

ENVIRONMENTAL ASSESSMENT

On an Application for an
OPENCUT MINING PERMIT

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.

COUNTY: Lincoln

APPLICANT: Schreiner, Rupert & Marlys

DATE: August 2010

SITE NAME: Schreiners

LOCATION: Section 29, T34 N R26 W

PROPOSAL: The proponent has submitted an application to conduct opencut mining operations for sand and gravel on 8 acres of mined and forested lands about eight miles southwest of Trego. The application, if approved would allow continued mining and processing up to 300,000 cubic yards of sand and gravel. A crusher and screen would be used to process the raw materials and tandem axle dump trucks would be used to move the products.

As part of the permit application, the proponent has submitted a Plan of Operation that provides baseline information, operation plans and plans for reclamation that would create a post-mine land use of grass lands for those areas affected. Reclamation is required by the Opencut Mining Act and is backed by a reclamation bond that allows the state to perform the work should the applicant be unwilling or unable to do such. The proponent commits to properly conducting opencut operations and would be legally bound by the permit to do such with an anticipated reclamation date of October, 2040.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:	There is minor topographic relief in this glacial outwash and till deposit. The 4” of pebbly clay loam appears to be quite stable with good water holding capacity. <i>Impacts:</i> An irreversible and irretrievable removal of 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 is no unusual topographic, geologic, soil, or special reclamation considerations that would prevent reclamation success.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	<p>There are no water features at this site. A small ephemeral drainage lies to the northwest. No water wells are within 1000 feet.</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>
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). The ARMB program is approved by the Environmental Protection Agency (EPA) and all 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. If dusty conditions are created, the proponent would wet the area with water sprayed from a truck.</p>
4. VEGETATION COVER, QUANTITY AND QUALITY	<p>The majority of this area has been disturbed, but the grasses and forbs reinvading consist primarily of tall fescue, Idaho fescue, orchard grass, Alsike white-Dutch clover and Daisy. The area outside of that which has been recently disturbed is witness to an overstory of Douglas fir, alpine fir, larch and lodgepole pine. Numerous forbs and shrubs are understory.</p> <p><i>Impacts:</i> No long term detrimental impacts to the vegetation would occur. Reclamation would be concurrent with mining and reseeded to adaptive species once an area is no longer needed.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>The area is used primarily for tree production, but it also supports populations of whitetail deer, turkey, black bear, coyotes, rodents and songbirds. The landowner is aware of moose passing through. 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 animal species of concern in the vicinity of the site: Northern Goshawk, Canada Lynx, Wolverine and Fisher. Plants of concern include the prairie sedge, slender cottongrass and moonwort.</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 and large areas of similar or identical habitat surrounds the site. The possible impact to these species would be minimal. Plant species noted in this area are generally identified in more mesic environments than that which exists here.</p>
7. HISTORICAL AND ARCHAEOLOGICAL SITES	<p>The Montana State Historic Preservation Office (SHPO) was notified of the application. It did not report any sites that have been previously discovered on</p>

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RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	<p>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 along the cut slopes or in open pedons 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> Negligible demands on air, energy or water would occur from this operation. While emissions from combustion of fuels is always present, they are within limits. Energy in the form of carbons based fuels is consumed here but would generally be consumed elsewhere if the products are still utilized. Water would be consumed at this site only when dusty conditions are present.</p>

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	This area is not zoned
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	There will not be any impact to these resources.
11. AESTHETICS	This is a very rural area; one infrequently used habitation exists to the west but is minimally visible from this operation.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	No change from that which currently exists.
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	This particular parcel has been mined for at least 20 years and the USFS operates a gravel mine immediately to the east. When mining on this parcel is complete, the land will be used for grass production.
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	Oversight by Opencut Program personnel would be conducted when in the vicinity to conduct inspections and for other permit or amendment applications. Complaints and/or requests from the operator would be cause for additional visits to the site.
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.

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.)
x		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
x		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)
	x	7a. Is the impact of government action direct, peculiar, and significant?
	x	7b. Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
	x	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.