

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: Timberline Ready Mix, Inc.

COUNTY: Lincoln

SITE NAME: Nutting

DATE: September 2013

LOCATION: Section 4, T36 N, R27 E

PROPOSAL: The applicant proposes to amend a short-term gravel pit to reclaim the site, and to add 12.1 acres to the existing 4.0 acre permit. The additional acreage would bring the site into compliance and include all of the land disturbed by Opencut operations. The total permit area would be 16.1 acres. No additional mining would occur at the site. Approximately 12.1 acres were disturbed outside of the existing permit area.

The site is located on the north side of Highway 37 approximately 2 miles west of Eureka. An unoccupied cabin and a Montana Department of Transportation stockpile area are located between the south boundary and Highway 37. A private drive is located parallel to the southeast boundary. Commercial properties are located south and east of the site.

A reclamation bond would be held by DEQ to ensure that final reclamation of the site to rangeland/pasture would be completed by November 2015. This application contains all items required by the Opencut Mining Act and its implementing rules. 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
1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:	<p>The topography is a nearly level glacial outwash plain. The geology is glacial till and glacial outwash. The onsite soils consist of sandy loams. The operator would replace 12 inches of soil and 6 inches of overburden. The site receives approximately 14 inches of precipitation per year.</p> <p><i>Impacts:</i> An irreversible and irretrievable removal of gravel from the site would occur. The operator would import soil to reclaim the regarded slopes. There are no unusual topographic, geologic, soil, or special reclamation considerations that would prevent reclamation success.</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	<p>There are no nearby streams or wetlands. Water will not be used for reclamation activities.</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> <p><i>Cumulative:</i> Cumulative impacts of the proposed action on resources would be negligible.</p>
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 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, 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 federal government and enforced by the ARMB would allow minimal detrimental air impacts.</p>
4. VEGETATION COVER, QUANTITY AND QUALITY	<p>There are no known rare or sensitive plants or cover types present in the site area. Onsite vegetation that remains near the permit boundaries consists of smooth brome and pasture grasses, and provides approximately 70% cover. The vegetation would be removed as soil is stripped and the site would be replanted with plant species compatible with the proposed reclaimed use.</p> <p><i>Impacts:</i> No long term detrimental impacts to the vegetation would occur.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>Although the area is used primarily for 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><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>The Montana Natural Heritage Program (MNHP) lists the following five species of concern in the vicinity of the site:</p> <p>Westslope Cutthroat Trout (<i>Oncorhynchus clarkii lewisi</i>) is one of two subspecies of native cutthroat found in the state. It has been designated as Montana's state fish. Westslope cutthroat trout require cold water and seek out gravel substrates in riffles and pool crests for spawning habitat.</p> <p>Bull trout (<i>Salvelinus confluentus</i>) is threatened species of fish that can be found in the Clark Fork and Flathead drainages of western Montana. Sub-adult and adult fluvial bull trout reside in larger streams and rivers and spawn in smaller tributary streams, whereas adfluvial bull trout reside in lakes and spawn in tributaries. Bull trout can grow to lengths of 37 inches and weights of 20+ pounds.</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
	<p>Hoary Bat (<i>Lasiurus cinereus</i>) is a large lasurine (20 to 35 g) with long pointed wings and heavily-furred interfemoral membrane. Hoary Bat is the largest bat species found in Montana. Its dorsal pelage in is a mixture of browns and grays, tinges with white, giving the bat a frosted or hoary appearance. Hoary Bat is migratory and only a summer resident in Montana, and occupies forested areas. They are reported to favor moths but stomach contents of 7 individuals captured in Carter County revealed beetles, moths, true bugs, leafhoppers, lacewings and true flies. They are also carnivorous, and have been reported to attack, kill, and eat pipillistrel bats.</p> <p>Spalding's Catchfly (<i>Silene spaldingii</i>) Spalding's Catchfly is a perennial with a simple or branched rootcrown. There are 4-7 pairs of sessile, broadly lance-shaped leaves that are 6-7 cm long below and gradually reduced in size upward. Herbage is long-hairy and very sticky. There are few to many flowers in a leafy, somewhat open inflorescence. The fruit is a capsule that is 10-15 mm long and filled with numerous tiny seeds. Flowering in July and usually continuing through August. Dried flower/fruited stalks are often visible into the Fall. This species can be distinguished from other perennial <i>Silene</i> spp. by its very sticky foliage and by its petals that are entire or only shallowly lobed. Populations are also at risk due to the small numbers of individuals and their isolated nature, which reduces the chances of cross-pollination and gene flow between populations.</p> <p>Moonworts (<i>Botrychium sp.</i>) Descriptive information on this species is not currently available from the MNHP.</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 surrounds 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 notified of the application. It reported that no sites have been discovered previously within the designated search locale. 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. SHPO does not feel that a cultural resource inventory is warranted at this site at this time.</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>
8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY	<p>There are no unusual demands on land, water, air or energy anticipated as a result of this project.</p> <p><i>Impacts:</i> Negligible impacts to land, water, air, or energy would occur.</p>
IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	<p>Lincoln County zoning clearance has been obtained.</p> <p>The site is not zoned.</p>

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	As seen on the aerial photo of the surrounding area, there are nearby residences to the east and the south. <i>Impact:</i> This commercial pit was sited in this area because of the location of the resource, and to service the growing population in this area of the county.
11. AESTHETICS	The site is located in a common pastureland area. There would be a temporary alteration of aesthetics while mining is under way. However, reclamation would return the area to a visually acceptable landscape. This project is considered to be short-term, i.e., planned to take two years to complete. As there are nearby residences, the hours of operations will be Monday through Friday 7 am to 7 pm.
12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	Existing employees would mainly be utilized for this operation. There is low potential that this project would create a significant number of new jobs. <i>Impacts:</i> New employment opportunities would be limited.
13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	The acreage listed in the proposal would be taken out of pastureland use. Upon completion of mining, the land would be reclaimed to rangeland/pasture. <i>Impacts:</i> Pastureland production would be reduced as soil stripping and operations progress across the site. When the entire site is opened up for mining and mine-related activities, all pastureland activities would cease, but would be restored as the site is reclaimed.
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. Following reclamation, it is assumed the tax base would revert to pre-mine levels.
15. DEMAND FOR GOVERNMENT SERVICES	Limited oversight by DEQ Opencut Program personnel would be conducted in concert with other area activity when in the vicinity.
16. HUMAN HEALTH AND SAFETY	Any industrial activity would increase the opportunities for accidental injury. There are agencies that require the Operator to implement specific safety measures. If followed there is no reason to believe that significant safety issues would be present.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES	This activity would not inhibit the use of the identified resources.
18. NATIVE CULTURAL CONCERNS	<i>Impacts:</i> None identified.

19. 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.** Approval Alternative: The Department would approve an application that complies with the Act and Rules. Impacts of this application are addressed in the body of the EA.

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.)
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		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)
		7a. Is the impact of government action direct, peculiar, and significant?
		7b. Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
		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.

SITE MAP

TIMBERLINE READY MIX, INC. (PERMIT #1743)
 NUTTING
 SECTION 4, TOWNSHIP 36N, RANGE 27W
 16.1 ACRE PERMIT AREA (INCLUDES ACCESS ROAD)
 DRAFTED BY: MONTANA DESIGN SERVICE, INC. 12-04-2012
 LINCOLN COUNTY
 AERIAL PHOTO: GOOGLE EARTH 9-7-12

REV	DESCRIPTION	BY/DATE	APPROV/DATE

0 200
 GLID IRRIGATION LINE
 TOP SOIL STOCK PILE
 PERMITTED BOUNDARY UNDER PERMIT #1743 (4.0 ACRES UNDER PERMIT)
 EXISTING SCREEN TO BE REMOVED
 ACCESS ROAD



- LEGEND:**
- BOUNDARY COORDINATES
 - PROPOSED PERMIT BOUNDARY
 - ACCESS ROAD CENTERLINE
 - EXISTING SCREEN
 - SOIL STOCK PILE AREA
 - MINERAL STOCK PILE AREA
 - ~ EXISTING PIT EDGE

⑥ ⑤ ④ ③ ②

NO.	DATE	BY	DESCRIPTION
1	12/04/12	MS	PERMIT #1743
2	12/04/12	MS	PERMIT #1743
3	12/04/12	MS	PERMIT #1743
4	12/04/12	MS	PERMIT #1743
5	12/04/12	MS	PERMIT #1743
6	12/04/12	MS	PERMIT #1743
7	12/04/12	MS	PERMIT #1743
8	12/04/12	MS	PERMIT #1743
9	12/04/12	MS	PERMIT #1743
10	12/04/12	MS	PERMIT #1743

RECEIVED BY: DP ENCLT 7/24/2013