

ENVIRONMENTAL ASSESSMENT

PROPONENT: Shumaker Trucking & Excavating Contractors, Inc.
LOCATION: Portions of Sections 10, 14, & 15, T19N, R2E

SITE NAME: Lord
COUNTY: Cascade

TYPE AND PURPOSE OF ACTION: Proponent has submitted a permit application to the Opencut Mining Program for a 500-acre gravel mine permit area where they seek approval for the following disturbances: 13.8 acres of access road, 8.5 acres of other facilities, and 16.5 acres of pit excavation. All application materials required under the Opencut Mining Act and the Rules and Regulations thereunder have been submitted. Proponent commits to properly conducting opencut operations and reclaiming the site to a postmining land use of rangeland. Proponent would be legally bound by their permit to appropriately conduct opencut operations and properly reclaim the site. The final reclamation date would be 1/2025.

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 checked="" type="checkbox"/>	<input type="checkbox"/>	The site is located on a relatively flat bench high above the confluence of the Missouri and Smith Rivers. The bench is about 300-feet higher than the rivers. Gravel removal to a maximum depth of 20 feet would alter the topography. The pit area would be graded and all slopes would be 3:1 or flatter as required for the postmining land use of rangeland. All surfaces would be graded to blend into the surrounding topography.
2. <u>GEOLOGY</u> : stability	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Potential impacts due to the removal of mine material have been reviewed and the Department has determined that the site could 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 soil thickness ranges from 6- to 12-inches and the average overburden thickness is 18 inches in the main permit area. Soil materials would be stripped from all areas to be disturbed and placed on areas prepared for resoiling or stockpiled for later reclamation use. About 18 inches of overburden and 6- to 12-inches of soil would be replaced on mine-level areas.
4. <u>WATER</u> : quality, quantity; distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ground water does not appear to be a factor at this isolated high bench site. There are no surface water features or water wells in or near the site.
5. <u>AIR</u> : quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	There would be some degradation of air quality while operations are in progress. 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"/>	None identified.

BIOLOGICAL ENVIRONMENT					
<p>1. <u>TERRESTRIAL, AVIAN, AND AQUATIC SPECIES AND HABITATS</u></p>					<p>The access road route and main permit area consist of basic grassland habitat. The Montana Natural Heritage Program reports the Swainson's hawk and bald eagle as species of special concern in the area.</p> <p>The Swainson's hawk nests in river bottom forests, brushy coulees, and shelterbelts. It is more tolerant of humans than other hawks. It hunts in grasslands and agricultural land, especially along river bottoms. Because nesting habitat does not exist on the bench, and abundant habitat exists in the area, the proposed operation would not be expected to impact Swainson's hawks.</p> <p>The bald eagle is primarily a species of riparian and lacustrine habitats (forested areas along rivers and lakes). Important year-round habitat includes wetlands, major water bodies, spring spawning streams, ungulate winter ranges, and open water areas. Wintering habitat may include upland sites. Nesting sites are generally located within larger forested areas near large lakes and rivers. Because the proposed site is on a high dry bench, and abundant habitat exists in the area, the proposed operation should not impact bald eagles.</p>
<p>2. <u>VEGETATION</u>: quantity, quality, species</p>					<p>The vegetation along the access road and in and around the main permit area is native grassland, except for a smaller area that is former farmland seeded to crested wheatgrass. Reclaimed areas would be seeded to a native grass and alfalfa mix.</p> <p>The Montana Natural Heritage Program reports Little Indian Breadroot as a species of special concern in the area. This plant is a perennial herb. It grows in loose, sandy soil of grasslands, and in open pine woodlands on the plains, below sandstone outcrops and in blowouts. Occurrences have been recorded in many counties across Eastern Montana. If this plant occurs in the area of the proposed site, it would likely grow on the steeper sideslopes of the bench among and below the rock outcrops. Such areas would not be disturbed by this opencut operation. Abundant habitat exists in the area. The proposed operation should not impact Little Indian Breadroot.</p> <p>No noxious weeds were observed on site. Proponent has contacted the local weed</p>

						district and would be in compliance with weed district requirements for the proposed opencut operation.
3. <u>AGRICULTURE</u> : grazing, crops, production	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Portions of the 500-acre grassland area will be open during the life of the operation. This would not substantially impact local agriculture. The site would be reclaimed to rangeland.
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"/>	
2. <u>CULTURAL</u> : uniqueness, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. <u>POPULATION</u> : quantity, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. <u>HOUSING</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. <u>HUMAN HEALTH & SAFETY</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No problems are anticipated. Due to the predominately agricultural setting and the high bench location, restricted hours of operation would not be needed at this site.
6. <u>COMMUNITY & PERSONAL INCOME</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. <u>EMPLOYMENT</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
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"/>	
9. <u>GOVERNMENT SERVICES</u> : demand	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. <u>INDUSTRIAL, COMMERCIAL, & AGRICULTURAL ACTIVITIES</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. <u>HISTORICAL AND ARCHAEOLOGICAL</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	In anticipation of possible future state and federal highway projects, Gar C. Wood and Associates conducted an intensive cultural resource survey (30-meter transects) of the permit area. The objective of the study was to comply with the various US antiquities acts including the Antiquities Act of 1906 with amendments, the National Historic Preservation Act of 1966 and 1992 as amended, and the Archaeological Resources and Protection Act of 1979. Results of this Class III survey are found in Gar Wood's Cultural Resource Management Report dated April 30, 2004. Sites were found around the periphery of the proposed permit area but outside of any proposed operations and associated disturbance. Gar C Wood and Associates recommended archaeological clearance. The proposed action would have no adverse affect on identified historic resources.
12. <u>AESTHETICS</u> : noise, visual	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The site is on a high bench in a rural area. There are no residences in the area that are at the same elevation as the proposed site. The closest residence is about 1,200 feet horizontally and about 200 feet vertically below the site. Opencut activities occurring

						along the perimeter of the proposed permit area facing the residence might be observable and audible from the residence.
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"/>	The proposed operation complies with county zoning regulations.
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"/>	
15. <u>TRANSPORTATION</u> : networks, traffic flows	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Access to the site would be from Highway 300 on an approximate 3,300-foot-long access road to the top of the bench. Operator would use the rural highway to connect to other roads in the process of distributing product to various locations across the region. This activity would not substantially affect transportation in the area.

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 landowner.

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

Approved By: _____ Date: _____
(Signature)

Prepared by: Mark Carlstrom