

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: Paul Eslick

SITE NAME: Corneliuson

LOCATION: Section 2, T27N, R20W

COUNTY: Flathead

DATE: June 15, 2009

PROPOSAL: Paul Eslick is proposing to mine up to 10,000 cubic yards of topsoil from a seven acre field previously farmed for small grains. Operator may extend this by an additional three acres immediately to the north following the initial mine area completion. This site is located adjacent to Highway 35 and about six miles north of Big Fork, MT. A paddle wheel scraper will be used to stockpile soils that will be loaded by front-end loader into end dump trucks. The operator will be required to follow an approved Plan of Operation that ensures reclamation to a productive post-mine land use – pastureland in this instance. A bond is posted to ensure completion and that is proposed to be reclaimed by Oct. of 2009.

IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:	<p>This site is located on a relatively level glacial outwash terrace left from the last retreating glacier. The deposit consists of stratified layers of alluvium and glacial outwash sand, gravel and cobbles that cover deeper Tertiary Valley fill. The Precambrian rock of the Belt Series sandstone, mudstone and limestone rocks surround the deposit in towering walls sculpted by alpine glaciers that form an intermountain fault block basin know as the Rocky Mountain Trench.</p> <p>Irreversible and irretrievable removal of soils from the site would occur. Small impact to the quantity of soils from mining the upper horizon, but this would not impair the capacity of the soils to support full reclamation because the soils have been mixed during the previous farming practices and this upper eight inches are really pretty homogeneous. There are no unusual topographic, geologic, soil, or special reclamation considerations that would lead to reclamation failure.</p>
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	<p>Site specific descriptions. This level, sloping field does not directly drain into any state waters. There are areas of grassed pasturelands and/or commercial uses on all sides – grasslands on downslope areas.</p> <p>The proposed activities would have a minimal effect on the quantity</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
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	and quality of the surface and groundwater resources. The mining would not encounter groundwater and there are no surface water features that could be impacted.
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 Resource Management Bureau (ARMB) following a program approved by the Environmental Protection Agency (EPA). These rules and standards are designed to be protective of human health and the environment.</p> <p>Best Available Control Technology (BACT) is the usual standard applied to operations such as this, and would consist of watering the affected lands if dust becomes problematic. Fugitive dust is that which blows off the roads, farm fields, etc. It is considered to be a nuisance but not harmful to health.</p> <p>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>This area has been farmed for small grains and summer fallowed.</p> <p>Minimal, temporary impacts would be noticed while the site is non-productive. The area consists of farm ground that has been used for small grain production and is fallow every other year and pasture ground to the north that consists primarily of orchardgrass and smooth brome grass. Reclamation would return these areas to productive grasslands and/or farm ground.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>Although the area is used primarily for farming and 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>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 has identified species of concern in the general region.</p> <p>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.</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 walkover 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>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	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.
8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY	There are minimal demands on these values. Agricultural land would be removed from production for a short time period and there may be minimal water applied to control dust.

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 would not be any impact to these resources.
11. AESTHETICS	There is a residence adjacent to this site, but it doubles as a business. This operation offers no greater visual degradation than the normal farming practices.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	There could be a student hired for the summer to load trucks and the landowner and operator would gain income.
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	Agricultural production would be reduced on the site for the life of the permit. Then the site would be returned to pastureland.
14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME	Additional taxes may be generated for the state and county as soil is hauled and sold.
15. DEMAND FOR GOVERNMENT SERVICES	The site would be monitored by state officials throughout the life of the permit although it would generally be done during regional site evaluations and specific trips to this site would be rare. Review of annual reports and fee calculations and billing would be ongoing activities conducted by the state.
16. HUMAN HEALTH AND SAFETY	Some dust and additional traffic could be generated at the site but the operator must comply with existing traffic and OSHA regulations.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES	No impact.

18. Alternatives Considered:

- A. Denial Alternative: The Department would deny an application 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 Historical Preservation Office, Montana Natural Heritage Program, local planning department, and weed control board.

20. Other Governmental Agencies which May Have Overlapping or Sole Jurisdiction: MSHA and OSHA regarding mine safety.

Possible permits required from other programs or agencies: DEQ's Air Resources Management Bureau regarding air quality and DEQ's Water Protection Bureau for stormwater permitting.

21. Regulatory Impact on Private Property: The analysis done in response to the Private Property Assessment Act indicates no impact. The Department does not plan to deny the application or impose conditions that would restrict the use of private property so as to constitute a taking.

22. Magnitude and Significance of Potential Impacts: This proposal is not likely to create impacts of significance.

23. Recommendation for Further Environmental Analysis: [] EIS [x] No Further Analysis

EA Prepared By: Steve Welch Opencut Mining Program Environmental Specialist
Name Title

EA Reviewed By: Neil Harrington Chief, Industrial and Energy Minerals Bureau
Name Title

Signature

Date

Neil Harrington, Chief, Industrial Minerals Bureau, DEQ