

# DEQ OPENCUT MINING PROGRAM

## ENVIRONMENTAL ASSESSMENT

Project Name: Dvorak Gravel Site.

Proposed Implementation Date: Upon approval.

Proponent: Yellowstone County Public Works.

Type and Purpose of Action: Proponent has applied for a 11.5-acre Mined Land Reclamation Permit where they propose to remove 42,240 cubic yards of gravel from a 2-acre pit. Mobile equipment and a screen will be used in the operation. 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 grassland. Proponent is legally bound through their reclamation permit with the state to reclaim the site. The estimated date for completion of final reclamation is 1/2010.

Location: SWSW26, T5N, R33E County: Yellowstone

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? Is any on-site waste disposal planned? Are any special reclamation features planned? Are there special reclamation considerations?</p>	<p>[Y] Geology and Topography. The proposed site is in the sedimentary plains portion of the state. It is located on the edge of a high bench above the Yellowstone River valley floor. This relatively flat site has steep drop-offs on three sides and meets a long slope going up to high ground to the northeast. There are no unusual geologic features.</p> <p>Soil and Overburden. Test holes showed 12 inches of soil plus 24 inches of overburden on gravel. All soil material will be salvaged and stockpiled for future reclamation use or direct hauled to areas prepared for final reclamation.</p> <p>Waste Disposal and Grading. Oversize will be laid in 24-inch layers on the pit floor and covered with 36 inches of soil material. The county currently stores some construction materials on site and may do so after reclamation. Site will have 4:1 sideslopes and a flat pit floor. Mining will alter the ground surface; however, proponent is required to properly grade the site and blend it into the surrounding topography. There are no unusual 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. The landowner has a pipeline from his house up the hill to the site to supply a livestock water tank.</p> <p>Groundwater. It does not appear that groundwater is a factor for consideration at this site. The site appears to be relatively topographically isolated from adjacent same elevation or higher ground.</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>

3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] Pollutants and particulates may be produced on a temporary basis by this operation. Proponent is required to comply with state air quality regulations. This is a small site in a rural area that will only be used from time to time.
4. VEGETATION COVER, QUANTITY, AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?	<p>[Y] Premining Vegetation. The site is currently rangeland with some sagebrush. Pine breaks are on three sides of the site.</p> <p>Postmining Vegetation. The site will be reclaimed to grassland consisting of predominately native grasses.</p> <p>Site Protection and Weed Control. Proponent will implement adequate site protection and management measures until seeded or planted vegetation is established. Proponent has committed to appropriate weed control measures. The county weed district has been notified.</p> <p>The Montana Natural Heritage Program reports no plant element occurrences within or near the site. The elements occurring in the broader area are related to the Yellowstone River. The proposed site is about a quarter mile from and 160 feet higher than the river. Habitat similar to the site is abundant in the area.</p>
5. TERRESTRIAL, AVIAN, AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds, or fish?	[N] The site consists of common rangeland/pine break habitat. A site visit did not reveal extraordinary use by wildlife or use by unique wildlife.
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>[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 animal element occurrences within or near the site. The elements occurring in the broader area are related to the Yellowstone River. The proposed site is about a quarter mile from and about 160 feet higher than the river. Habitat similar to the site is abundant in the area.</p>
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological, or paleontological resources present?	[N] A walk of the area revealed none of the mentioned resources. 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.
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?	[Y] The aesthetic impact will be (temporary or insignificant due to site size or location). There are no nearby residences or high-use areas.
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] The operation will not use resources that are limited in the area. The operation should not affect or be affected by other activities in the area.
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. The operation should not affect any environmental studies.
<b>IMPACTS ON THE HUMAN POPULATION</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
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, county weed control board, and landowner.

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

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: 5/12/00

Approved By: Jerry Burke

Title: Opencut Mining Program Supervisor, IEMB

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Signature

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Date