

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

Water Protection Bureau

Name of Project: Montana Pollutant Discharge Elimination System (MPDES) permit MT0028720 renewal for the City of Helena Ten Mile Water Treatment Facility (WTF).

Location of Project: City of Helena Ten Mile WTF, 1115 Rimini Road, Helena, MT

Type of Project: The Department of Environmental Quality (DEQ) proposes to renew the MPDES permit for the Ten Mile WTF for a five-year cycle.

Description of Project: The Ten Mile WTF is a 9.0 million gallon per day potable water treatment plant using clarification and filtration processes to treat raw surface water from Tenmile Creek (and other creeks and groundwater wells) to provide finished drinking water for 27,000 people. Clarifier and filter backwash is treated through a series of three sedimentation/infiltration lagoons before discharge to Tenmile Creek via either ground water or an unnamed tributary.

Agency Action and Applicable Regulations: The proposed action is to renew the MPDES permit for another five-year cycle.

ARM Title 17, Chapter 30, Subchapter 2 - Water Quality Permit Application and Annual Fees.

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 10 – Montana Ground Water Pollution Control System

ARM Title 17, Chapter 30, Subchapters 12 and 13 – MPDES Standards.

Montana Water Quality Act, MCA 75-5-101, *et seq.*

Summary of Issues: The renewed permit continues coverage for surface water discharge from the three sedimentation/infiltration lagoons from both ground water and via an unnamed tributary. Due to lack of hydrogeologic information for the area, DEQ made the conservative assumption that the ground water is connected to the surface water and the surface water effluent limits are sufficiently conservative and must be met at the end of the new outfall.

Metals limits (arsenic, cadmium, and zinc) became effective in January 2016. Based on improved ambient and effluent data, the proposed permit renewal includes slightly different effluent limits for these metals as well as a new limit (copper) that becomes effective in 2020.

Benefits and Purpose of Action: The permit will ensure compliance with the Montana Water Quality Act and protection of the beneficial uses of the tributary and Tenmile Creek as well as the ground water.

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] Effluent limits will continue to assure discharge quality and protect receiving water beneficial uses.
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. SAGE GROUSE EXECUTIVE ORDER: Is the project proposed in core, general or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program (Program) at: http://dnrc.mt.gov/divisions/cardd/sage-grouse ? If yes, did the applicant attach documentation from the Program showing compliance with Executive Order 12-2015 and the Program's recommendations? If so, attach the documentation to the EA and address the Program's recommendations in the permit. If project is in core, general or connectivity habitat and the applicant did not document consultation with the Program, refer the applicant to the Sage Grouse Habitat Conservation Program.	[N] DEQ has verified the facility is not within core, general, or connectivity sage grouse habitat.
8. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N]
9. 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]
10. 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]
11. 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
12. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] Effluent limits will protect public health.
13. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N]
14. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N]
15. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N]
16. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N]
17. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N]
18. 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]
19. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N]
20. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N]
21. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N]
22. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]
23(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]
23(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]
23(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]

24. **Description of and Impacts of other Alternatives Considered:** None
25. **Summary of Magnitude and Significance of Potential Impact:** None
26. **Cumulative Effects:** None
27. **Preferred Action Alternative and Rationale:** The preferred action is to renew the MPDES permit. This action is preferred because the MPDES program provides the regulatory mechanism for protecting water quality by enforcing the terms of the MPDES permit.

Recommendation for Further Environmental Analysis:

Environmental Impact Statement (EIS) More Detailed EA No Further Analysis

Rationale for Recommendation: An EIS is not required under the Montana Environmental Policy Act because the project lacks significant adverse effects to the human and physical environment.

28. **Public Involvement:** A 30-day public notification/comment period will be held.
29. **Persons and agencies consulted in the preparation of this analysis:** None

EA Checklist Prepared By:

EA prepared by: Christine A. Weaver
Date: August 2016

Approved by:

Jon Kenning, Chief
Water Protection Bureau

Date