ENVIRONMENTAL ASSESSMENT

Project Name: See Attached

Proponent: E. H. Oftedal & Sons, Inc.

Legal Description: See Attached

County: Carter

Proprosed Implementation Date: Fall 1997

Type and Purpose of Action: The operator has applied for nine borrow sites for road projects south and west of Alzada. They propose to properly prepare each site for mining and reclamation, remove the mineral needed, and reclaim the sites to grassland. The date of final reclamation is Summer 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
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?	N - Location and topography: The first seven sites on the attached list are located next to Highway 212 west of Alzada. The Arpan site is about 1.5 miles north of Alzada and the Lawrence site is about 1.5 miles south of Alzada. The area along Highway 212 west of Alzada consists of rolling prairie with wide, gentle drainageways. The Arpan and Lawrence sites are located in the wide, flat Little Missouri River valley. Geologic and edaphic characteristics: The sites are in the sedimentary plains portion of the state. There is a 6-inch plus soil thickness at each site. Because these are borrow sites, 6 inches of soil salvage is the maximum required because the underlying material is considered the borrow mineral to be removed. Exceptional topographic, geologic, and edaphic considerations: None.
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? Is the proposed bulk fuel storage adequate? Are there special mining and reclamation considerations?	N - The operator has committed to protecting surface water and groundwater resources. The Arpan site is several hundred feet from the Little Missouri River channel across flat ground. The Lawrence site is well over a quarter mile from the channel. All site plans indicate that there should be no problem with surface water protection. Groundwater resources or wells: A spring on the BLM #3 site will be protected by keeping mining downgradient and at least 50-feet from the channel where the spring is located. Surface water resources: See above. Surface water flowing into the Lawrence site will be confined to a permanent low area on the pit floor. Bulk fuel storage: None anticipated. Exceptional water resource considerations: None.
3. AIR QUALITY: Will pollutants or particulate be produced? Do air quality regulations apply?	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. Exceptional air quality considerations: None.

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?	N - Vegetation and present land use: All sites are native range used for livestock grazing. Proposed postmining land use and vegetation: rangeland consisting of native grasses. Rare plants or rare vegetative communities: The Montana Natural Heritage Program (MNHP) reports the following species of concern in or near the project area: bur oak, blue toadflax, creeping spike-rush, and wild lily-of-the-valley. Bur oak does not occur on or near any of the sites. The other species were not observed on any of the sites. 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. Exceptional land use and vegetation considerations: None.
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?	N - Common species or evidence of their use of the area: Antelope and mule deer. Rare species or evidence of their use of the area: None apparent. The MNHP reports the following species of concern in or near the project area: bald eagle. No bald eagles or nest sites were observed on any of the sites.
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?	N - Unique, endangered, fragile, or limited environmental resources within or around the site: None apparent. Riparian areas and wetlands: The Arpan site is next to a small row of trees in an old, perched meander of the Little Missouri River. Removal of these trees will decrease habitat security for area whitetail deer; however, the increased topographic variation of the site due to mining may compensate for this loss of woody vegetation.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Has the site been surveyed by a cultural resource professional or paraprofessional? Are any historical or archaeological re-sources present?	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.
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?	N - Visibility from surrounding area: All sites except for Arpan are readily visible from public roads. Fortunately, all sites are in a remote area of the state and all disturbances will be temporary. Visibility from populated or high use areas: Such areas are not in the vicinity of the site. Facilities to be on site: None anticipated. Excessive noise or light: None anticipated.
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?	N - There will not be a significant demand or impact on environmental resources or other projects as a result of this operation.
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?	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.

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 project 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 sites are on or near the project area. No government services should be significantly affected.
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. The operator would seek another mineral source.

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.

26. Regulatory Impact on Private Property: The analysis conducted in response to the Private Property Assessment Act indicates no impact. The Department does not plan to deny the application or impose conditions that would restrict the use of private property.

Recommendation for Further Environmental Analysis:

[ ] EIS [ ] More Detailed EA [X] No Further Analysis

EA Checklist Prepared By: Mark Carlstrom Mine Reclamation Specialist 2/27/98
Name Title Date

Approved By: Jerry Burke IEMB Opencut Mining Program Supervisor _____ _____
Name Title Signature Date

E. H. OFTEDAL ALZADA PROJECT SITES

Pilster #1	19, T8N, R58E	39 acres	150,000 cubic yards borrow
Pilster #2	21, T8S, R58E	16 acres	25,000 cubic yards borrow
BLM #2	26, T8S, R58E	27 acres	30,000 cubic yards borrow
S&L Sheep Ranch	35, T8S, R58E	5 acres	40,000 cubic yards borrow
State	36, T8S, R58E	18 acres	74,000 cubic yards borrow
BLM #3	31, T8S, R59E	13 acres	44,000 cubic yards borrow
BLM #1	31, T8S, R59E	14 acres	66,000 cubic yards borrow
	6, T9S, R59E		
Arpan	13, T9S, R59E	15 acres	180,000 cubic yards sand
	14, T9S, R59E		
Lawrence	31, T9S, R60E	12 acres	60,000 cubic yards borrow
	Totals	159 acres	669,000 cubic yards sand and unclassified borrow