

DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

WATER QUALITY DIVISION
Water Protection Bureau

Name of Project: Stillwater East Boulder Mine

Type of Project: Major Modification of Montana Pollutant Discharge Elimination System (MPDES) permit MT0026808

Location of Project: Latitude 45°30'45"N, Longitude 110°05'14"W

City/Town: Approximately 32 miles south of Big Timber, Montana

County: Sweet Grass

Description of Project: Stillwater Mining Company (SMC) is the owner and operator of the Stillwater East Boulder Mine (hereinafter Facility), an underground platinum and palladium mine.

This major modification is to extend the deadline for SMC to meet the final limits for three years, until September 1, 2023.

Applicable Regulations:

ARM Title 17, Chapter 30, Subchapter 5 - Mixing Zones in Surface and Ground Water.
ARM Title 17, Chapter 30, Subchapter 6 - Surface Water Quality Standards.
ARM Title 17, Chapter 30, Subchapter 7 - Nondegradation of Water Quality.
ARM Title 17, Chapter 30, Subchapter 12 – MPDES Effluent Limitations and Standards
ARM Title 17, Chapter 30, Subchapter 13 – MPDES Permits
Montana Water Quality Act, Section 75-5-101, et. seq., MCA.

Benefits and Purpose of Action: The permit ensures adequate treatment of wastewater prior to discharge and includes monitoring and reporting requirements for the quality and quantity of effluent discharged from the facility.

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]
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?	[N] The permit contains WQBELs that are based on Montana water quality standard promulgated in ARM 17.30.601 – 670 and Montana’s nondegradation provisions set forth in 75-5-703, MCA and ARM 17.30.701-715.
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N]
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N]
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N]
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]
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N]
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]
9. LAND USE: (waste disposal, agricultural lands [grazing, cropland, forest lands, prime farmland], recreational lands [waterways, parks, playgrounds, open space, federal lands), access, commercial and industrial facilities [production & activity, growth or decline], growth, land-use change, development activity)	[N]
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N]

IMPACTS ON THE HUMAN ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N]

IMPACTS ON THE HUMAN ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N]
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N]
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]
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]
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N]
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. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]
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]
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]
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]

23. **Description of and Impacts of other Alternatives Considered:** None

24. **Summary of Magnitude and Significance of Potential Impact:** None

25. **Cumulative Effects:** None

26. **Preferred Action Alternative and Rationale:** The preferred action is to modify the Stillwater Mining Company's MPDES permit no. MT0026808. The existing effluent limitations and other conditions, including monitoring and reporting requirements in the MPDES permit, implement technology-based controls on the discharge of pollutants required by the federal Clean Water and state water quality standards including nondegradation requirements in 75-5-303, MCA, Montana's Nondegradation Policy. The three-year extension will provide time for SMC to complete installation of the 10-micron filter and optimize the WWTF performance.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

Rationale for Recommendation: An EIS is not required for the MPDES permit under the Montana Environmental Policy Act because the action to modify the MPDES lacks significant adverse effects to the human and physical environment. All of the anticipated effects to the physical and human environment will be mitigated or eliminated during the project implementation.

27. **Public Involvement:** The DEQ will provide for a 30-day public comment period on the draft permit, fact sheet and environmental assessment.
28. **Persons and agencies consulted in the preparation of this analysis:** None

EA Checklist Prepared By:

EA prepared by Christine Weaver, April 2020.

Approved by:

Jon Kenning, Chief
Water Protection Bureau

Date