

ENVIRONMENTAL ASSESSMENT

Project Name: BLM/Warhorse **Proposed Implementation Date:** Spring 99

Proponent: Petroleum County

Type and Purpose of Action: The proponent proposes to mine, crush, stockpile and transport 10,000 cubic yards of sand and gravel from a 3.1-acre site for use on county roads. The proponent would salvage soils, mine sand and gravel, recontour, reseed and reseed the site with grasses. The reclaimed use would be grazing. Final reclamation on the site would be completed in November 2008.

Location: NW¼, Sec.8, T16N, R25E

County: Petroleum

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>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>[Y] The proposed site lays approximately 21 miles northwest of Winnett on the east side of the county road. The proposed operation is on the second bench on the north side of Duck Creek. The soil is a pebbly sandy silt loam, approximately 6 inches deep. There are several "blowouts" where there is no soil and only hardpan is exposed. The soils are not fragile, compactible or unstable. There is no overburden to be salvaged. The soil would be salvaged and stockpiled prior to mining and after regrading the slopes to 3:1 or flatter the topsoil would be replaced. The site would be mined to a maximum depth of 15 feet. Microorganisms should invade the site. There are no unusual geologic features and no special reclamation considerations.</p>
<p>2. WATER QUALITY, QUANTITY AND DISTRIBUTION: 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 are no water wells within 1,000 feet of the proposed operation. The estimated depth to the water table is 60 plus feet. The site would be mined to a depth of 15 feet which is well above estimated depth to the water table. The applicant would berm and line any fuel and fuel storage areas to contain any petroleum-based products spills. Any spills of petroleum-based products would be immediately picked up and properly disposed of. Any storm water would be contained on site using earthen berms, straw bales, and/or silt fences. Duck Creek is 500 feet to the south. With the mining depth of 15 feet and Best Management Practices there should be no impact to ground or surface water resources.</p>
<p>3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>[Y] There would be an increase in airborne particulates while the soil is being salvaged, the gravel being crushed and hauled and soil replaced. The applicant would need to secure an Air Quality Permit from the Montana Dept. of Environmental Quality prior to crushing activities and the proponent must comply with all applicable air quality guidelines. Spray bars will be placed on the crusher to suppress dust. The hard stand areas, soil stockpiles and haul roads would be watered as necessary. The site is not within a Class I airshed.</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Are any rare plants or cover types present?</p>	<p>[N] Existing vegetation would be removed with the soil. Some roots may remain viable in the soil stockpile and regenerate upon replacement. The applicant would seed all affected land to species compatible with the post mine land use. The site currently contains native species. A literature search by the Montana Natural Heritage Program and a ground search found no threatened or endangered plants present.</p>
<p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>[N] The location does receive some use by small, medium and large mammals and various avian species.</p>

6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?	[N] The Montana Natural Heritage Program and a ground search did not identify any threatened or endangered plant or animal species present on this site. There are no wetlands or species of special concern present on the site.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] A cultural resource survey was done by BLM and no cultural resources were found and clearance has been given. Should a significant archaeological or historical value be found, the operation would be routed around the site of discovery for a reasonable time until salvage can be made. The State Historic Preservation Office would be promptly notified.
8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	[N] The site would be visible from people traveling the county road, but the proposed operation is located in a remote area.
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 the project?	[N]
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other studies, plans or projects on this tract?	[N] Zoning clearance has been obtained.

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[Y] The use of heavy mining and hauling equipment will increase the risk of accidents. However, the applicant must comply with OSHA and MSHA regulations and it is expected that safety considerations will be given the utmost attention.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] 3.1 acres would be temporarily removed from agricultural production (grazing) until such time as the site is fully reclaimed.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N]
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N]
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?	[N] The site would require periodic site evaluations by DEQ staff, however they would generally be conducted in conjunction with other regional sites.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] Zoning clearance has been secured from Petroleum County.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N]
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N]
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N]

