

## ENVIRONMENTAL ASSESSMENT

**Project Name:** Dupea Borrow      **Proposed Implementation Date:** Summer 97

**Proponent:** Empire Sand & Gravel Co., Inc.

**Type and Purpose of Action:** The proponent proposes to mine and transport 60,000 cubic yards of borrow from a 4.50 acre site for use in the reconstruction of Highway 12. The site would be reclaimed by recontouring, respreading the topsoil and reseeding the site with grasses.

**Location:** SW¼, Sec. 30 & NW¼, Sec. 31, T9N, R7E    **County:** Meagher

**N = Not present or No Impact will occur.**

**Y = Impacts may occur (explain under Potential Impacts).**

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p><b>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</b> Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>[N] The proposed operation is a small hill located in an intermontaine valley between the Big Belt Mountains and the Castle Mountains. The borrow material consists of silts, clays, sands and gravels of Tertiary valley fill. The soils are of a silty loam with rock texture and are approximately 6 inches deep. The topsoil would be stripped and stockpiled and after regrading would be evenly replaced. There is no overburden to replace as it will be utilized as borrow for the road project. Microorganisms should reinvade the soil.</p>
<p><b>2. WATER QUALITY, QUANTITY AND DISTRIBUTION:</b> Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>[N] There is an intermittent drainage 400 feet north of the proposed operation. There are no water wells within 1,000 feet of the proposed operation. The site will be mined to a maximum depth of 20 feet, which is well above the depth to the water table, which is estimated to be 130 feet below the elevation of the proposed operation. Fuel storage tanks would be lined and bermed and be of sufficient size to contain any leaks or spills. The site upon reclamation would result in the site being daylighted to the west and having 8:1 or flatter slopes in all other directions. The site would drain inward. Thus, any storm water would not leave the site. BMP's would be implemented to prevent any possible effects to water quality.</p>
<p><b>3. AIR QUALITY:</b> Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>[Y] Air quality would be degraded, but an air quality permit would not be required from the Montana Dept. Of Environmental Quality as no crusher or screening plant would be involved with the operation.</p>

<p><b>4. VEGETATION COVERS, QUANTITY AND QUALITY:</b> Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[N] The site was plowed this sprong and seedeed with alfalfa. Upon the site being regraded and topsoiled the site would be reseeded with alfalfa. A literature search was done by the Montana National Heritage Program and no rare plants or cover types were identified and none were identified during a ground search.</p>
<p><b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b> Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>[N]</p>
<p><b>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</b> Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>[N] Ground and literature searches were conducted and no threatened or endangered a species or identified habitats were found on the site. No wetlands are present.</p>
<p><b>7. HISTORICAL AND ARCHAEOLOGICAL SITES:</b> Are any historical, archaeological or paleontological resources present?</p>	<p>[N] A cultural survey was conducted on the location of the proposed operation and no cultural resources were found. The site has been cultivated in the past. If the operator of the proposed operation discovers any cultural resources the operation must be routed around the site of discovery for a reasonable amount of time until salvage can be made. The State Historical Preservation Office must be promptly notified.</p>
<p><b>8. AESTHETICS:</b> Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?</p>	<p>[N] The site will be visible from vehicles traveling Highway 12, but its impact will be no greater then the work being done on the actual highway right of way.</p>
<p><b>9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:</b> Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?</p>	<p>[N]</p>
<p><b>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:</b> Are there other studies, plans or projects on this tract?</p>	<p>[N]</p>

**IMPACTS ON THE HUMAN POPULATION**

<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<p><b>11. HUMAN HEALTH AND SAFETY:</b> Will this project add to health and safety risks in the area?</p>	<p>[Y] There will be increased hazards because of equipment activity and hauling of the borrow material. The applicant must comply with OSHA and MSHA regulations however, proper precautions will be taken to avoid accidents.</p>
<p><b>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</b> Will the project add to or alter these activities?</p>	<p>[N]</p>
<p><b>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</b> Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>[N]</p>
<p><b>14. LOCAL AND STATE TAX BASE AND TAX REVENUES:</b> Will the project create or eliminate tax revenue?</p>	<p>[N]</p>
<p><b>15. DEMAND FOR GOVERNMENT SERVICES:</b> Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?</p>	<p>[N] The site will require periodic site evaluations, but these will be done in conjunction with other operations in the area.</p>
<p><b>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</b> Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>[N] The operation is in compliance to Meagher County zoning.</p>
<p><b>17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:</b> Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?</p>	<p>[N]</p>
<p><b>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:</b> Will the project add to the population and require additional housing?</p>	<p>[N]</p>

<b>19. SOCIAL STRUCTURES AND MORES:</b> Is some disruption of native or traditional lifestyles or communities possible?	[N]
<b>20. CULTURAL UNIQUENESS AND DIVERSITY:</b> Will the action cause a shift in some unique quality of the area?	[N]
<b>21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</b>	[N]

**22. Alternatives Considered:**

Alternative # 1: Denial. The owner of the gravel resource would be denied full utilization of his property at this time.

**23. Public Involvement, Agencies, Groups or Individuals contacted:** Montana Natural Heritage Program, Meagher County Commissioners & Weed Control District

**24. Other Governmental Agencies with Jurisdiction, List of Permits Needed:** Mine Safety & Health Administration for safety permit; Montana Department of Labor & Industry, Bureau of Safety for safety permit; Permitting and Compliance Division for stormwater permit.

**25. Magnitude and Significance of Potential Impacts:** Impacts are unlikely to be significant on the general environment because of the small amount of disturbance and short duration of the project.

**26. Regulatory Impact on Private Property:** The analysis conducted in response to the Private Property Assessment Act indicates no impact.

**Recommendation for Further Environmental Analysis:**

EIS       More Detailed EA       No Further Analysis

EA Checklist Prepared By: Jerry Burke

Title: Permit Coordinator

Approved By: Steve Welch

Title: Industrial and Energy Minerals Bureau Chief

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Signature

Date