

ENVIRONMENTAL ASSESSMENT

Project Name: Johnson Gravel Source.

Proponent: Empire Sand & Gravel, Billings.

Location and County: NW8, T7N, R59E.

Proposed Implementation Date: July 1997.

Type and Purpose of Action: The operator has applied for a 11.31-acre gravel source where they propose to salvage all available soil, removed 125,000 cubic yards of gravel, and reclaim the site to farmland/hayland. The date of final reclamation is fall of 1998.

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 in rolling rangeland and farmland area on the edge of a low bench next to a wide, flat, and dry prairie draiageway.</p> <p>Geologic and edaphic characteristics: The site is in the sedimentary plains portion of the state. No unusual geologic features are in the area. The soil is about 6 inches thick with about 2.5 feet of overburden underneath. The operator proposes to salvage and replace all available soil material.</p> <p>Exceptional 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? Are there special mining and reclamation considerations?</p>	<p>N - Groundwater resources or wells: None apparent.</p> <p>Surface water resources: None apparent.</p> <p>Exceptional mining and reclamation considerations: None.</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>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 site is farmland/hayland and is in grass at this time.</p> <p>Proposed postmining land use: Hayland.</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: 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 apparent.</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: The site is in a rural area and is visible from the paved county road.</p> <p>Visibility from populated or high use areas: Such areas are not in the vicinity of the site.</p> <p>Excessive noise or light: Will not be a problem.</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>

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	N - Health and safety: This is a short-term project that 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.
12. INDUSTRIAL, COMMERCIAL, AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or 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 (e.g., fire protection, police, schools) be affected or needed?	N - Government services: The operator used the highway to distribute their product.
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.

