

ENVIRONMENTAL ASSESSMENT

Project Name: Bitterroot Gravel Source.

Proponent: H.L. Ostermiller.

Location and County: NW12, T1N, R26E.

Proposed Implementation Date: 9/97.

Type and Purpose of Action: The operator has a 70.55 acre contracted area. Most of this area is mined out. Thirty-four and a half (34.5) acres are reclaimed and will be released soon, 10 acres have been recently mined out, 25.55 acres are being used as facility area, and 0.5 acre near the entrance needs grading and seeding. The action that triggered this EA is an amendment application for 10 additional acres to mine about 180,000 cubic yards of gravel. The operator proposes to properly prepare the site for mining and future reclamation, remove the mineral, and reclaim the area to grassland--this is the basic plan for the entire area. The operator will also construct a network of surface drains that will intercept water along the highwall and carry it to the edge of the bench above Five Mile Creek, where it will then harmlessly flow down established channels, eventually reaching the creek below. Reclamation is an ongoing process. The amendment area should be mined out in 3 years. The date of final reclamation for the 10-acre area depends on which way the operation may/will expand.

N = Not present or insignificant impact.
Y = An impact may occur (explain).

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>1. LOCATION, TOPOGRAPHY, AND GEOLOGIC AND EDAPHIC CHARACTERISTICS, SUITABILITY, AND STABILITY: Are there unusual geologic features? Are fragile, compactible, or unstable soils present? Is the proposed soil material handling adequate? Are there exceptional mining and reclamation considerations?</p>	<p>N - Location and topography: The site is about a half mile east of Bitterroot Drive on the bench on the north side of Five Mile Creek. The area being mined is flat, irrigated pasture.</p> <p>Geologic and edaphic characteristics: The site is in the sedimentary plains portion of the state. No unusual geologic features occur in the area. The soil is deep and the operator is required to salvage and retain enough soil material to replace at least an 18-inch thickness.</p> <p>Exceptional topographic, geologic, or edaphic mining and reclamation considerations: none.</p>

<p>2. WATER RESOURCE LOCATION, QUANTITY, QUALITY, AND PROTECTION: Are groundwater or surface water resources present? Is there the potential for degradation of water quality or quantity? Could water wells be affected? Is the proposed bulk fuel storage adequate? Are there special mining and reclamation considerations?</p>	<p>N - Groundwater resources or wells: There is an abundance of groundwater in the gravels being mined due to the irrigated land and at least one medium and one large irrigation ditch upgradient from the site. At it's current location, mining will not have a negative effect on upgradient or downgradient groundwater use. Any wells and residences are located well above the site, and downgradient groundwater would have surfaced anyway at the edge of the bench that has been mined. The approved plan calls for the establishment of interceptor drains along the base of the highwall which will pick up seepage at the base of the highwall and carry the water to the edge of the bench where it will be harmlessly flow downslope, eventually reaching Five Mile Creek.</p> <p>Surface water resources: The medium size irrigation ditch that runs along the north side of the site has been relocated farther north to go around the north and east sides of the previous and currently applied for 10-acre areas.</p> <p>Bulk fuel storage: None anticipated.</p> <p>Exceptional mining and reclamation considerations concerning water resources: see above.</p>
<p>3. AIR QUALITY: Will pollutants or particulate be produced? Do air quality regulations apply?</p>	<p>N - Pollutants and particulates will be produced on a temporary basis by mining and reclamation operations. Operators are required to comply with state air quality regulations.</p> <p>Exceptional mining and reclamation considerations concerning air quality: None.</p>
<p>4. PRESENT LAND USE, VEGETATIVE COMPOSITION AND COVER, PROPOSED POSTMINING LAND USE, AND WEED CONTROL: Will vegetative communities be permanently altered? Are any rare plants or vegetative communities present? Are there exceptional mining and reclamation considerations?</p>	<p>N - Vegetation and present land use: The vegetation in the expansion area is irrigated pasture.</p> <p>Proposed postmining land use: Grassland.</p> <p>Rare plants or rare vegetative communities: None apparent. If the Montana Natural Heritage Program (MNHP) reports an element occurrence in the area, the Department will perform appropriate follow-up.</p> <p>Weed control: The Department will notify the county weed control board about the operation. The operator has committed to controlling any on-site noxious weeds.</p> <p>Exceptional mining and reclamation considerations concerning land use and vegetation: None.</p>
<p>5. TERRESTRIAL, AVIAN, AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by common or rare mammals, birds, fish, or other animal species?</p>	<p>N - Common species or evidence of their use of the area: None apparent.</p> <p>Rare species or evidence of their use of the area: None apparent. If the MNHP reports an element occurrence in the area, the Department will perform appropriate follow-up.</p>

<p>6. UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Species of special concern? Riparian areas? Wetlands?</p>	<p>N - Unique, endangered, fragile, or limited environmental resources within or around the site: None apparent. If the MNHP reports an element occurrence in the area, the Department will perform appropriate follow-up</p> <p>Riparian areas and wetlands: None that will be affected.</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Has the site been surveyed by a cultural resource professional or paraprofessional? Are any historical or archaeological resources present?</p>	<p>N - Archaeological or historical resources: None apparent. If such resources are found, the operator has committed to routing the operation around the site of discovery for a reasonable time until salvage can be made, and to promptly notifying the State Historic Preservation Office.</p>
<p>8. AESTHETICS: Is the project area readily visible from surrounding accessible areas? Is it visible from populated or high use areas such as residences, scenic viewpoints, or recreational areas? Considering the facilities to be on site, will there be excessive noise or light?</p>	<p>N - Visibility from surrounding area: A subdivision is encroaching the site from the northwest. Past mining and reclamation has occurred next to and closer to this subdivision in the past. One large home was recently built next to this reclaimed area, within sight and earshot of the current operation. The areas to the north, east, and south are open country. The area to the west is the operator's shop and office area.</p> <p>Visibility from populated or high use areas: See above.</p> <p>Facilities to be on site: A crusher sits on the current pit floor which helps buffer the noise to surrounding areas.</p> <p>Excessive noise or light: No problems are anticipated.</p>
<p>9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR, OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect or be affected by the project?</p>	<p>N - There will not be a significant demand or impact on environmental resources or other projects as a result of this operation.</p>
<p>10. OTHER ENVIRONMENTAL ASPECTS OR IMPACTS: Are there other studies, plans, or projects on this tract? Will waste disposal be properly handled? Is reclamation guaranteed by a bond?</p>	<p>N - The author is not aware of any other environmental aspects or impacts. The operator has committed to proper waste disposal. The operator has posted sufficient bond to guarantee reclamation.</p>
<p>IMPACTS ON THE HUMAN POPULATION</p>	
<p>RESOURCE</p>	<p>[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES</p>
<p>11. HUMAN HEALTH AND SAFETY: Will this 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/landowner manages the site in a responsible manner. Operators are required to comply with OSHA and MSHA regulations.</p>
<p>12. INDUSTRIAL, COMMERCIAL, AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or 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>

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 (e.g., fire protection, police, schools) be affected or needed?	N - Government services: Local roads are used to distribute the product. No government services should be significantly affected.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there federal, state, county, city, tribal, and/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 AND WILDERNESS ACTIVITIES: Are recreational or wilderness areas nearby or accessed through this tract? Is there recreational potential within the tract?	N - Access to or the quality of recreational lands and activities on site and in the area 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: Is some disruption of native or traditional lifestyles or communities possible?	N - The local social structure or mores will not be significantly affected by the project.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some 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.

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 stormwater 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.

