AND QUALITY	<p>that supports grasses, cattails, shrubs and various forbs.</p> <p><i>Impacts:</i> Mining would result in permanent changes to the vegetative community. About 8.3 acres of the wetland would be replaced with a combination wetland and pond. About 5 acres would be converted to a house site.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>Most of the surrounding area is in the Yellowstone floodplain. Although there are many pock marks of old and present gravel mining operations, it is basically a wild land supporting populations of deer, rodents, song birds, pheasant, turkeys, coyotes, foxes, raptors, insects and various other animal species. Population numbers for these species are not known.</p> <p><i>Impacts:</i> The proposed mine is expected to temporarily displace some individual species. It is likely that portions of the site would be re-inhabited following reclamation to similar wetland habitat. The pond would provide an aquatic habitat. The home site, depending upon landscaping, may support a third habitat type.</p>
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:	<p>The Montana Natural Heritage Program has no listings on site, but does list reports for the Yellowstone River Corridor ecological corridor and 6 possible species of concern for the general vicinity. The site is in the heart of a hunting area used by Bald Eagles. It is also at the edge of a 49,431-acre hunting area used by the Spotted Bat. The Spiny Softshell is an aquatic turtle found in the Yellowstone River Corridor that uses sandy or muddy backwater areas such as found on this site. The Greater Horned Lizard, the Common Sagebrush Lizard, and the Western Hognose Snake live in arid or semi-arid habitat which does not exist on this site.</p> <p><i>Impacts:</i> None of the listed species have been found on this site. Even if suitable habitat did exist on this site, the disturbance area would be small for a short duration, and large areas of similar or identical habitat surround the site. The possible impact to these species would be minimal. Reclamation to a pond could increase the value of the habitat for bald eagles, spotted bats, and spiny softshells by increasing fish and insect habitat.</p>
7. HISTORICAL AND ARCHAEOLOGICAL SITES	<p>The Montana State Historic Preservation Office (SHPO) was supplied with the application materials. It reported no sites have been discovered previously on this property. A pedestrian survey of the area by DEQ personnel did not reveal any artifacts or signs of occupation. No signs were evident at depth in the previously disturbed area.</p> <p><i>Impacts:</i> If during operations resources were to be discovered, activities would be temporarily moved to another area or halted until SHPO was contacted and the importance of the resources was determined.</p>
8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY	<p><i>Impacts:</i> There would be negligible impacts to the resources in the area. Even though the approximate 300,000 yards of gravel to be mined would be permanently removed, it is a minute amount of the gravel resource in this portion of the valley.</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	The area is zoned heavy industrial. Surrounding land uses are other gravel mining, factory, industrial agriculture, railroad, trucking industry, and a few homes across the tracks.
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	An aerial photo reveals that the surrounding area contains wild land and wetland, and is used for industrial purposes. <i>Impacts:</i> About one quarter of the permit area would be reclaimed as a house site.
11. AESTHETICS	The hours of operation would be from 7 a.m. to 7 p.m. Monday through Saturday. <i>Impacts:</i> These hours are reasonable given the zoning and uses in the area.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	<i>Impacts:</i> New employment opportunities would be very limited since this is a relatively small, short term operation.
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	<i>Impacts:</i> This site has not been used economically until recently when the parking area was developed for storing beet trucks and heavy equipment.
14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME	Local, state and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, etc., from the companies, employees, or landowners benefitting from this operation.
15. DEMAND FOR GOVERNMENT SERVICES	Traffic increases on Johnson Lane would be minimal given the industrial uses of the area.
16. HUMAN HEALTH AND SAFETY	Any industrial activity will increase the opportunities for accidental injury. There are agencies that require specific safety measures are in place. If followed there is no reason to believe that significant safety issues would be present.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES	This activity would not inhibit the use of the identified resources.

18. Alternatives Considered:

- A. Denial Alternative: The Department would deny an that does not comply with the Act and Rules. No impacts to the natural or human environment would occur.
- B. Proposed Action Alternative

19. Public Involvement, Agencies, Groups or Individuals contacted: Montana State Historic Preservation Office, Montana Natural Heritage Program, local planning department, public response to notifications, local residents.

20. Other Governmental Agencies which May Have Overlapping or Sole Jurisdiction: Required: Yellowstone County Commission, County Planning Department (zoning clearance), Yellowstone

