

## ENVIRONMENTAL ASSESSMENT

On an Application for an

### OPENCUT MINING 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:** Vogel, Daniel J.

**COUNTY:** Sanders

**SITE NAME:** Hereford

**DATE:** August 2010

**LOCATION:** Section 14, T26 N, R33 W

**PROPOSAL:** The proponent has submitted an application to expand his permitted opencut mine from 6 acres to 13.5 acres on forested land just north of the Clark Fork river and south of highway 200 near Noxon Landing. The application if approved, would allow the continued mining of an additional 300,000 cubic yards of sand and gravel. A crusher, screen, wash plant and concrete plant would be used to process materials for later distribution. Tandem axle dump and concrete trucks would be used to move the product and a dozer and front-end loader are used to mine and load materials.

As part of the permit application, the proponent has submitted a new Plan of Operations that provides better baseline information and updated operation plans and plans for reclamation that would create a post-mine land use of grass lands and general purpose ponds that could be used for recreation and/or aesthetic attributes. 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.

### IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<b>1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</b>	<p>This site lies on a relatively level river terrace of the Clark Fork River. Gravels deposited by the Clark Fork and earlier glacial and glacial melting are very deep. Soils generally consist of sandy loam to an average depth of 6 inches and then transitions to sands before gravels are reached. Moisture holding capacity is acceptable and these relatively flat slopes will not cause excessive soil erosion.</p> <p><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. The creation of ponds on a portion of this site will result in thicker soils on the remainder. There are no unusual topographic, geologic, soil, or special reclamation considerations that would prevent reclamation success.</p>

<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<b>2. WATER QUALITY, QUANTITY AND DISTRIBUTION</b>	<p>This site is located in an area of high ground water and near surface water features – the Clark Fork River and old floodway channels. There are no obvious sources of pollutants – fuels are not stored on 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>
<b>3. AIR QUALITY</b>	<p>Air quality standards are based upon the Clean Air Act of Montana and pursuant rules which are administered by the DEQ Air Resources Management Bureau (ARMB). That program has been approved by the Environmental Protection Agency (EPA) and the Montana 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 state federal governments and enforced by the ARMB would allow minimal detrimental air impacts. Dust will be controlled by spray bars on the transfer points and watering hard stand areas using water from the ponds.</p>
<b>4. VEGETATION COVER, QUANTITY AND QUALITY</b>	<p>Vegetation has generally been removed from the site due to soil salvage operations. Immediately adjacent however bear grass, shrubs, fir, larch, hemlock and pine provide under and overstory species.</p> <p><i>Impacts:</i> No long term detrimental impacts to the vegetation would occur. Reinvasion of native species is occurring on the topsoil stockpiles and the entire affected area will be seeded to acceptable species following mining operations.</p>
<b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b>	<p>Although the area is used primarily for woodland, it likely supports populations of whitetail deer, transient black bear, rodents, reptiles and birds. Raptor nests were not observed, but the probability of their existence would seem to be high. 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 and likely attract waterfowl and other species attracted to open waters.</p>
<b>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</b>	<p>The Montana Natural Heritage Program (MNHP) lists the following species of concern in the vicinity of the site: Coeur d’Alene Salamander, Western Toad, Bald Eagle, Peregrine Falcon, Bull Trout, Townsend’s Big Eared Bat, Gray Wolf, Grizzly Bear, Fisher, Wolverine, Canada Lynx and Alligator Lizard. Holly- Fern was the only plant species of concern in the area.</p> <p><i>Impacts:</i> None of the listed species have been found on this site. If suitable habitat did exist on this parcel, 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.</p>

<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<b>7. HISTORICAL AND ARCHAEOLOGICAL SITES</b>	<p>The Montana State Historic Preservation Office (SHPO) was notified of the application. It reported that no sites have been discovered 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>
<b>8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY</b>	<p><i>Impacts:</i> Negligible impacts to land, water, air, or energy would occur. Any natural resource processing will consume carbon based energy and the combustion of those fuels will create emissions. All machinery must be capable of meeting air quality standards. Small amounts of water are used for washing gravel and dust control when necessary.</p>

<b>IMPACTS ON THE HUMAN POPULATION</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<b>9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</b>	This area is not zoned
<b>10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING</b>	This amendment will not impact these resources
<b>11. AESTHETICS</b>	There are no nearby residents to see this operation. It is visible from the railroad tracks to the north.
<b>12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT</b>	<i>Impacts:</i> There will not be any employment created by this expansion.
<b>13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION</b>	<i>Impacts:</i> The acreage listed in the Proposal would be taken out of woodland use and put into industrial/commercial use. Upon completion of mining, the land would be reclaimed to general purpose/recreational ponds and grassland.
<b>14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME</b>	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
<b>15. DEMAND FOR GOVERNMENT SERVICES</b>	Oversight by DEQ Opencut Program personnel would be conducted in concert with other area activity when in the vicinity; on scheduled inspections and in response to complaints or requests from the operator.
<b>16. HUMAN HEALTH AND SAFETY</b>	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.