

ENVIRONMENTAL ASSESSMENT

On an Application for an

OPENCUT MINING PERMIT AMENDMENT

The Montana Department of Environmental Quality (DEQ) prepared this Environmental Assessment (EA) in accordance with requirements of 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 thereunder place operational guidance and limitations on a project during its lifetime, and provide 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 thereunder. The DEQ approval of this application would not relieve the operator from the obligation to comply with any other applicable federal, state, or county statutes, regulations, or ordinances. The operator is responsible for obtaining any other permits, licenses, approvals, etc. that are required for any part of the proposed operation.

APPLICANT: Stan Hendricksen

SITE NAME: Hendricksen Site

LOCATION: Section 23, T11N, R20W

COUNTY: Missoula

DATE: May 2010

PROPOSAL: The site is located approximately 3.5 miles south of Lolo, Montana. The proponent proposes to mine, crush, stockpile and transport 2,350,000 cubic yards of sand and gravel from a proposed 50 acre permit area. A reclamation bond would be held by DEQ to ensure the final reclamation use of grassland by December 2020, would be accomplished.

This application contains all items required by the Opencut Mining Act and its implementing rules. Proponent 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 proposed site is located below an agricultural bench between the foothills of the Bitterroot Mountains and the Bitterroot River. It is a quaternary glacial stream deposit composed of stratified layers of sands and gravels overlain by a layer of sandy silt loam.</p> <p><i>Impacts:</i> An irreversible and irretrievable removal of sand and gravel from the site would occur. A small impact to the quantity and quality of soils from salvaging, stockpiling, and resoiling activities also would occur, but this would not impair the capacity of the soils to support full reclamation. There are no unusual topographic, geologic, soil, or special reclamation considerations that would prevent the reclamation from being successful.</p>
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	<p>The estimated seasonal high and low water table levels in the main permit area are 10 and 15 feet below ground surface, respectively. McClain Creek is located 300 feet north, and Maple Creek is located</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
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	<p>within 50 feet south of the permit boundary. Maple Creek has for a wetland south of the site. No mining into groundwater would occur. The site will be enclosed by berms and highwalls, so that runoff will be prevented from leaving the site.</p> <p><i>Impacts:</i> The proposed activities would have a minimal effect on the quantity and quality of the surface and groundwater resources.</p> <p><i>Cumulative:</i> Cumulative impacts by the proposed action on resources would be negligible.</p>
3. AIR QUALITY	<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><i>Impacts:</i> Air quality standards as set by the federal government and enforced by the ARMB would allow minimal detrimental air impacts.</p>
4. VEGETATION COVER, QUANTITY AND QUALITY	<p>Site vegetation consists of various wheatgrasses, bluegrass, timothy, brome, roses quackgrass and knapweed.</p> <p><i>Impacts:</i> No long term detrimental impacts to the vegetation would occur.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>Although the area is used primarily for pasture, it also supports populations of deer, rodents, song birds, 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 and it is likely that the site would be re-inhabited following reclamation to similar habitat.</p>
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:	<p>The Montana Natural Heritage Program (MNHP) lists the following seven species of concern in the vicinity of the proposed site:</p> <p>Westslope Cutthroat Trout (<i>Oncorhynchus clarkii lewisi</i>) Gray Wolf (<i>Canis lupus</i>) Fisher (<i>Martes pennanti</i>) Wolverine (<i>Gulo gulo</i>) Canada Lynx (<i>Lynx Canadensis</i>) Toothcup (<i>Rotala ramosior</i>) Shining Flatsedge (<i>Cyperus rivularis</i>)</p> <p><i>Impacts:</i> These species have not been found on this site. Even if suitable habitat did exist on this site, the disturbance area would be small and large areas of similar or identical habitat surrounds the site.</p>

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	The possible impact to these species would be minimal.
7. HISTORICAL AND ARCHAEOLOGICAL SITES	<p>The Montana State Historic Preservation Office (SHPO) was notified of the application. 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	<i>Impacts:</i> Negligible impacts to land, water, air, or energy would occur.

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	The site location is currently zoned as ZD #40 for which the proposed operation complies with county regulations.
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	<p>The site is located in a rural location, with minimal population density.</p> <p><i>Impact:</i> This commercial pit being sited in this area because of the location of the resource.</p>
11. AESTHETICS	The site is located in a rural setting. The mine will be operated 7:00 a.m. to 7:00 p.m., Monday through Friday. The operation may be occasionally open Saturdays for retail sales.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	<i>Impacts:</i> New employment opportunities would be limited. This is a relatively small operation.
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	<i>Impacts:</i> Agricultural production would be reduced on the site for the life of the permit. It would then be restored to grassland by December, 2020.
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. Following reclamation, it is assumed the tax base would revert to pre-mine levels
15. DEMAND FOR GOVERNMENT SERVICES	Limited oversight by DEQ officials that are generally conducted in concert with other area activity would occur.
16. HUMAN HEALTH AND SAFETY	Any industrial activity will increase the opportunities for accidental injury. Other government agencies (e.g. MSHA, OSHA) require specific safety measures. As a result, there is no reason to believe that significant safety issues would be present.

PRIVATE PROPERTY ASSESSMENT ACT (PPAA) CHECKLIST

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PPAA?

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deprive the owner of all economically viable uses of the property?
	X	4. Does the action deny a fundamental attribute of ownership?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 5a and 5b and continue with question 6.)
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property?
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? (If the answer is NO, skip questions 7a-7c)
		7a. Is the impact of government action direct, peculiar, and significant?
		7b. Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
		7c. Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.