

ENVIRONMENTAL ASSESSMENT

PROPONENT: Fisher Sand & Gravel
LOCATION: Section 1, T11N, R5W
 Section 36, T 12N, R5W

SITE NAME: Anderson Site
COUNTY: Lewis and Clark

TYPE AND PURPOSE OF ACTION: The applicant is proposing a 37 acre, 150,000 cubic yard gravel mine in an historic gold mining/sawmill disposal area. The application is being requested to complete the upgrade of the Maryville Road. The proposed mine would consist of 22.7-acres of mine level area. The proposed mine level area would encompass rangeland as well as areas of previous disturbance (by County gravel pit mining, historic placer mining and historic sawmill disposal.). As proposed the facility level area excluding access roads would encompass 12.7-acres and would include land previously disturbed by farming, placer mining and historic sawmill disposal. Access to the facility would initially be off of Birdseye Road (for mobilization to build the new road) and a newly constructed gravel road (1.6-acres, 24 feet wide x 2,864 feet long) which would initiate from 0.2 miles west southwest of the Junction of Highway 279 and Maryville Road and head Southwest to the proposed site across Montana State Lands as well as private land. There is an existing irrigation ditch and holding pond that is used by the landowner, neither is proposed to be disturbed by the operation.

Mining would begin in the North portion of the mining area and would proceed to the South in one phase. Loaders, Dozers and a combination of crushers would be used for mining activities that include crushing and processing. As proposed these activities would begin in July 2008 and conclude in September 2008, weather permitting. Facilities would include crushers and a portable fuel tank all located within the proposed facility area (please see map for proposed permit boundary). Dust mitigation water would be obtained from the landowner and stored on site in portable steel, plastic and/or fiberglass tanks. Fisher states that it would use landowner's water rights to obtain water. There would be on-site fuel storage in portable steel wall tanks. The proposed permit area would be buffered by 3 feet high by 10 feet wide soil stockpiles, as well as 20 foot setbacks from the proposed boundary. No groundwater is proposed to be encountered at the proposed estimated maximum depth of mining of 12 feet (GWIC logs supplied by the operator indicate a high groundwater depth of 58 feet, operator states 62 feet in Plan of Operation). Due to the historic nature of the site, the proponent has stated that in the event that historic disposal areas are encountered, they would be dealt with according to the Opencut Mining Act. The existing asphalt pile is the responsibility of the landowner and would be relocated prior to the start of mining activities. Operating hours, as proposed, would be fourteen hours/day nine days on and five days off unless otherwise specified.

Upon completion of reclamation activities, estimated at June 1, 2012, the proponent proposes to grade the slopes to 5:1. There is no backfill proposed. Reclamation would be to grazing land with the exception of stockpiles left for the landowners use. Operator would replace a minimum of 10 inches of over burden on mine-level area.

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 it's permit to reclaim the site to a postmining land use of grazing land.

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 type="checkbox"/>	The site is Previously disturbed, therefore the native topography is undiscernible
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 12 inches and the average overburden thickness is 20 inches. Soil and overburden would be stripped from all mine-level areas and stockpiled for buffers and 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"/>	Groundwater is not expected to be encountered. The operator proposes to utilize the landowner's water right for dust control. Stormwater mitigation as proposed would be with buffer zones and stockpiled topsoil.

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 proponent has stated that the utmost care would be taken to mitigate any potential hazards.
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 type="checkbox"/>	<input checked="" 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 and Brewer's Sparrow (<i>Spizella breweri</i>) a sensitive species. The proposed operation would have little effect as abundant similar habitat exists 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"/>	Mix of pasture and native vegetation. Some Spotted Knapweed was 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 it's requirements. The Lewis and Clark County Weed Coordinator indicates that a management plan must be completed and an inspection certification must occur prior to ground disturbance.
3. <u>AGRICULTURE</u> : grazing, crops, production	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The proposed operation could have the potential to increase agricultural activities at the site as the operator would be reclaiming and grading historic spoil piles.
HUMAN ENVIRONMENT						
1. <u>SOCIAL</u> : structures, mores	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Some social impacts may occur due to the proximity of the neighboring houses and the utilization of Birdseye Road for access. There is already increased construction on Birdseye Road (from other development in the area) and increased use of this road may impact residences of the area. That said, the operator has stated that Birdseye Road would be utilized for mobilization. Due to the proposed limited use of Birdseye Road for full mining activities, these concerns should be mitigated. This proposed project would potentially have positive social impact as the gravel from this project would be used to improve the Marysville Road.
2. <u>CULTURAL</u> : uniqueness, diversity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The State Historical Preservation Office (SHPO) has stated that there are previously recorded historic or archeological sites near and potentially within the proposed area. As long as there is no disturbance or alteration of structures over fifty years of age, SHPO feels that a cultural resource inventory is unwarranted at this time. The operator has stated that historic mining debris encountered would handled per applicable laws.
3. <u>POPULATION</u> : quantity, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Minimal impacts are anticipated as Fisher employees are already living in or mobilizing to the area.
4. <u>HOUSING</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Minimal impacts are anticipated. Please see Section 3. Population above.
5. <u>HUMAN HEALTH & SAFETY</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	As proposed, the operation would have potential negative impact on the health and human safety of the neighboring houses due to potential air

						<p>pollution. This concern would be mitigated through dust control measures proposed by the operator. There would also be potential for negative impact on the health and human safety of motorists on Birdseye Road due to increased use by large equipment. The operator has stated that Birdseye Road would be utilized for mobilization. Due to the proposed limited use of Birdseye Road for full mining activities, these concerns should be mitigated.</p> <p>Given the historic use of the site, the proposed operation would have positive impact on health and human safety as the operator would be reclaiming a previously disturbed mining/sawmill disposal site that had not been reclaimed using modern reclamation standards. The operator would be held to reclamation standards set forth by modern understanding of land management. Therefore, the proposal would reclaim an area to a productive use where none to little productive use currently exists.</p>
6. <u>COMMUNITY & PERSONAL INCOME</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>The proposal would have some positive personal income impacts to the landowner and operator. Due to the use of the gravel to improve Marysville Road, there are potential long term positive impacts to the businesses and residents of Marysville.</p>
7. <u>EMPLOYMENT</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Minimal impacts are anticipated due to the proposed use of Fisher Sand and Gravel's present employment force.</p>
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"/>	<p>Minimal impacts anticipated.</p>
9. <u>GOVERNMENT SERVICES</u> : demand	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Minimal impacts anticipated.</p>
10. <u>INDUSTRIAL, COMMERCIAL, & AGRICULTURAL ACTIVITIES</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Minimal impacts anticipated.</p>
11. <u>HISTORICAL AND ARCHAEOLOGICAL</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Historic mining resources were identified during the premine inspection. These would include placer mining facilities not in the proposed boundary. In a letter dated May 20, 2008 SHPO stated that there are previously recorded historic or archeological sites near and potentially within the proposed mining area. As long as there is no disturbance or alteration of structures over fifty years of age, SHPO feels that a cultural resource inventory is unwarranted at this time. The operator has stated that historic mining debris encountered would be handled per applicable laws. Should any cultural materials be discovered in the course of the proposed operation, the operator would follow state and federal guidelines.</p>
12. <u>AESTHETICS</u> : noise, visual	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>The operator proposes to use 3 feet high by 10 feet wide topsoil and overburden buffers as well as a 20 foot set back from the proposed permit boundary to mitigate potential aesthetic pollution. The operator also went door to door at the neighboring subdivision to discuss potential concerns. There are residents who have requested copies of the EA through resident notification forms. This office has contacted</p>

						those residents to discuss review of the EA.
13. <u>ENVIRONMENTAL PLANS AND GOALS</u> : local, regional	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	As proposed, the operation would assist environmental diversity by reclaiming portions of an historic mining/sawmill disposal site using private funds and not soliciting the state and local governments for reclamation assistance. 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"/>	Environmental resources would improve through reclamation that adheres to current Opencut reclamation standards.
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. Please see above in reference to Birdseye Road use. There is proposed impact on Montana State Lands due to the construction of an access road off of Marysville Road. However, utilization of this road would take pressure off of Birdseye Road for the extent of the project.

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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