

**DEPARTMENT OF ENVIRONMENTAL QUALITY
OPENCUT MINING PROGRAM**

ENVIRONMENTAL ASSESSMENT

KUKES GRAVEL SITE

PROPONENT: Fisher Sand & Gravel

LEGAL DESCRIPTION: SENW,29, T1S, R24E

IMPLEMENTATION DATE: October 1998

COUNTY: Yellowstone

DATE FOR COMPLETION OF FINAL RECLAMATION: 5/2000

TYPE AND PURPOSE OF ACTION: Operator has applied for a 14.3-acre Mined Land Reclamation Contract where they plan to mine about 160,000 cubic yards of gravel from a 9.7-acre pit. Operator has submitted all application materials required under the Opencut Mining Act and Rules And Regulations governing that Act. Operator proposes to properly prepare, mine, and reclaim the site in an environmentally responsible manner to a postmining use of rangeland. Operator is legally liable through their contract with the state to reclaim the site.

N = not applicable or relatively insignificant or temporary impact.
Y = relatively significant or long-term 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>Y - Location and topography. The site is located north of Laurel, north of the landfill and northeast of the saddle club, on a high flat bench on the east side of the paved road. After mineral removal, the site will be graded to a stable condition and blended into the surrounding topography. The topography will be permanently altered with a graded highwall and lower pit floor remaining.</p> <p>Geologic characteristics. The site is in the sedimentary plains portion of the state. The gravel mineral deposit to be mined is up to 17' thick. No significant geological impacts are anticipated.</p> <p>Edaphic characteristics. Soil thickness is ≥ 6" over about 2.5' of overburden. 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 - No groundwater is apparent within or around the mine area. Surface water and groundwater resources should not be affected by the operation. There are no wells in the immediate area. No on-site fuel storage is anticipated. Operator has committed to protecting water resources.</p>
3. AIR QUALITY. SPECIAL CONSIDERATIONS, POTENTIAL IMPACTS, AND MITIGATION MEASURES.	<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. The site is in a relatively remote location.</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. The bench has been mined at least a couple times in the past. A pit on one finger remains unreclaimed. The larger mined area was graded.</p> <p>Present land use and vegetation. The area is used as native rangeland. 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 reclaimed to rangeland consisting of native grasses.</p> <p>Weed control. Operator has committed to appropriate weed control measures. 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 consists of basic prairie habitat common in the area.</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. 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 - This is a federally funded project. If cultural 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 - Any aesthetic impact will be temporary. The site is located in a relatively remote area. There are no nearby residences.</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, AND SPECIAL COMMITMENTS.</p>	<p>N - Operator will use an existing access road that the landowner wants left open. All mineral should be used off site; otherwise, operator will leave stockpiles in an acceptable condition. All wastes will be properly disposed of. This operation requires no special commitments other than any discussed above.</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 county and state roads to haul his 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 12/1/98 (Y/N OK above)

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