

ENVIRONMENTAL ASSESSMENT

PROPONENT: Doug or Diann Russell

SITE NAME: Russell

LOCATION: Section 14, T9N, R6E

COUNTY: Meagher

TYPE AND PURPOSE OF ACTION: Proponent has applied for a 2.8-acre opencut mine permit area where they propose to remove 20,000 cy of gravel. The site will be a source of pit run gravel. The tentative final reclamation date is 11/2018. The application contains all items required by the Act and Rules. Proponent commits to properly conducting opencut operations and would be legally bound by their 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 checked="" type="checkbox"/>	<input type="checkbox"/>	The site is located in a flat grassland area about 400 feet south of the North Fork Smith River. Gravel removal to a maximum depth of 10 feet would alter the topography by lowering the surface and creating new slopes. All surfaces would be graded to 3:1 or flatter and blended into the surrounding topography and drainageways.
2. <u>GEOLOGY</u> : stability	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 soil thickness is 12 inches and the average overburden thickness is 0 inches. Soil would be stripped from mine-level areas and evenly placed on areas prepared for resoiling, or stockpiled for later reclamation use. Soil stripped from facility-level areas would be evenly replaced on those 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"/>	<p>The North Fork Smith River is about 400 feet north of the north end of the proposed permit area. This is a relatively small perennial stream. There is minimal chance of stream capture by the excavation.</p> <p>Ground water is a factor at the site. Available information shows the seasonal high water table may come to within 13 feet of ground level. The proposed maximum depth of mining is 10 feet, which will keep the reclaimed surface sufficiently above the high water table.</p> <p>There are no water wells in or near the site that could be affected by this operation.</p>
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						
1. <u>TERRESTRIAL, AVIAN, AND AQUATIC SPECIES AND</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Montana Natural Heritage Program reports the gray wolf, greater sage-grouse, and sage

<u>HABITATS</u>					<p>sparrow as species of special concern in the vicinity of the proposed operation. There was no indication during the site inspection that these species occupy the relatively small grassland site where the proposed permit area is located.</p> <p>Gray Wolf. The gray wolf is the largest of the wild dogs. In Montana, its range is predominately the western mountainous portion of the state. This species is not migratory but may move seasonally following migrating ungulates within its territory. The gray wolf exhibits no particular habitat preference except for the presence of native ungulates within its territory on a year round basis. It is unlikely that a gray wolf would be found in this open valley bottom area near White Sulphur Springs.</p> <p>Greater Sage-grouse. The greater sage-grouse is the largest of Montana's grouse. In Montana, it ranges primarily in the southwestern and eastern portions of the state. This species does not migrate. Sagebrush is its preferred habitat. The opencut operation would disturb a relatively small grassland area devoid of sagebrush.</p> <p>Sage Sparrow. This is a medium-sized sparrow. Its summer range extends into Southwestern Montana. It is found in sagebrush and other open habitat with shrubs. The opencut operation would disturb a relatively small grassland area devoid of sagebrush.</p>
2. <u>VEGETATION</u> : quantity, quality, species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> <p>The proposed disturbance area consists of native rangeland. The Montana Natural Heritage Program reports no species of special concern. No noxious weeds were observed on or next to the proposed permit area. Proponent contacted the local weed district about the proposed operation and is in compliance with their requirements.</p>
3. <u>AGRICULTURE</u> : grazing, crops, production	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> <p>A small area of native rangeland would be temporarily out of production. This would not substantially impact local agriculture. The site would be reclaimed to grassland.</p>
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"/> <p>No problems are anticipated. Restricted hours of operation are not needed at this remote site.</p>
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"/>	No resources were identified during the premine inspection.
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 in a remote location. The two nearby residences are owned by the proponent.
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"/>	Proponent contacted the local zoning authority about the proposed operation and is in compliance with local zoning regulations.
14. <u>DEMANDS ON ENVIRON- MENTAL 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"/>	Proponent would use county roads to transport mine material to project sites. This activity would not substantially affect local traffic.

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