

CHECKLIST ENVIRONMENTAL ASSESSMENT

COMPANY NAME: RX Exploration
 PERMIT OR LICENSE 000674

Project: Drumlummon

LOCATION: T12N/R6W/Section 36

County: Lewis and Clark

PROPERTY OWNERSHIP: Federal State

Private

TYPE AND PURPOSE OF ACTION: In order to continue underground drilling and sampling at the Maskelyne Adit, RX Exploration seeks to de-water the mine from the 400’ level to the 800’ level, discharging treated mine water to ground water using 5000 feet of perforated pipe buried 2 feet deep in an abandoned railroad grade subject to 75-5-401(5)(j) MCA. At a rate of 500 gpm, this will take approximately 5 months and to maintain this level a constant discharge rate of 100 to 150 gpm would be required. In areas of bedrock, non-perforated pipe would be used in these sections and also used to skirt an abandoned building.

Mine Water Quality – The adit water shows slightly elevated arsenic, alkalinity and, other than arsenic, the dissolved elements are low. Arsenic in adit water varies from 0.024 to 0.24 mg/l (total) or from 0.016 to 0.045 mg/l (dissolved). Nitrates are not expected to be elevated during the de-watering phase because the use of explosives during rehabilitation of the adit is minimal.

Treatment Method – A passive FeOOH³ treatment system located underground will treat the water in the #1 shaft that has slightly elevated levels of arsenic.

Expected Treated Water Quality – Treated water will meet Montana groundwater standards per Circular DEQ-7 (Montana Numeric Water Quality Standards). The placement of the pump in relation to the amount of suspended sediment could dictate whether or not a filtration system may be needed.

Frequency of monitoring – The three monitoring sites will be sampled monthly during the initial discharge phase (500 gpm for 5 months) and quarterly during the constant discharge phase (100-150 gpm until the end of the project).

Reclamation Plan - The 10-foot wide pipeline trace would be seeded and monitored for weeds while in use. Upon completion of the project, the pipe would be removed and the ditch reclaimed, seeded and monitored for weeds. Total disturbance is about 1.1 acres. The passive water treatment system will remain on the 400 level as the adit is flooded.

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
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?	[N] The generalized geology consists of middle proterozoic sediments of the Piegan Group in contact with a Cretaceous granitic stock.

IMPACTS ON THE PHYSICAL ENVIRONMENT

<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] No surface water is present in the pipeline route. Three water monitoring points have been established on Silver Creek above and below the portal and above the confluence of Silver Creek with Sawmill Gulch about 2 miles downstream to verify that surface water quality is not affected by the discharge to groundwater. The ambient arsenic level in Silver Creek is 0.0024 mg/l, the adit water runs between 0.024 to 0.24 mg/l before treatment and the groundwater arsenic standard is 0.01 mg/l, the level to which the water will be treated. Groundwater quality along the railroad is an unknown, but likely lies between the adit water range and the surface water quality of 0.0024 mg/l.</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]</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?</p>	<p>[N]</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] Ungulates traverse through the site.</p>
<p>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>[N]</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>[N] A decrepit cabin will be skirted and other structures in the area will be avoided. The railroad grade itself will remain intact.</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>[N] Some drilling sites will be visible from the area around Marysville.</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] Bolero Resources has an idled exploration project 3 miles to the west.</p>
<p>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?</p>	<p>[N] See above.</p>

IMPACTS ON THE HUMAN POPULATION

<p>11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>[N]</p>
<p>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or</p>	<p>[N] May add to the mining activity around the portal.</p>

IMPACTS ON THE HUMAN POPULATION	
alter these activities?	
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] Will give the local excavating contractor some more work and will provide some (less than 5) part-time jobs associated with the drilling project.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N]
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N] Some additional traffic may be encountered and the Marysville road is in the process of being upgraded from gravel to pavement. The Company has a cabin in Marysville where the workers stay in an effort to reduce trips to town.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N]
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] A ski area is located 3 miles to the northwest, but this project will be concluded before skiing season begins.
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N] See #15 above.
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N]
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N]
21. PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	[Y]
22. PRIVATE PROPERTY IMPACTS: Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required.	[N]
23. PRIVATE PROPERTY IMPACTS: Does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the	[N/A]

IMPACTS ON THE HUMAN POPULATION	
use of private property, and analyze such alternatives.	
24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]

- 25. Alternatives Considered:
 - No Action:
 - Approval:
 - Approval with modification: As long as RX Exploration sticks to their monitoring plan as stated in their proposal, there should be no unresolved issues which would require modification of the proposal.
- 26. Public Involvement:
- 27. Other Governmental Agencies with Jurisdiction: There is one proposed hole location and about 4000 feet of the pipeline located on BLM land.
- 28. Magnitude and Significance of Potential Impacts: There would be no significant impacts associated with this proposal.
- 29. Cumulative Effects: None

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

EA Checklist Prepared By: Robert Cronholm
Program Supervisor

Signature

6-17-08
Date