

ENVIRONMENTAL ASSESSMENT

Project Name: Petermann

Proposed Implementation Date: October 1, 2000

Proponent: Wibaux County

Type and Purpose of Action: The county proposes to mine and crush 5,000 yards of scoria from a 5.0-acre site. The product would be used for county road projects in the vicinity over the next 15 years. Mining would occur to a depth of 20 feet on a high ridge. The site would be reclaimed as pasture by the Fall of 2015.

Location: NE of the SW of Sec 20 T12N R59E **County:** Wibaux

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>[N] The site is located on a high scoria ridge top. Elevational changes on the site are from 60 to 80 feet.</p> <p>The soils are of the "Wibaux" series on top of the ridge, and of the "Regent" series on the lower slopes and the activities area of the site. The Wibaux soils are very shallow, from 0 to 2 inches of stony, clay loam overlying the scoria. The Regent soils are also a silty-clay-loam. They are 6 to 12 inches deep, and support a good stand of range grasses. In the past the facilities area has been plowed and seeded to rangeland grasses, including crested wheatgrass. This topsoil has a high water-holding capacity, which should help in revegetation. Topsoil would be salvaged and stockpiled toward the west and north.</p> <p>Annual precipitation is about 15 inches, most of which falls during May, June and July.</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] The nearest surface water is an intermittent stream about 2000 feet to the west. A smaller ephemeral swale lies 1000 feet to the north of the site. These are some headwater drainages of Horse Creek. The lower site is fairly well vegetated with sagebrush, bunchgrasses, and planted range grasses including crested.</p> <p>The plan of operations calls for mining the top of the ridge up to a depth of 20 feet. The pit would day-light to the west and north.</p> <p>There is no indication that groundwater be intercepted during the operation of this pit over the years.</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>[N] No designated Class I or Class II airsheds exist in the area. A water truck would be available for dust control on-site. The crusher is equipped with sprayer nozzles and is permitted by the DEQ Air and Waste Management Bureau.</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[N] The site is presently used as dryland pasture. The ridge top has about 25 percent cover consisting of sage, grasses, and some yucca. The site would be reclaimed to daylight to the west and north, with highwall slopes being no less than 3:1. The facilities area is well covered with rangeland grasses. This area should revegetate very well and would maintain production at reclamation.</p> <p>No noxious weeds were seen on site, but the county would control or eliminate any weeds that should invade the site before final reclamation.</p> <p>No rare species or cover types were found during a field inspection, and none were reported in an NRIS search.</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] Wildlife does use the site. Deer, a few antelope, coyotes, raptors and other plains animals have been observed.</p> <p>The reclaimed site would provide better grazing on the ridge, but otherwise,</p>

	mining would have little impact on wildlife.
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 has no listings for the site. No wetlands are present on the site. No species of special concern are present.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] The State Historical Preservation Office has no listings for this area. During a field survey no evidence was found to indicate that any surface or subsurface cultural resources exist on site. If some resource were discovered, operations would be shifted to another area for a reasonable time period to allow for assessment of the new find.
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 is very isolated and is not visible from the nearest county road. Noise from the operation would not be heard from the road either.
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] Several large scoria ridges occur in the area.
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other studies, plans or projects on this tract?	[N]
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?	[N] During the times when the county is hauling out of the pit, truck traffic on the county road could create a minor increase in the safety risk.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] The site would be taken out of rangeland production for the life of the project.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] Most of the product from this operation would be used on county road projects. There would be no impact to employment.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] There would be no effect on taxes.
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?	[N] Truck traffic generated by this project would impact local residents during construction activity and could be annoying to the public, but it would not be dangerous or overburden the county's infrastructure.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N]
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] The recreational potential of this site is low because it is private ground. Impacts are not anticipated.
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]

