

ENVIRONMENTAL ASSESSMENT

September 18, 2009

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, the Rules adopted hereunder, and local laws and regulations.

Applicant: Zanetti Brothers Inc.

SITE NAME: Haugen

LOCATION: NE1/4, Sec. 21, T19N, R30W

COUNTY: Mineral

PROPOSAL: The proponent has submitted an application to expand opencut mining operations on lands currently permitted. The expansion adds a total of 22.56 acres; 11.56 of which would remain undisturbed until bonded. Land originally forested has been logged and soils stripped over a portion and gravels mined prior to submitting an amendment application. The proponent received a violation letter for mining without a permit. This application if approved will allow continued mining on that property with excavated materials anticipated to reach 592,000 cubic yards. A crusher and wash plant would be used in addition to dozers and front-end loaders. The majority of processed aggregates are shipped to the west, but some local use could also occur.

As part of the amendment application the proponent has agreed to follow the Plan of Operation that provided baseline information, an operation plan and a plan for reclamation that would return the mined lands to pasture. Reclamation is required by the Opencut Mining Act and the proponent has posted a bond that would allow the state to perform the work should the applicant be unable or willing to do such.

IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:	<p>This flat lying St. Regis river terrace is composed of stratified layers of sand and gravel overlain by up to 12 inches of sandy silt loams.</p> <p><i>Impacts:</i> There will be an irreversible and irretrievable removal of gravel from the site and a small impact to the quantity and quality of soils from salvaging, stockpiling, and resoiling activities. However, this would not impair the capacity of the soils to support full reclamation.</p> <p>There are no unusual topographic, geologic, soils, or special reclamation considerations that would lead to reclamation failure.</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>2. WATER QUALITY, QUANTITY AND DISTRIBUTION</p>	<p>Water quality is generally considered to be good. Depth to ground water varies from 6 plus feet and most local residents secure their household water from these wells. The St. Regis River flows east and west about 800 – 1000 feet south of the site and Timber Creek is located about 400 feet from the north and east side.</p> <p><i>Impacts:</i> The proposed activities would have a minimal effect on the quantity and quality of the surface and groundwater resources. Wash water (no additives) will be settled out in below grade ponds and recycled – sediment is cleaned from the ponds and could be used for overburden replacement or backfill. Make-up water will come from an on-site well but use may not exceed 35 gpm, or approx. 25,000 gallons per 12 hour day for up to 50 days per year. These gravels are very porous and off-site sedimentation is not expected. The applicant may be required to secure a storm water discharge permit from the DEQ’s Water Protection Bureau.</p>
<p>3. AIR QUALITY</p>	<p>Air quality in this area is generally good even though there are winter days of reduced air quality because of wood smoke and fine particulate matter. Air quality permits would be required on the processing equipment before operating. Machinery, such as generators and crushers, are individually permitted for allowable emissions and Best Available Control Technology (BACT) is the usual standard applied. Fugitive dust that blows off the pit floor, stockpiles, gravel roads etc could be present at times. It is considered to be a nuisance but not harmful to health and would be controlled by watering or dust suppressants during periods of activity; the wet gravels at this location may preclude the need. Only a crusher, screens and wash plant are anticipated to be in use at this site, and then every other year for up to 50 days. Water bars may be required for transfer points on the crusher.</p> <p><i>Impacts:</i> Air quality standards as set by State and federal government and enforced by the DEQ’s Air Resources Management Bureau would allow only minimal detrimental air impacts and they could not be detrimental to public health.</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY</p>	<p>Native overstory vegetation was composed of Lodgepole Pine and Douglas Fir, which has now been logged off. Understory consisted of elk sedge, pine grass, kinnickinick and other grass and forb species.</p> <p><i>Impacts:</i> Generally, all vegetation is removed during soil salvage and stockpile operations. Some drrf and vegetative propegules will remain viable in the soils and could be a source for reclamation species. All disturbed lands will be revegetated to species compatible with, and useful for pastureland.</p>
<p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</p>	<p>Although the area was primarily woodland, it also supported populations of deer, rodents, song birds, coyotes, foxes, black bear, 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. Cover provided by trees will</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	generally not be reproduced and those species dependant upon such may not repopulate this area. There are other similar habitat types nearby that would accept some displaced species.
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:	The Montana Natural Heritage Program has listed the Gray Wolf, Canada Lynx, Fisher, Wolverine and Humped Coin as being species of special concern in this region. <i>Impacts:</i> None of the listed species have been found on this site. Even if suitable habitat did exist at this location, the disturbance area would be small and other areas of similar or identical habitat are locally intact. However, there are residential and commercial developments near by that have permanently altered the landscape and removed much critical habitat. The possible impact to these species would be minimal.
7. HISTORICAL AND ARCHAEOLOGICAL SITES	The Montana State Historic Preservation Office has not reported any sites that may 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. <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.
8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY	Trucking of these processed and washed gravels, will consume diesel fuel as will the use of dozers and loaders. <i>Impacts:</i> This demand, while measurable would not preclude the same use if the product were supplied elsewhere. This site was chosen because of the resource and distance to markets.

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 are no permanent employees that affect these resources..
11. AESTHETICS	The majority of operations will occur below grade and therefore noise and visual impacts will be significantly reduced to those living north and west of this site. Interstate traffic and the use of a major Transportation weigh station contribute to noise in this area. The proponent will continue to construct soil berms to reduce the aural and visual impacts.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	Workers from other operations will staff this project.
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	The native woodlands did not support industrial or significant agricultural activities.

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	<i>Impacts:</i> Commercial/industrial use will be the predominant use until this site is reclaimed to pastureland.
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.
15. DEMAND FOR GOVERNMENT SERVICES	Oversight by State and Federal employees will generally be conducted when in the area on similar business and would not in itself create a significant, increased demand.
16. HUMAN HEALTH AND SAFETY	Any time industrial machinery and moving equipment is in operation, the risk of accidents is increased. The proponent is required to comply with specific MSHA and OSHA standards however, so that risk is decreased substantially.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES	Not from this property.

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 Historical Preservation Office and the Montana Natural Heritage Program.

20. Other Governmental Agencies which May Have Overlapping or Sole Jurisdiction: Required: Mineral County Commission and/or County Planning Department (zoning clearance), Mineral County Weed Control Board, MSHA and OSHA regarding mine safety, DEQ Air Resources Management Bureau and Water Protection Bureau.

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.

22. Magnitude and Significance of Potential Impacts:

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

EA Prepared By: Steve Welch Environmental Specialist
Name

EA Approved By: Chris Cronin Section Supervisor
Name Title

Signature

Date

PROPERTY DESCRIPTION: NE1/4 Sec. 21, T19N, R30W

COMPANY NAME: Zanetti Brothers Inc.

DATE: August, 2009

PREPARED BY: Steve Welch

PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PRIVATE ASSESSMENT ACT?

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.