

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: Alme Construction Inc.

SITE NAME: Baker 2 Pit

LOCATION: Section 23, T33N, R6W

COUNTY: Glacier

DATE: August 2009

Type and Purpose of Action: The proponent proposes an amendment to add acreage to the existing permit. The proponent proposes to mine, crush, screen, stockpile and transport approximately 75,000 cubic yards of sand and gravel from this site, which would be increased to 15.7 acres, for use within the local area. Once mining is complete the site would be reclaimed to grazing land. Consistent with the Plan of Operation, a reclamation bond would be held to ensure that reclamation is completed to meet state standards by September 2020.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:	<p>The proposed operation is located in sands and gravels of Laurentide Glacial deposits. The site is located on a bench approximately 2.5 miles southwest of Cut Bank. The soils are on average 6 inches deep and have a sandy loam texture. There is on average 6 inches of overburden located onsite. The topsoil and overburden would be stripped and stockpiled separately and after regrading 6 inches of topsoil and 6 inches of overburden would be evenly replaced. Microorganisms should reinvade the site.</p> <p><i>Impacts:</i> Irreversible and irretrievable removal of gravel from the site. 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.</p>
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	<p>Cut Bank Creek lies approximately $\frac{3}{4}$ of a mile east and down drainage of the proposed mining site.</p> <p><i>Impacts:</i> The proposed activities would have a minimal effect on the</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	quantity and quality of the surface and groundwater resources. The site will be mined to a depth of 12 feet which is well above the water table depth. No fuel will be kept onsite. Runoff will run to the south and east and will be filtered by the vegetation.
3. AIR QUALITY	<p>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 (ARMB). Its program is approved by the Environmental 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, and crushers are individually permitted for allowable emissions. Best Available Control Technology (BACT) is the usual standard applied.</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>
4. VEGETATION COVER, QUANTITY AND QUALITY	<p><i>Impacts:</i> All vegetation will be lost during soil salvage operations but will be re-established following mining. The operation would be a westerly and southerly expansion of the existing gravel pit. The expansion is in an area of native vegetation consisting of crested wheatgrass, bluebunch wheatgrass, and slender wheatgrass. A DEQ approved seed mixture would be seeded on the site after regrading and topsoiling have been completed. No rare plants or cover types were identified during a ground search.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>Although the area is used primarily for pasture, it also provides habitat for populations of deer, rodents, song birds, coyotes, foxes, raptors, insects and various other animal species. Population numbers for these species are not known, although populations are likely low due to lack of cover.</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>Species of concern identified by the Montana Natural Heritage Program that could possible populate this area include the Northern Leopard Frog.</p> <p><i>Impacts:</i> This species has 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 this species would be minimal due to lack of habitat that supports it.</p>
7. HISTORICAL AND ARCHAEOLOGICAL SITES	<p>The Montana State Historic Preservation Office (SHPO) was notified of the proposed mining and did not recommend a cultural resource inventory due to the lack of previously recorded historic or archaeological sites within the designated search locale and impact from previous mining. 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> <p><i>Impacts:</i> If during operations resources were to be discovered,</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	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	<i>Impacts:</i> Impacts to land, water, air, and energy use would be minimal.

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 pit is being sited in this area because of the location of the resource, and the need to supply local infrastructure needs. There are no identified residences within 1,000 feet of this proposed pit.
11. AESTHETICS	The site is located away from residences and commercial businesses.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	<i>Impacts:</i> Employment opportunities will likely remain the same for this pit.
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	<i>Impacts:</i> There will be a temporary loss of grazing on approximately 15.7 acres of land until the site is successfully reclaimed. Reclamation of portions of the site may occur while mining is ongoing, which would increase pasture/rangeland.
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 benefiting from this operation.
15. DEMAND FOR GOVERNMENT SERVICES	Limited oversight by DEQ officials that are generally conducted in concert with other area activity.
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. The site will not restrict access to public lands and should not affect quality of recreational or wilderness activities due to distance from public land.

18. Alternatives Considered:

- A. Denial Alternative: The Department would deny an application that does not comply with the

