

ENVIRONMENTAL ASSESSMENT

PROPONENT: Riverside Contracting
LOCATION: Section 27, 22, T15N, R7W

SITE NAME: Courtesy Land & Livestock
COUNTY: Lewis and Clark

TYPE AND PURPOSE OF ACTION: The applicant is proposing an 18-acre, 75,000 cubic yard gravel mine. The proposed area is currently half reclaimed gravel pit and half sub-alpine meadow. The application is being requested to complete maintenance of Roger's Pass on Highway 200. The proposed mine would consist of 11 acres of mine level area. The proposed mine level area would encompass sub-alpine meadow and forested land and the proposed facility level area excluding access roads would encompass 7 acres that are currently disturbed and partially reclaimed gravel pit. The facility would be accessed by an existing improved gravel road utilized by the landowner for access to his property. This road would be left after mining activities cease.

Mining would begin on the SE edge of the old gravel pit area and progress to the south. Front end loaders, belly dump trucks, a crusher and an asphalt plant would be utilized for mining activities. The crusher and asphalt plant would be located in the old gravel pit area (designated as the facility area). No asphalt is proposed to be buried on site and all solvents and wastes associated with mining activities would be hauled off site and disposed of according to State and Federal laws. A 10,000 gallon temporary fuel storage tank (tank is on skids) with double-wall self-contained structure would be used on site. As proposed, these activities would begin in July 2008 and hours of operation would be as follows: crusher 6:00 am to 10:00 pm Monday –Saturday, Asphalt Plant 7:00 am-7:00 pm Monday- Saturday. Dust mitigation water would be obtained from an existing pond located in the center of the facility area. Spray bars and a water truck would pump water from the pond for the mitigation. No further storage of water is proposed. Water usage would be approximately 5,000 gallons per day and there would be no discharges of water. Stormwater, surface water, and erosion mitigation would occur through the use of silt fences and/or straw wattles as needed.

The estimated depth of mining is 10 feet. The Plan of Operation states that, according to contour maps and field observations, the estimated seasonal high water table level is 10 feet and the seasonal low water table level is 20 feet. Drill logs submitted with the application indicates that wet gravel had been encountered at a depth of 9.5 feet. The operator states that there is currently groundwater present on the site. There is also a ditch running from the existing pond to the east and along the south side of the old gravel pit that drains through a culvert running under the access road. As proposed, the ditch, which lies within the proposed Facility area, would be maintained for drainage during the timeline of this permit. Inspection of the site on June 20, 2008 by J. Dafoe (author) identified this drainage. It appears that the culvert then drains out onto native land near Bartlett Creek, but does not drain directly into the creek. The operator also proposes that should groundwater be encountered in the proposed mine level area, the area would be sloped to drain to the existing ditch (mentioned above). It is unclear if a discharge permit would be required. It is the responsibility of the operator to identify this need and obtain all other required permits.

Reclamation activities are proposed to be completed by November 15, 2009. The post-mining land use is proposed to be grassland graded to a 3:1 slope. The grading would be directed towards the existing drainage ditch on the east and south sides of the proposed facility area. No backfill is proposed at this time. The existing drainage ditch and pond would remain as well as uncrushed material for landowners use (quantity unknown at this time). The mine level area would be graded to 3 feet above the seasonal high water table. If during mining activities groundwater is encountered, the operator would backfill the area with excess crusher fines to adhere to the requirement that final reclaimed surfaces be at least 3 feet above the seasonal high water table for dryland reclamation. A minimum of 18 inches of overburden would be replaced on the mine level area.

The permit application contains all items required under the Openpit Mining Act and the Rules and Regulations thereunder, including adequate reclamation bond. Proponent commits to properly conducting openpit operations and would be legally bound by its permit to reclaim the site to a postmining land use of grassland.

A = significant unavoidable impacts. B = insignificant as a result of conditioned mitigation. C = insignificant as proposed.

	POTENTIAL IMPACTS AND MITIGATIVE MEASURES					
	A	B	C	LONG TERM	SHORT TERM	EXPLANATION
PHYSICAL ENVIRONMENT						
1. <u>TOPOGRAPHY</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The site appears to be a glacial deposit.
2. <u>GEOLOGY</u> : stability	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Department reviewed potential impacts due to the removal of mine material and determined that the site can be reclaimed to a stable condition.
3. <u>SOILS</u> : quality, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The average facility level soil thickness is 4 inches, the average mine level soil thickness is 6 inches and the average mine level overburden thickness is 18 inches. Soil and overburden would be stripped from all mine-level areas and stockpiled for later reclamation use.

4. <u>WATER</u> : quality, quantity; distribution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Bartlett Creek is 190 feet west of the proposed facility level area. Even with the close proximity of the creek and the depth of mining, groundwater is not proposed to be encountered. Should it be encountered, appropriate measures would be taken to mitigate groundwater impacts (please see paragraph 3 in the Type and Purpose of Action section above). The operator proposes to utilize an existing pond for dust control. Stormwater mitigation as proposed would be with silt fences and/or straw wattles.
5. <u>AIR</u> : quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to short term timeframe and rural location of this site, minimal impacts are anticipated. Proponent must comply with state air quality regulations.
6. <u>UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No unique environmental resources are apparent.
BIOLOGICAL ENVIRONMENT						
1. <u>TERRESTRIAL, AVIAN, AND AQUATIC SPECIES AND HABITATS</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Montana Natural Heritage Program reports the occurrence of the Gray Wolf (<i>Canis lupus</i>), a sensitive species of concern; Bull Trout (<i>Salvelinus confluentus</i>), a threatened special species of concern; Northern Goshawk (<i>Accipiter gentilis</i>), a sensitive species; Canada Lynx (<i>Lynx canadensis</i>), a threatened special species of concern; Grizzly Bear (<i>Ursus arctos</i>), a threatened special species of concern; Olive-sided Flycatcher (<i>Contopus cooperi</i>), species of concern; an Agapetus Caddisfly (<i>Agapetus montanus</i>), species of concern; Wolverine (<i>Gulo gulo</i>), a sensitive species of concern; Fisher (<i>Martes pennanti</i>), a sensitive species; and the Westslope Cutthroat Trout (<i>Oncorhynchus clarkia lewisi</i>), a sensitive species. Due the previous gravel operations at this site, the proposed mitigation measures, and the abundant similar habitat in the area, the proposed operation would have little effect on these species.
2. <u>VEGETATION</u> : quantity, quality, species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sub-alpine meadow vegetation. No noxious weeds were observed during the pre-mine site inspection (6/20/2008 by J. Dafoe). The Lewis and Clark County Weed District has certified that the proposed operation complies with its requirements and the area was certified as weed free on June 17, 2008.
3. <u>AGRICULTURE</u> : grazing, crops, production	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The proposed operation would have little to no impact on agriculture in the area.
HUMAN ENVIRONMENT						
1. <u>SOCIAL</u> : structures, mores	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to short term timeframe and rural location of this site, minimal impacts are anticipated.
2. <u>CULTURAL</u> : uniqueness, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The State Historical Preservation Office (SHPO) has stated that there are no previously recorded historic or archeological sites near and potentially within the proposed area. SHPO feels that a cultural resource inventory is unwarranted at this time.
3. <u>POPULATION</u> : quantity, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to short term timeframe and rural location of this site, minimal impacts are anticipated.

4. <u>HOUSING</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to short term timeframe and rural location of this site, minimal impacts are anticipated.
5. <u>HUMAN HEALTH & SAFETY</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to short term timeframe and rural location of this site, minimal impacts are anticipated.
6. <u>COMMUNITY & PERSONAL INCOME</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to short term timeframe and rural location of this site, minimal impacts are anticipated.
7. <u>EMPLOYMENT</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to short term timeframe and rural location of this site, minimal impacts are anticipated.
8. <u>TAX BASE</u> : local, state tax revenue	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to short term timeframe and rural location of this site, minimal impacts are anticipated.
9. <u>GOVERNMENT SERVICES</u> : demand	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to short term timeframe and rural location of this site, minimal impacts are anticipated.
10. <u>INDUSTRIAL, COMMERCIAL, & AGRICULTURAL ACTIVITIES</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to short term timeframe and rural location of this site, minimal impacts are anticipated.
11. <u>HISTORICAL AND ARCHAEOLOGICAL</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Should any cultural materials be discovered in the course of the proposed operation, the operator would follow state and federal guidelines.
12. <u>AESTHETICS</u> : noise, visual	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to short term timeframe and rural location of this site, minimal impacts are anticipated.
13. <u>ENVIRONMENTAL PLANS AND GOALS</u> : local, regional	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to short term timeframe and rural location of this site, minimal impacts are anticipated.
14. <u>DEMANDS ON ENVIRONMENTAL RESOURCES</u> : land, water, air, energy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to short term timeframe and rural location of this site, minimal impacts are anticipated.
15. <u>TRANSPORTATION</u> : networks, traffic flows	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to short term timeframe and rural location of this site, minimal impacts are anticipated.

ALTERNATIVES CONSIDERED: The Department would deny an incomplete application or one that does not comply with the Act and Rules. The proponent could then submit a modified application or submit an application for another site.

PUBLIC INVOLVEMENT: Agencies and individuals involved in the process included the Montana Natural Heritage Program, State Historic Preservation Office, local zoning authority, county weed control board, and landowners.

OTHER GROUPS OR AGENCIES CONTACTED OR WHICH MAY HAVE OVERLAPPING JURISDICTION: DEQ's Air Resources Management Bureau regarding air quality, DEQ's Water Protection Bureau regarding water discharge, DNRC's Water Rights Bureau regarding water rights, and MSHA regarding mine safety.

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.

RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS: No further analysis

INDIVIDUALS OR GROUPS CONTRIBUTING TO THIS EA: None

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