

DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

Permitting and Compliance Division
Water Protection Bureau

Name of Project: Contact Mill

Type of Project: Contract Floatation Mill

Location of Project: East ½ of Section 36, T 7N, R 14W

City/Town: Philipsburg

County: Granite County

Description of Project:

Contact Mining Company applied for a renewed Montana Ground Water Pollution Control System (MGWPCS) permit for the discharge of wastewater associated with its Contact Mill. Their existing permit was issued in 1998 and expired in 2003. The Department administratively extended it in 2003.

The present facility has been in operation since the early 1980's. The first MGWPCS permit was issued to Contact Mining Company in October 1983.

An Environmental Assessment (EA) was completed for the Contact Mill in December 1992 by the Montana Department of Health and Environmental Sciences Water Quality Bureau (today's DEQ). The EA presented three alternatives: no action; proposed action; and agency preferred. The third alternative, the agency preferred, contained mitigations for reclamation that were incorporated into the MGWPCS permit. The permittee agreed to the mitigations and they were included in the 1993 and 1998 issued permits; the mitigations are included in the this renewed permit in Part I. D. "Special Conditions".

Tailings are pumped from the mill to two impoundments. Wastewater contained in the tailings is allowed to infiltrate to the ground water. Two impoundments are used; each is delineated as a separate outfall. The East tailings impoundment is designated as Outfall 002A and the West tailings impoundment is designated as Outfall 003A. The previous permit had monitoring requirement from horizontal drainpipes (outfalls) located near the base of each tailings impoundment. No wastewater was realized from either drain pipe, so water quality samples have never been collected. The previous permit had an internal sampling and compliance point located at the mill (Outfall 001A); sparse and scattered water quality data have been collected and self-reported. The permittee had two effluent limit violations in 2005 (one lead, and one cadmium). As a result of the sparse data and the effluent violations, the permit requires more frequent monitoring and reporting requirements from Outfall 001A.

The saturated conditions in the tailings impoundment are not known. This is problematic for permit development because the Department does not know the quality of the wastewater that is

actually be discharged to the receiving water (the underlying ground water). In Part I.D. of the renewed MGWPCS permit, a special condition has been included that will require the permittee to define the saturated conditions, and if wastewater present in the tailings pore spaces, water quality samples will be required. The reader is referred to Part VII. of the statement of basis and Part I.D. of the MGWPCS permit for further details.

The receiving ground water classification is not known. To be conservative, the Department is assuming the ground water is Class I, as classified at ARM 17.30.1006, because the classification supports the most beneficial uses and has the most stringent water quality standards. Ground water quality data downgradient of the tailings impoundments has not been provided nor is it available. This permit renewal contains a special condition requirement to install a minimum of one monitoring well downgradient of each impoundment and within 50 feet of the downgradient dike. The permit contains monitoring and reporting requirements of the ground water sampling results. If the ground water data indicates that the wastewater from tailings impoundment is creating impacts to ground water quality and/or beneficial uses, Part IV.O “Reopener Provisions” of the MGWPCS permit allow the Department to reopen the permit.

Agency Action and Applicable Regulations: The proposed action is to issue an individual MGWPCS permit that has effluent limits and effluent monitoring requirements. The permit is issued under the authority of the Montana Water Quality Act 75-5-101 *et seq.* Montana Ground Water Pollution Control System Administrative Rules of Montana (ARM) 17.30.1001-1070, and Montana Numeric Water Quality Standards in the Department Circular DEQ-7 (February 2008).

The project predates the Montana Metal Mine Reclamation Act (MMRA) and does not have any associated permits or licenses.

Summary of Issues: The purpose of this action is to regulate the discharges of pollutants to state waters from the regulated facility. Issuance of an individual permit will require the applicant to implement, monitor, and management practices to prevent pollution and degradation of groundwater.

Affected Environment & Impacts of the Proposed Project:

Y = Impacts may occur (explain under Potential Impacts).

N = Not present or No Impact will likely occur.

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] Refer to the 1992 EA for further information.
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?	[Y] Refer to the 1992 EA for further information. Ground water quality is not known. No wells have been completed in the shallow ground water near the mill site. The characteristics of the wastewater contained (if any) in the tailings impoundment are unknown. Monitoring of downgradient ground water and tailings impoundment water are proposed in the draft permit.
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] Ore hauling could generate road dust and diesel particulate increases around the mine site. The mill equipment is housed in a metal building. There are residences along the roads around/near the mill site.
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N] The mill has been in operation since the early 1980's. Further impacts to vegetation are not anticipated. The permit contains stipulations for reclamation (Part I. D), which includes seeding and irrigation of annual plants.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] Refer to the 1992 EA for further information.
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?	[N] Refer to the 1992 EA for further information. The mill has been in operation since the early 1980's. Further impacts to unique, endangered, fragile or limited environmental resources are not anticipated.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] Refer to the 1992 EA for further information. The mill has been in operation since the early 1980's. Further impacts to vegetation are not anticipated.
	The mill site is located in an area that has had over 100 years of mining and milling activities. Douglas Creek, the perennial stream adjacent to the mill, has been channelized in a wooden flume over/around historic tailings that were deposited in the original Douglass Creek channel. According to the State Historic Preservation Office (SHPO), the wooden flume was built in the 1890's for the original Bimetallic Mill. Contact Mining Company installed an overflow channel that will route flood water from the upgradient Douglas Creek drainage around the reclaimed tailings in the valley bottom should a large storm or run-off event occur.
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?	[N] Refer to the 1992 EA for further information. The tailings have been used since the early 1980's. The East tailings impoundment downgradient dike is visible from the county road (Contact Mine Road). The dike face is vegetated with grass and knapweed. The West tailings impoundment downgradient dike might be visible from State Highway 1 and/or downgradient homeowners and ranchers. The area has been used for over 100 years and does show human impacts by way of abandoned buildings, structures, and equipment.

IMPACTS ON THE PHYSICAL ENVIRONMENT

<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? Will new or upgraded powerline or other energy source be needed)</p>	<p>[N] The operation has been in existence since the early 1980's. Milling is not continuous, so continuous water use and disposal is not a typical situation. No significant impacts have been identified during EA preparation.</p>
<p>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?</p>	<p>[N] No significant impacts have been identified during EA preparation.</p>

IMPACTS ON THE HUMAN ENVIRONMENT

RESOURCE	[Y/N] 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] No significant impacts have been identified during EA preparation. The permit contains effluent limits that protect water quality and the receiving water beneficial uses, including human health.</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 have been identified during EA preparation. Refer to the 1992 EA for further details.</p>
<p>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>[N] The operation is a small, family company. It is not anticipated that jobs will not be created or destroyed through the permitting action. No significant impacts have been identified during EA preparation. Refer to the 1992 EA for further details.</p>
<p>14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?</p>	<p>[N] No significant impacts have been identified during EA preparation. Refer to the 1992 EA for further details.</p>
<p>15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?</p>	<p>[N] The operation has been in existence since the early 1980's and no changes in traffic and/or demands on other services are anticipated. No significant impacts have been identified during EA preparation. Refer to the 1992 EA for further details.</p>
<p>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>[N] No significant impacts have been identified during EA preparation. Refer to the 1992 EA for further details.</p>
<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?</p>	<p>[N] The county road passes by the mill; the tailings impoundments and associated roads are on private land. No significant impacts have been identified during EA preparation. Refer to the 1992 EA for further details.</p>
<p>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?</p>	<p>[N] Refer to #13 & #15. No significant impacts have been identified during EA preparation. Refer to the 1992 EA for further details.</p>
<p>19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>[N] No significant impacts have been identified during EA preparation. Refer to the 1992 EA for further details.</p>

IMPACTS ON THE HUMAN ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] No significant impacts have been identified during EA preparation. Refer to the 1992 EA for further details.
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N] No significant impacts have been identified during EA preparation. Refer to the 1992 EA for further details.
22(a). 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.	[N] No significant impacts have been identified during EA preparation. Refer to the 1992 EA for further details.
22(b). PRIVATE PROPERTY IMPACTS: Is the agency proposing to deny the application or condition the approval in a way that restricts the use of the regulated person's private property? If not, no further analysis is required.	[N/A] see 22 a.
22(c). PRIVATE PROPERTY IMPACTS: If the answer to 21(b) is affirmative, 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 use of private property, and analyze such alternatives. The agency must disclose the potential costs of identified restrictions.	[N/A] see 22 a.

23. Description of and Impacts of other Alternatives Considered:

A. No Action: Under the ‘No Action’ alternative the Department would not issue an individual ground water discharge permit under the Montana Ground Water Pollution Control System administrative rules.

B. Approval with modification: The Department has not identified any necessary modifications to grant approval.

24. Summary of Magnitude and Significance of Potential Impacts: Impacts were assessed with the assumption that the permittee will comply with the terms and conditions of the permit. Violations of the permit could lead to significant adverse impacts to state waters. In preparing permit effluent limits, the Department has taken steps to ensure that beneficial uses of the receiving water are preserved and exceedance of water quality standards will not occur, which includes that the discharge will remain “nonsignificant”, as required by ARM 17.30.subchapter 7 “Nondegradation of Water Quality”. The Department provides assistance to applicants in understanding and implementing the

requirements of the permit and conducts periodic inspections of permitted facilities, where potential problems with design or management practices might be identified. If violations of the permit do occur, the Department will take appropriate action under the water quality act (Section 75-5-617, MCA). Enforcement sanctions for violations of the permit include injunctions, civil and administrative penalties, and cleanup orders.

25. Cumulative Effects: The issuance of this individual MGWPCS discharge permit would not have cumulative effects because the permit prohibits pollution and degradation of state waters.
26. Preferred Action Alternative and Rationale: The preferred action is to issue the individual MGWPCS discharge permit. This action is preferred because the permit provides a regulatory mechanism for protecting ground water quality by applying effluent limits and monitoring requirements to the discharged wastewater.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

Rationale for Recommendation:

27. Public Involvement: A 30-day public comment period will be from June 1 through June 30, 2009. A public hearing is not scheduled.
28. Persons and agencies consulted in the preparation of this analysis:
State Historic Preservation Office
Montana Natural Heritage Program

EA Checklist Prepared By:

Rebecca Ridenour

May 7, 2009

Approved By:

Jenny Chambers, Chief
Water Protection Bureau

Date