

DEQ OPENCUT MINING PROGRAM

ENVIRONMENTAL ASSESSMENT

Project Name: J.P. Gravel Site.

Proposed Implementation Date: On-going.

Proponent: J.P., Inc.

Type and Purpose of Action: Proponent has applied for a 3.8-acre amendment to their Mined Land Reclamation Permit where they propose to remove 150,000 cubic yards of gravel from a 2.6-acre pit. When the north 2.2 acres reclaimed to fish pond are released from the current 4-acre permit area, the remaining 1.8 acres plus the 3.8 amendment acres will constitute a total 5.6-acre permit area. Mobile equipment, a crusher, and a dewatering pump 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 fishpond and 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 12/2009.

Location: SWNE 26, T1N, R26E

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 a low, flat bench next to the Yellowstone River.</p> <p>Soil and Overburden. There are approximately 6-12" of sandy loam topsoil and 12-24" of sandy overburden over the gravel deposit. An average of 9" of soil and 18" of overburden will be salvaged and stockpiled. The department surveyed the residences directly west of the site and determined that there is no call for a sight and sound barrier. Because a portion of the area is to be reclaimed to pond, excess soil and overburden may be sold as product.</p> <p>Waste Disposal and Grading. The operator's plan gives them the option of disposing of clean fill in the small pond area around the midpoint of the west property boundary. Operator will grade the face of such fill to 3:1 or less and cover the fill top and slopes with at least 3 feet of material suitable for plant growth. Clean fill includes soil, dirt, sand, gravel, rock, brick, and exposed-metal-free concrete. Non-clean fill and other wastes will be removed from the permit area and properly disposed of. Operator will use excess overburden, fines, and oversize not sold as product to shape the pond area. Operator will follow DEQ's pond guidelines to create a fishpond.</p> <p>Removal of mine material (overburden and gravel) will alter the ground surface; however, operator is required to properly grade the site and blend it into the surrounding topography. The site will be graded to accommodate a fishpond. There are no unusual geologic features.</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. Within the permit area there is a 2.2-acre pond and a 200' x 100' pit that is presently being mined. The Yellowstone River parallels the northern boundary of the permit area. The Coulson Ditch diversion is located both south and east of the permit area.</p>

	<p>The operator plans to use a 10" Crisafulli water pump to move 350,000 gallons per hour from the small working pit into the larger holding pond. Once the smaller pond or pit is dewatered, the pump will run continuously at 1/4 capacity to keep the pit water under control. Pumping will occur for 4-6 weeks between May and October. The operator may not discharge water off-site due to non-mine related contamination of the area's groundwater.</p> <p>The site is within the jurisdictional area of the Yellowstone County Floodplain Administrator's office. The operator has obtained a permit variance from this office.</p> <p>Groundwater. The water table in the permit area generally fluctuates between 7-9' below the ground surface. The plan is to reclaim the site to a fishpond following the Departments' Pond Design Guidelines.</p> <p>Groundwater quality problems unrelated to the operation have been identified in the permit area and vicinity (Pioneer Tech. Serv., 1998). Chlorinated solvent concentrations have been identified in water samples collected by DEQ from our former pit (the large north pond) as well as several residential wells adjacent to the permit area. The DEQ and EPA are providing bottled water to affected residents. The EPA is constructing a waterline project that will supply potable water to affected residents.</p> <p>Wells. There are several residential, agricultural, and industrial wells, active and inactive, within 1000' of the permit area. Landowner information suggest that well depths range from 14-50' below the ground surface and static water levels range from 7-18' below the ground surface. No water rights appear to have been filed on the majority of the wells located within 1000' of the permit area according to Department of Natural Resources and Conservation records. The Montana Bureau of Mines and Geology (MBMG) database reports two wells as being present within approximately 1,000 feet of the operation. These wells are located near 542 Klenck Land and are registered in the name of Ed Corcoran and Raymond Corcoran Trucking. Only the residential well log registered to Ed Corcoran at 542 Klenck has a well log on file with MBMG. According to the log: the upper 15 feet of alluvium comprises fill, topsoil and brown clay; sand and gravel are prevalent from 15 to 30 feet below the ground surface (bgs); and shale (bedrock) is encountered 30 feet bgs; and sandstone exists from 42 to 59 feet bgs (the total depth of the drill hole).</p> <p>Because the operator is not allowed to discharge any water off-site, all pond water and groundwater to be pumped should remain within or adjacent to the permit area; therefore, groundwater levels around the permit area should not experience appreciable fluctuations. In addition, the operator has committed to aerating the groundwater as it is pumped so that the non-mine chlorinated solvent contamination in the neighborhood's groundwater may be improved.</p> <p>Surface and groundwater resources should not be adversely affected by the operation. Proponent has committed to protecting surface water and groundwater resources. The tank supplying fuel to the crusher is contained in a concrete vault capable of handling any fuel tank leak.</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 operator has obtained an air quality permit for the crusher. Spray bars will be used on the crusher to control dust when conditions warrant; roads within the permit area and the facility and stockpile areas will be sprayed with water to control dust. Proponent is required to comply with state air quality regulations.</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. Much of the permitted area is already disturbed. The vegetation primarily consists of native and introduced grasses and trees common to riparian areas.</p>

	<p>Postmining Vegetation. The site will be reclaimed to predominately native grass species seeded on the contour in the early spring or late fall.</p> <p>Site Protection and Weed Control. Operator will maintain adequate site protection and management measures until vegetation is established. Operator has obtained a weed control plan from Yellowstone County and has contracted with a local weed spraying business to assist in weed control on the site.</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 is located between the Yellowstone River, residences, and industrial sites. The site consists of mine-created pond that contains fish, and disturbed mine area. Because of its proximity to the riparian edge along the Yellowstone River, the site is frequented by wildlife that occupies the river corridor. Upon reclamation, the site should add to the wildlife habitat in the area.</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. Reclamation will create wetland and fishpond habitat.</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological, or paleontological resources present?</p>	<p>[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.</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] Because of the proximity of the site to residences, the aesthetic impact is of major concern. The department surveyed the residences directly west of the site and received no negative feedback about the site. These residences did not indicate the need for a sight and sound barrier. The operator has committed to certain dust control measures. The operator has committed to hours of operation--Monday through Saturday, 7:00 a.m. to 5:00 p.m.--for mining and processing. Loadout of the materials, delivery, reclamation work, and work on equipment can occur at any time.</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 should not affect the availability of resources in the area. The operation should not adversely affect or be adversely affected by other activities in the area.</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 should be insignificant and temporary. The operation should not affect any environmental studies.</p>

IMPACTS ON THE HUMAN POPULATION

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>[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.</p> <p>Certain neighbors have complained about the dust generated by trucks running on Lomond Lane and about the operator loading out and hauling at all hours. Both of these activities are beyond the jurisdiction of the Opencut Mining Program.</p>
<p>12. INDUSTRIAL, COMMERCIAL, AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>[N] No significant impacts are anticipated.</p>

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] The local zoning authority has been contacted and clearance obtained. The operator has been in-touch with county flood plain administrator concerning flood plain issues.
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, James Kraft, Yellowstone County Floodplain Administrator, and landowner.

24. Other Governmental Agencies with Jurisdiction, List of Permits That May Be Needed: Montana Department of Environmental Quality, Air and Waste Management and Water Protection Bureaus. Floodplain permit from the County Floodplain Administrator Office.

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: 6/1/00

Approved By: Jerry Burke

Title: Opencut Mining Program Supervisor, IEMB

Signature

Date