

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

ENVIRONMENTAL ASSESSMENT

Project Name: Buffalo Gulch Gravel Site. Phase I **Proposed Implementation Date:** June 1999

Proponent: Strata Corporation.

Type and Purpose of Action: Proponent has applied to the Department of Environmental Quality (DEQ) for a 46.55-acre Mined Land Reclamation Contract where they propose to remove 570,629 cubic yards of gravel from a 23.46-acre pit. Equipment to be used in the operation includes a crusher, asphalt plant, wash plant, and mobile equipment. 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. In addition, an approximate 0.4 mile portion of the haul road will be reclaimed to dryland farmland, and a fresh water pond will remain for agricultural and wildlife use. Proponent is legally bound through their reclamation contract with the state to reclaim the site. A bond of \$51,787.50 has been posted. The final reclamation of Phase I mining area will be completed by 2004. This project may be expanded to additional phases in the future which would extend its active life expectancy to 25-40 years.

Location: Sections 23-26 & 36, T16N, R54E. **County:** Dawson 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>[N] Geology. The proposed site is in the sedimentary plains portion of the state on a bench consisting of sedimentary rock layers overlain by a veneer of gravel. There are no unusual geologic features.</p> <p>Soils. Test holes throughout the area indicate an overall average of approximately 1-foot of topsoil and 1.4' of overburden.</p> <p>Soils thin out towards the end of the finger ridges. After grading, soil material will be evenly replaced. There are no fragile, compactible or unstable soils present.</p> <p>Removal of mineral 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. The main site is on a high, dry bench. Runoff is carried from the bench top and side slopes via ephemeral drainageways. There are no permanent flowing streams or ponds within 1000' of the proposed contract area.</p> <p>A series of three settling ponds will be established in a small coulee the flows into a tributary of Dry Creek. These ponds will catch sediment from the wash plant operation. They will be cleaned out as needed and the sediment will be spread on pit floor. Water from the settling ponds will be recycled through the wash plant. Upon completion of the operation, the pond areas will be properly reclaimed.</p>

	<p>Below the settling ponds will be a fresh water pond supplied by an off-site well and surface runoff. They will need to secure the necessary permit from DNRC for the well. The water from this pond will be used in the wash plant operation. The NRCS has determined that the design capacity for this pond far exceeds the potential runoff water (including water from the settling ponds if they should fail) that could flow into the pond. Upon completion of the operation, the pond will remain for livestock and wildlife use.</p> <p>Groundwater. Groundwater does not appear to be a factor in this proposal.</p> <p>Wells. There are no wells 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 influenced by air quality regulations or zones (Class I airshed)?</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 required to comply with state air quality regulations.</p> <p>The operation will be more than one mile from the nearest residence. The haul road will be graveled which will aid in the reduction of fugitive dust.</p> <p>Water trucks will be utilized in the initial construction of the haul road.</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] Premine Vegetation. The site is currently native rangeland in fair to good condition. A portion of the haul road will cross dry land farmland.</p> <p>Postmining Vegetation. The site will be reclaimed to rangeland consisting of wheat grasses, possibly green needle grass, and alfalfa or yellow sweet clover.</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 reports no element occurrences within or near the site. Abundant similar habitat exists 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 rangeland 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 no element occurrences within or near the site.</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological, or paleontological resources present?</p>	<p>[N] A ground reconnaissance was conducted on the site and no cultural resources were found and a literature search by the State Historic Preservation Office did not reveal the presence of any cultural resources on the site of the proposed operation. 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>As part of the operation there will be a gravel staging area and loadout facility on state land in the NW36, T16N, R54E. The Montana Department of Natural</p>

	<p>Resources and Conservation (DNRC) has prepared an environmental assessment of this action. A joint decision of record will be produced by DEQ and DNRC to address any adverse cumulative impacts regarding the mine site and loadout area projects.</p> <p>Gravel will be transported under Highway 200S via a conveyor belt to a rail car loading facility. The conveyor belt will require an air space permit from the Department Of Transportation. (DOT).</p>
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other studies, plans, or projects on this tract?	[N] Any affect on other environmental resources will be temporary, and the operation should not affect any environmental studies.

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?	<p>[N] The DNRC and DOT are addressing the repair of an existing headcut located on state and private land in and near the proposed loadout area. The DNRC and DOT are also evaluating the environmental impacts of Strata's proposal regarding the proposed loadout and road crossing areas, respectively.</p> <p>Author is not aware of any other environmental plans or goals. The local zoning authority has been contacted and clearance obtained.</p>
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 mineral resource would be denied full utilization of their property at this time. The proponent may seek another mineral source.

23. Public Involvement, Agencies, Groups or Individuals contacted: Montana Department of Natural Resources and Conservation, Montana Department of Transportation, Montana Natural Heritage Program, State Historic Preservation Office, local zoning authority, and county weed control board.

24. Other Governmental Agencies with Jurisdiction, List of Permits That May Be Needed: Montana Department of Environmental Quality, Air and Water Protection Bureaus. For off-site facilities associated with the mine area, a DNRC lease agreement for use of state land and beneficial use permit for well, and a DOT airspace and encroachment permit are needed.

25. Magnitude and Significance of Potential Impacts: Any impacts should be temporary or relatively insignificant and confined to the general area. 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 No Further Analysis

EA Checklist Prepared By: Mark Carlstrom Title: Mine Reclamation Specialist Date: 05/10/99

Approved By: Jerry Burke Title: Opencut Mining Program Supervisor, IEMB

Signature

Date