

**DEPARTMENT OF ENVIRONMENTAL QUALITY
OPENCUT MINING PROGRAM**

ENVIRONMENTAL ASSESSMENT

KAELBERER GRAVEL SITE

PROPONENT: James and Marianne Kaelberer

LEGAL DESCRIPTION: SWSE34, T1S, R18E

IMPLEMENTATION DATE: Ongoing

COUNTY: Stillwater

DATE FOR COMPLETION OF FINAL RECLAMATION: 11/2017

TYPE AND PURPOSE OF ACTION: Operator has submitted an application for 3.0 acres including 1.5 acres of previously disturbed area and 1.5 acres of potential expansion area. It is anticipated that up to 20,000 cubic yards of gravel will be mined over time. Operator has submitted a Plan Of Operation whereby they commit to preparing, mining, and reclaiming the site in an environmentally responsible manner. The site would be reclaimed to rangeland.

N = Not present or insignificant impact

Y = Significant impact may or will occur (put "Y" even if impact will be mitigated)

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
1. LOCATION, TOPOGRAPHY, AND GEOLOGIC AND EDAPHIC CHARACTERISTICS. SPECIAL CONSIDERATIONS, POTENTIAL IMPACTS, AND MITIGATION MEASURES.	<p>Y - Location and topography. The site is three miles east of Reedpoint just south of the frontage road. It's on the edge of a low, gently sloping bench above the Yellowstone River valley floor. Mineral removal will result in an approximate 15' lower pit floor surface and 3:1 highwall slopes. The site will be graded to a stable condition, blended into the surrounding topography.</p> <p>Geologic characteristics. The site is in the sedimentary plains portion of the state. No significant geological impacts are anticipated.</p> <p>Edaphic characteristics. The soil is slightly gravelly and 6-12" thick over gravel. The plan calls for salvaging all available soil material and using it for site reclamation.</p>
2. SURFACE WATER AND GROUNDWATER RESOURCES INCLUDING LOCATION, QUANTITY, QUALITY, STRUCTURES, AND USES. SPECIAL CONSIDERATIONS, POTENTIAL IMPACTS, AND MITIGATION MEASURES.	<p>N - It does not appear that surface water and groundwater resources or structures are present on or near the site. Water resources should not be affected by the operation. Operator has committed to protecting these resources. No on-site fuel storage is anticipated.</p>

<p>3. AIR QUALITY. SPECIAL CONSIDERATIONS, POTENTIAL IMPACTS, AND MITIGATION MEASURES.</p>	<p>N - Pollutants and particulates may be produced on a temporary basis by this operation. Operators are required to comply with state air quality regulations. Operator has committed to controlling dust by spraying if needed.</p>
<p>4. PAST MINING DISTURBANCE, PRESENT LAND USE AND VEGETATION, PROPOSED POSTMINING LAND USE AND VEGETATION, AND WEED CONTROL. - SPECIAL CONSIDERATIONS, POTENTIAL IMPACTS, AND MITIGATION MEASURES.</p>	<p>Y - Past mining disturbance and present land use. The site has been used by various operators over time. Some portions have been reclaimed to grassland and some area is open stockpile area. The site being applied for is 1.5 acres open area with two small pits, and 1.5 acres of tame hayland bench that may be mined. The Montana Natural Heritage Program (MNHP) reports no element occurrences within or near (1.0 mile) the site.</p> <p>Proposed postmining land use and vegetation. The site will be reclaimed to rangeland consisting of native grasses.</p> <p>Weed control. Operator has committed to appropriate weed control. The county weed control board has been notified of the operation.</p>
<p>5. COMMON AQUATIC, TERRESTRIAL, AND AVIAN HABITATS AND SPECIES. SPECIAL CONSIDERATIONS, POTENTIAL IMPACTS, AND MITIGATION MEASURES.</p>	<p>N - The area is open gravel stockpile area and tame hayland with apparent limited wildlife habitat or use.</p>
<p>6. FRAGILE, RARE, THREATENED, OR ENDANGERED HABITAT AND SPECIES. - SPECIAL CONSIDERATIONS, POTENTIAL IMPACTS, AND MITIGATION MEASURES.</p>	<p>N - None of the mentioned resources are apparent. There are no riparian or wetland areas within or adjacent to the site. The MNHP reports the occurrence of the bald eagle on the Yellowstone River not far from the site but this habitat is far enough from the proposed operation (≥ 0.25 mile) that the birds would not be affected.</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL - SITES. SPECIAL CONSIDERATIONS, POTENTIAL IMPACTS, AND MITIGATION MEASURES.</p>	<p>N - An MDEQ reconnaissance of the site revealed no cultural resources on site. If such resources are found during mining and reclamation operations, operator has committed to promptly notifying the State Historic Preservation Office and routing the operation around the site of discovery for a reasonable time until salvage can be made.</p>
<p>8. AESTHETICS. SPECIAL CONSIDERATIONS, POTENTIAL IMPACTS, AND MITIGATION MEASURES.</p>	<p>N - The site is located in a rural area. It's partially visible from the interstate. There will be no facilities on site. This is a small operation and the aesthetic impact should be minimal.</p>
<p>9. EFFECTS ON OTHER NATURAL - RESOURCES. SPECIAL CONSIDERATIONS, POTENTIAL IMPACTS, AND MITIGATION MEASURES.</p>	<p>N - There should be no impacts on other natural resources.</p>

10. OTHER ENVIRONMENTAL OR OPERATIONAL CONSIDERATIONS SUCH AS ROAD CONSTRUCTION AND RECLAMATION, MINERAL STOCKPILE DISPOSITION, WASTE DISPOSAL, BOND, AND SPECIAL COMMITMENTS.	N - A several hundred yard long access road exists to the site from the paved frontage road. This road is likely to remain at the conclusion of the operation to service future mining operations and the landowner's agricultural operation. All wastes will be properly disposed of. Operator has posted bond sufficient to cover reclamation costs.
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IMPACTS ON THE HUMAN POPULATION	
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RESOURCE	[POTENTIAL IMPACTS AND MITIGATION MEASURES
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11. HUMAN HEALTH AND SAFETY. Will the project add to health and safety risks in the area?	N - Health and safety: This project should not increase health and safety risks in the area if the operator and landowner manage the site in a responsible manner. Operator is required to comply with OSHA and MSHA regulations.
12. INDUSTRIAL, COMMERCIAL, AND AGRICULTURAL ACTIVITIES AND PRODUCTION. Will the project alter these activities?	N - Industrial, commercial, or agricultural activities in the area will not be significantly affected by the project.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT. Will the project create, move, or eliminate jobs?	N - The quantity or distribution of employment in the project area will not be significantly affected by the project.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES. Will the project create or eliminate tax revenue?	N - Local and state tax revenues have not been significantly affected by similar operations in the state.
15. DEMAND FOR GOVERNMENT SERVICES. Will substantial changes in road use occur? Will other facilities and services be affected or needed?	N - The operator will use county roads to haul his product. No other government services should be significantly affected.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS. Are federal, state, county, city, tribal, or private zoning or management plans in effect?	N - The author is not aware of any other environmental plans or goals. The local zoning authority has been contacted and clearance obtained.
17. ACCESS TO AND QUALITY OF RECREATIONAL AREAS. Will mining and reclamation activities affect the access to or quality of recreation areas?	N - Access to or the quality of recreational areas will not be affected by the project.
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING. Will the project add to the area's population and require additional housing?	N - Population or housing density and distribution will not be significantly affected by the project.
19. SOCIAL STRUCTURES AND MORES. Will the project cause disruption of native or traditional lifestyles or communities?	N - The local social structure or mores will not be significantly affected by the project.
20. CULTURAL UNIQUENESS AND DIVERSITY. Will the project cause a shift in a unique quality of the area?	N - The local cultural uniqueness or diversity will not be significantly affected by the project.
21. OTHER SOCIAL AND ECONOMIC CIRCUMSTANCES.	N - Other significant social or economic circumstances are not apparent.

22. Alternatives Considered: Denial. The owner of the mineral resource would be denied full utilization of his property at this time. The operator may seek another mineral source.

23. Public Involvement, Agencies, Groups or Individuals contacted: Montana Natural Heritage Program, county weed control board, State Historic Preservation Office, and local zoning authority.

24. Other Governmental Agencies with Jurisdiction, List of Permits (that may be) Needed: Montana Department of Environmental Quality, air quality and storm water discharge permits; United States Department of Labor, safety permit; Montana Department of Labor & Industry, safety permit.

25. Magnitude and Significance of Potential Impacts: Negative impacts during mining should be insignificant and implementation of the Mining And Reclamation Plan should return this area to an aesthetically pleasing and useful condition.

26. Regulatory Impact on Private Property: The analysis conducted 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.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

EA completed by Mark Carlstrom, Mine Reclamation Specialist, on 8/11/98

EA approved by Jerry Burke, Opencut Mining Program Supervisor: _____

Signature

Date