

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER PROTECTION BUREAU**

Environmental Assessment

**Name of Project:** City of East Helena, Wastewater Treatment Plant (WWTP)

**Location of Project:** 3330 Plant Drive, East Helena MT 59635

**City/Town:** East Helena

**County:** Lewis and Clark

**Description of Project:** This is a reissuance of an MPDES permit MT0022560 for the City of East Helena WWTP which discharges treated domestic wastewater to Prickly Pear Creek. The WWTP is an extended aeration activated sludge system with metals removal and ultraviolet light (UV) effluent disinfection.

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

Applicable rules and statute:

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

ARM Title 17, Chapter 30, Sub-chapter 5 - Mixing Zones in Surface and Ground Water.

ARM Title 17, Chapter 30, Sub-chapter 6 - Surface Water Quality Standards.

ARM Title 17, Chapter 30, Sub-chapter 7 - Nondegradation of Water Quality.

ARM Title 17, Chapter 30, Sub-chapters 12 and 13 - Montana Pollutant Discharge Elimination System Standards.

Department Circular DEQ-12A – Montana Base Nutrient Standards

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

**Summary of Issues:** The discharge from the WWTP must meet the final permit limits for biochemical oxygen demand, total suspended solids (TSS), pH, nitrogen, nitrate + nitrite nitrogen, total recoverable copper and *Escherichia coli* (*E. coli*). Nutrient limits (total nitrogen and total phosphorus) have been applied in accordance with DEQ-12B, Nutrient Standards Variances, that reflect the treatment capability of the WWTP.

**Affected Environment & Impacts of the Proposed Project:**

*Y = Impacts may occur (explain under Potential Impacts). Include frequency, duration (long or short term), magnitude, and context for any significant impacts identified. Reference other permit analyses when appropriate (ex: statement of basis). Address significant impacts related to substantive issues and concerns. Identify reasonable feasible mitigation measures (before and after) where significant impacts cannot be avoided and note any irreversible or irretrievable impacts. Include background information on affected environment if necessary to discussion.*

*N = Not present or No Impact will likely occur. Use negative declarations where appropriate (wetlands, T&E, Cultural Resources).*

<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
<b>RESOURCE</b>	<b>[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
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] No changes.
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] Facility is long established; no new impacts are expected.
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] Facility is long established; no new impacts are expected.
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N] Facility is long established; no new impacts are expected.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] Facility is long established; no new impacts are expected.
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] Facility is long established; no new impacts are expected.
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: <a href="http://dnrc.mt.gov/divisions/cardd/sage-grouse">http://dnrc.mt.gov/divisions/cardd/sage-grouse</a> ? 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] The Department has verified the facility is not within core, connectivity or general sage grouse habitat as identified on the DNRC habitat map for the State of Montana.
8. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] Facility is long established; no new impacts are expected.
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] Facility is long established; no new impacts are expected.
10. 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?	[N]
11. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N]

<b>IMPACTS ON THE HUMAN ENVIRONMENT</b>	
<b>RESOURCE</b>	<b>[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
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]

IMPACTS ON THE HUMAN ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
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.	<input type="checkbox"/>

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 reissue the MPDES permit. This action is preferred because the permit program provides the regulatory mechanism for protecting water quality by enforcing the terms of the MPDES permit.

**Recommendation for Further Environmental Analysis:**

EIS                                       More Detailed EA         No Further Analysis

**Rationale for Recommendation:**

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

**EA Checklist Prepared By:** Jeff May

**Date:** October, 2018

**Approved by:**

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Jon Kenning, Chief  
Water Protection Bureau

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Date