

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
OPENCUT MINING PROGRAM**

**ENVIRONMENTAL ASSESSMENT  
FOR THE PROPOSED  
UNDEM GRAVEL SITE**

PROPONENT: McCone County

LEGAL DESCRIPTION: NENW13, T19N, R49E

IMPLEMENTATION DATE: Spring 1998

COUNTY: McCone

COMPLETION OF FINAL RECLAMATION: Fall 1998

TYPE AND PURPOSE OF ACTION: Operator has submitted an application to MDEQ for a permit to surface mine about 5,000 cubic yards of gravel from a 2.5-acre site. Operator has submitted a Plan Of Operation including a Mining And Reclamation Plan insuring that the site will be properly prepared, mined, and reclaimed. The site will be reclaimed to grazing.

N = Not present or insignificant impact, Y = Significant impact may occur.

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>N - Location and topography. The site is a couple hundred yards south of the county road on the west side of Berry Creek. It's on the washed gravel surface near the creek channel. The area topography is rolling with flat rangeland and farmland crossed by gentle drainageways. Mineral removal will result in a small depression with sufficient material left as a buffer between the creek channel and pit. The plan calls for grading the site 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. There is little to no soil material. Operator will salvage what soil material is available and use it for reclamation.</p>
2. SURFACE WATER AND GROUNDWATER RESOURCES INCLUDING LOCATION, QUANTITY, QUALITY, STRUCTURES, AND USES. SPECIAL CONSIDERATIONS, POTENTIAL IMPACTS, AND MITIGATION MEASURES.	<p>N - The site is next to Berry Creek and is likely to be flooded during high spring flow. Operator will locate the pit at least 25' from the creek to provide sufficient buffer to keep flow in the established channel. Operator is also likely to encounter groundwater but will do final grading so that the pit is bowl shaped to minimize the area that may be inundated or saturated. Operator has committed to protecting these resources. No on-site fuel storage is anticipated.</p>
3. AIR QUALITY. SPECIAL CONSIDERATIONS, POTENTIAL IMPACTS, AND MITIGATION MEASURES.	<p>N - Pollutants and particulates will 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>N - Past mining disturbance and present land use. Some mining was done north of the site years ago but is not detectable. The site is mostly bare gravel. The Montana Natural Heritage Program (MNHP) reports no element occurrences within or near the site.</p> <p>Proposed postmining land use and vegetation. The site will be seeded with native grasses and sweetclover.</p> <p>Weed control. Operator has committed to spraying weeds as necessary and to controlling any on-site noxious weeds. 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 site is small and mostly bare 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. No riparian or wetland areas will be affected by the operation. The MNHP reports no element occurrences within or near the site.</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES. SPECIAL CONSIDERATIONS, POTENTIAL IMPACTS, AND MITIGATION MEASURES.</p>	<p>N - A MDEQ reconnaissance of the site revealed no archeological or historical 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 visible from the county road. There will be no facilities on site. This is a small, short-term 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>
<p>10. OTHER ENVIRONMENTAL OR OPERATIONAL CONSIDERATIONS SUCH AS ROAD CONSTRUCTION AND RECLAMATION, MINERAL STOCKPILE DISPOSITION, WASTE DISPOSAL, BOND, AND SPECIAL COMMITMENTS.</p>	<p>N - A several hundred foot road will be constructed to access the site from the county road. This road will be completely reclaimed at the conclusion of the operation. All wastes will be properly disposed of. Operator is liable through their contract with the state to properly reclaim the site.</p>

**IMPACTS ON THE HUMAN POPULATION**

RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>11. HUMAN HEALTH AND SAFETY. Will the project add to health and safety risks in the area?</p>	<p>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.</p>
<p>12. INDUSTRIAL, COMMERCIAL, AND AGRICULTURAL ACTIVITIES AND PRODUCTION. Will the project alter these activities?</p>	<p>N - Industrial, commercial, or agricultural activities in the area will not be significantly affected by the project.</p>
<p>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT. Will the project create, move, or eliminate jobs?</p>	<p>N - The quantity or distribution of employment in the project area will not be significantly affected by the project.</p>
<p>14. LOCAL AND STATE TAX BASE AND TAX REVENUES. Will the project create or eliminate tax revenue?</p>	<p>N - Local and state tax revenues have not been significantly affected by similar operations in the state.</p>
<p>15. DEMAND FOR GOVERNMENT SERVICES. Will substantial changes in road use occur? Will other facilities and services be affected or needed?</p>	<p>N - The operator will use the county road to haul their product. No other government services should be significantly affected.</p>

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 5/19/98

EA approved by Jerry Burke, Opencut Mining Program Supervisor: \_\_\_\_\_  
Signature Date