

DEQ OPENCUT MINING PROGRAM

ENVIRONMENTAL ASSESSMENT

Project Name: 1M Bentonite Site.

Proposed Implementation Date: 2000.

Proponent: Wyo-Ben, Inc.

Type and Purpose of Action: Proponent has applied for a 206.3-acre Mined Land Reclamation Permit where they propose to remove 130,000 tons of bentonite from a mining sequence consisting of 88.2 acres of pit. Certain qualities of bentonite will be hauled directly to Wyo-Ben's Lovell mining facility, other qualities will be stockpiled for field drying. Proponent has submitted all application materials required under the Opencut Mining Act and the Rules and Regulations governing the Act. Proponent proposes to properly prepare, mine, and reclaim the site to a postmining land use of rangeland. Proponent is legally bound through their reclamation contract with the state to reclaim the site. The estimated date for completion of final reclamation is 2015.

Location: SE 24, T9S, R25E, SWSW 19 & NWSE 30, T9S, R26E **County:** Carbon County, Montana.

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] Geology. The proposed site is in the sedimentary plains portion of the state. The proposed pit lies on gently tipping slopes of the Mowry geologic formation. The overburden typically consists of siltstones, mudstones, thin bentonites, and soils.</p> <p>Soils. Soils in the area generally exhibit poorly defined horization and are fine textured and shallow. They are mainly residuum of Mowry sandstone and shale as well as alluvial accumulation along several small drainages. Soils in the area are described as having hard shale or sandstone within 20 inches of the surface.</p> <p>Removal of material will alter the topography; however, operator is required properly grade the site and blend it into the surrounding topography. There are 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] Surface Water. It does not appear that surface water is a factor for consideration at this site. This site is located in a very dry portion of the state. Ephemeral drainages from limited watershed areas flow down through this site.</p> <p>Groundwater. It does not appear that groundwater is a factor for consideration at this site. In only one of the more than 300 drill holes was water encountered and that was at 26 feet.</p> <p>Wells. No wells were seen within or near the site.</p> <p>Surface and groundwater resources should not be adversely affected by the operation. Proponent has committed to protecting surface water and groundwater resources.</p>
<p>3. AIR QUALITY: Will pollutants or particulate be produced? Is the project</p>	<p>[N] Pollutants and particulates may be produced on a temporary basis by this operation. The site is relatively small and in a remote location. Proponent is</p>

<p>influenced by air quality regulations or zones (Class I airshed)?</p>	<p>required to comply with state air quality regulations.</p> <p>Wyo-Ben's standard operation procedure is to conduct regular haulroad watering during active hauling operations. It is unlikely that dusty conditions will develop in the active pit area due to the rocky nature of the Mowry overburden, shallow surface soils, and native moisture content of the in-place bentonite.</p>
<p>4. VEGETATION COVER, QUANTITY, AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[Y] Premining Vegetation. The site is dominated by Gardner Saltbush or Gardner Saltbush/Birdsfoot Sagebrush map units. Vegetative cover is less than 25% in this area which receives 5-9 inches of precipitation per year.</p> <p>Postmining Vegetation. The site will be reclaimed to rangeland. Wyo-Ben will seed reclaimed areas to a mix consisting of 2 shrubs, 5 grasses, and 1 legume</p> <p>Weed Control. Proponent has committed to appropriate weed control measures. The county weed control district has been notified.</p> <p>The Montana Natural Heritage Program report indicates the desert dandelion on their report. Wyo-Ben reports the occurrence of this plant in all of their vegetation map units. In consulting the Bureau of Land Management, this is not a concern, however, since there are townships of this habit type with the desert dandelion in the area.</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 site consists of common southern Montana prairie habitat. A site visit did not reveal extraordinary use by wildlife or use by unique wildlife.</p>
<p>6. UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or an endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>[N] None of the mentioned resources appear to be present. Similar habitat is abundant in the area. No wetland, riparian, or other less common habitat will be affected.</p> <p>The Montana Natural Heritage Program reports indicates that the Merriams shrew and white-tailed prairie dog may be in the area. Wyo-Ben information also indicates that these animals may potentially occur in the area. This should not be a concern since there are townships of similar habitat in this area.</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological, or paleontological resources present?</p>	<p>[N] The BLM performed a cultural resources inventory of Wyo-Ben's proposed mine area and haul roads. One previously unrecorded archeological site was identified. This site consisted of two stone circles. Wyo-Ben has agreed to exclude this area from their disturbance area.</p> <p>If cultural resources are found during mining and reclamation operations, proponent has committed to promptly notifying the State Historic Preservation Office and routing the operation around the site of discovery for a reasonable time until salvage can be made.</p>
<p>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?</p>	<p>[Y] The aesthetic impact will be temporary. The site is located in a remote area. There are no nearby residences.</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 the project?</p>	<p>[N] The operation will not use resources that are limited in the area, and it should not impact or be affected by area activities.</p>
<p>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other studies, plans, or projects on this tract?</p>	<p>[N] Any affect on other environmental resources will be temporary, and the operation should not affect any environmental studies.</p>

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] This project should not significantly increase health and safety risks in the area if the proponent and landowner manage the operation and site in a responsible manner. Proponent is 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] No significant impacts are anticipated.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move, or eliminate jobs? If so, estimated number.	[N] No significant impacts are anticipated.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] Tax revenues have not been significantly affected by similar projects in the state.
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 proponent will use local roads to distribute their product. No other government services should be significantly affected.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] 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 wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N] There are no wilderness or recreational areas nearby or accessed through the site.
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N] No significant impacts are anticipated.
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] No significant impacts are anticipated.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] No significant impacts are anticipated.
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N] Author is not aware of such circumstances.

22. Alternatives Considered: Denial. The owner of the material resource would be denied full utilization of their property at this time. The proponent may seek another material source.

23. Public Involvement, Agencies, Groups or Individuals contacted: Montana Natural Heritage Program, State Historic Preservation Office, local zoning authority, and county weed control board, & Ken Hanify, botanist for Bureau of Land Management in Billings. Ken Hanify of the BLM in the Billings Field Office reviewed the EA and had no comments.

24. Other Governmental Agencies with Jurisdiction, List of Permits That May Be Needed: Montana Department of Environmental Quality, Air and Water Protection Bureaus.

