

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 thereunder.

Applicant: Mower, R.D.

LOCATION: SWSW, Sec 24, T35N, R26W

SITE NAME: Mower Site

COUNTY: Lincoln

DATE: May 15, 2009

Type and Purpose of Action: The proponent would mine and crush up to 50,000 cubic yards of gravel from two previously logged areas on adjacent ridge top sites located just north of Fortine. Soils would be salvaged from areas to be disturbed and stockpiled for later reclamation. Front-end loaders and dozers would be used to excavate materials, feed the crusher and load the trucks. Once mining is complete the area would be reclaimed to pastureland. An acceptable Plan of Operation would be followed and a reclamation bond held to ensure that reclamation is completed to meet state standards by December of 2014.

IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:	Site Specific descriptions. Northwest/southeast-trending ridge top that is glacially modified and on which has been deposited a layer of sand and gravel. <i>Impacts:</i> Irreversible and irretrievable removal of gravel from the site. There will 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. There are no unusual topographic, geologic, soil, or special reclamation considerations that would lead to reclamation failure.
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	Site specific descriptions. There is no surface or ground water within the impact zone. <i>Impacts:</i> The proposed activities would have a minimal effect on the quantity and quality of the surface and groundwater resources. There should not be any surface runoff from this flat ridge-top.
3. AIR QUALITY	Air quality standards are based upon the Clean Air Act of Montana and pursuant rules and is administered by the DEQ Air Resources Management Bureau whose program is approved by the Environmental

IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	<p>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 unless it is continuous and exceeds time and opacity limitations.</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, QUANTITY AND QUALITY</p>	<p>Existing vegetation is characterized as immature regrowth that consists primarily of coniferous overstory and grass and forb understorey.</p> <p><i>Impacts:</i> All vegetation will be lost during soil salvage operations but will be re-established following mining. The Plan of Operation requires the site to be seeded to pastureland and it is anticipated that natural invasion of coniferous species will occur over time.</p>
<p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</p>	<p>Although the area is used primarily for forestry, 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>
<p>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</p>	<p>Species of concern identified by the Montana Natural Heritage Program that could possibly populate this area include grizzly bear and lynx. The bald eagle is also listed as probable, but no nesting or individuals were observed.</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 surround the site. The possible impact to these species would be minimal. Because this site has seen previous logging and is adjacent to an active railroad site, it would not appear to offer the critical homeland habitat sought by these species.</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES</p>	<p>The Montana State Historic Preservation Office was provided with the application materials and they did not report any sites that have been previously discovered on this property. Pedestrian surveys 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>
<p>8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY</p>	<p><i>Impacts:</i> Negligible impacts to land because of the small surface area. The only water used would be from a portable tank for use on spray bars and/or dust control for surface areas. Trucks, dozers, front-end loaders and the portable crusher would consume small amounts of fuel</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	while the operation is in an active status.

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	This area is not zoned or part of any long range growth plan. It is generally utilized for natural resource and other life form production and existence.
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	As seen on the aerial photo of the surrounding area this is a rural, non-residential area. <i>Impact:</i> This commercial opencut operation is located in this area because of the resource, and the need to supply local infrastructure needs.
11. AESTHETICS	This site is generally hidden from neighboring residences.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	<i>Impacts:</i> There will not be employment opportunities from this operation.
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	While the area has seen logging activities in the past, the new, temporary land use would transition to more industrial. <i>Impacts:</i> All other uses would be reduced on the site for the life of the permit. The post-mine land use of pastureland and later reinvasion of trees would return the land to its pre-mine use.
14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME	Local, state, and federal tax revenue may increase in the near-term depending on how the land is taxed during this action. 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 is anticipated.
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 will be present.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES	This area does not inhibit the use of the identified resources.

18. Alternatives Considered:

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

19. Public Involvement, Agencies, Groups or Individuals Contacted: Montana State Historic

