

ENVIRONMENTAL ASSESSMENT

PROPONENT: Riverside Contracting Inc.
LOCATION: Section 14, 23,T12N, R12W

SITE NAME: Manley Site
COUNTY: Powell

TYPE AND PURPOSE OF ACTION: Proponent has submitted a permit application to the Opencut Mining Program for a 40-acre, 105,000 cubic yard, gravel mine site. The application is being requested to complete Secondary Highway S-271 repair. The site is currently hayland and pastureland. The proposed mine would consist of 19.8-acres of mine-level area, 7.3-acres of Facility Level Area, and 12.9-acres of undisturbed area (for future use if needed). In the event that the 12.9 acres would be used, an increase in bonding would be necessary. As proposed, mining will begin on the north portion near the existing pit and progress south using front end loaders and/or excavators. If the material in the north section (19.8-acres) is insufficient to complete the job, the southern portion (12.9-acres) will be utilized using front end loaders and/or excavators. A crusher will be located on site (please see Plan of Operations map) as well as a double-wall, self contained 10,000 gallon fuel storage tank. Water protection measures will include silt fences and/or straw wattles as needed. Mining activities are estimated to be completed by November 15, 2009 at which time the pit would be closed and reclaimed to hayland with a 5:1 slope. The operator would be responsible for replacing the amount of topsoil and overburden that are currently present on site (as reflected in the submitted Plan of Operation). The permit application contains all items required under the Opencut Mining Act and the Rules and Regulations thereunder, including adequate reclamation bond. 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 pastureland.

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 what appears to be the bench of a foothill of the surrounding mountains. Topography would be slightly altered with a maximum depth of mining from ground surface of 9 feet. Upon removal of borrow material, minimal slopes would be created. At the time of completion of the operation, all surfaces are proposed to be blended into the surrounding topography.
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 soil thickness is 6 inches and the average overburden thickness is 12 inches. The operator would be required to strip soil and overburden from all mine-level areas and placed on areas prepared for resoiling or stockpiled for later reclamation use. Soil stripped from facility-level areas would be required to 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"/>	Ground water is not expected to be encountered. There is what appears to be a seasonal stream (Sheep Creek) to the south of the proposed "first area" as well as Sturgeon Creek to the northwest. The operator has proposed silt fences and/or straw wattles for stormwater control to mitigate any potential impact. Due to the distance from Sturgeon Creek and Sheep Creek the operator has mapped the operation so that minimal if any impact to these waters would occur and proposed mitigation should be sufficient.
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. The site is remote with few residences nearby. Therefore these effects would be minimal and short term.
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"/>	The Montana Natural Heritage Program reports the occurrence of various species with unique status, please see below for an explanation.
BIOLOGICAL ENVIRONMENT						
1. <u>TERRESTRIAL, AVIAN, AND AQUATIC SPECIES AND HABITATS</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	As per the Montana Natural Heritage Program, various species of concern are listed in the area. These include: Gray Wolf (<i>Canis lupus</i>)-species of concern, Fringed Myotis (<i>Myotis thysanodes</i>)-sensitive, Bald Eagle (<i>Haliaeetus leucocephalus</i>)-threatened/special status, Canada Lynx (<i>Lynx canadensis</i>)-threatened/special status, Missoula Phlox (<i>Phlox kelseyi</i> var. <i>missoulensis</i>)-sensitive, Wolverine (<i>Gulo gulo</i>)-sensitive, Westslope Cutthroat Trout (<i>Oncorhynchus clarkia lewisi</i>)-sensitive, Fisher (<i>Martes pennanti</i>)-sensitive. In regards to the Westslope Cutthroat Trout, the proposed pit is expected to have little to no impact on the stream that houses the species. The proposed operation would have minimal effect on the remaining species listed above due to the short term nature of the project as well as abundant similar habitat in the area.
2. <u>VEGETATION</u> : quantity, quality, species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Small patches of knapweed were observed during the pre-mine site inspection (5/19/2008 by J. Ludwig). The existing vegetation consists of various pasture grasses and has approx. 30-50% cover (minus the "existing borrow area").
3. <u>AGRICULTURE</u> : grazing, crops, production	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cow pasture and hayland would be temporarily out of production. This would not substantially impact local agriculture. The site would be reclaimed to use for hayland.
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"/>	Remote site; minimal impacts anticipated.
2. <u>CULTURAL</u> : uniqueness, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Remote site; minimal impacts anticipated.
3. <u>POPULATION</u> : quantity, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Remote site; minimal impacts anticipated.
4. <u>HOUSING</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Remote site; minimal impacts anticipated.
5. <u>HUMAN HEALTH & SAFETY</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Remote site; minor impacts on humans anticipated.
6. <u>COMMUNITY & PERSONAL INCOME</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Short-term site; minimal impacts anticipated.
7. <u>EMPLOYMENT</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Short-term site; minimal impacts 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"/>	Short-term site; minimal impacts anticipated.
9. <u>GOVERNMENT SERVICES</u> : demand	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Short-term site; minimal impacts 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"/>	Short-term site; minimal impacts anticipated.
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. In a letter dated April 10, 2008 the Montana Historical Society stated that there is a "low likelihood cultural properties will be impacted" and that "a cultural resource inventory

						is unwarranted at this time". 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"/>	The site is adjacent to Secondary Highway S-271. During the operation of the proposed pit, the highway would be under construction. As a result, the visual impact would be minimal.
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"/>	Short-term site; minimal impacts 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"/>	The operator would use local roads to transport mine material to projects. This activity, in and of itself, would minimally 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: Jamie Ludwig 05/08