

DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

Permitting and Compliance Division
Water Protection Bureau

Name of Project: City of Choteau, Wastewater Treatment Facility

Location of Project: 0.3 mile S of City of Choteau

City/Town: Choteau

County: Teton

Description of Project: This is a modification to MPDES permit MT0020052 for the domestic wastewater treatment facility used by the City of Choteau. The City requested a permit modification to change the effective date of final pathogen limits for Outfall 001 from January 1, 2010 to January 1, 2012.

Agency Action and Applicable Regulations: The proposed action of the Department is to modify the MPDES permit to require compliance with the final pathogen limits by September 30, 2010 and to replace fecal coliform limits with comparable *Escherichia coli* (*E. coli*) limits in accordance with current Montana water quality standards relative to pathogen indicator bacteria species.

Applicable rules and statute:

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.

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

Summary of Issues: The City of Choteau requested a permit modification to set back the effective date of final pathogen limits to coincide with completion of Phase 1 of their wastewater treatment facilities upgrade project and to allow essentially 18 months to fine tune operation of a new ultraviolet light (UV) disinfection system. The Department will modify the permit to allow until September 30, 2010, the expiration date of the current permit, to meet final pathogen limits. Completion of construction of the UV disinfection system is estimated to be July 2010.

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).*

IMPACTS ON THE PHYSICAL ENVIRONMENT

| RESOURCE | [Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES |
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| 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 wastewater treatment facility has been located at this site for over 50 years. Soils in the vicinity of the treatment facility consist of loam, gravel, clay mixtures, sandy loam and clay to depths of about 16 feet. Sand and gravel predominate from 20 to 30 feet depths with blue shale at depths of about 30 feet and deeper. No fragile, erosive or unstable soils are noted and there are no identifiable unusual or unstable geological features. Construction at the project will meet or exceed current engineering design criteria, including seismic, soils and construction stormwater control considerations. |
| 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 wastewater treatment facility has discharged to this same receiving water for more than 50 years. The area around the treatment facility is a shallow groundwater area with well logs showing static water levels at or near 8 feet below the surface. The lagoon is suspected of leaking as evidenced by hydrophilic vegetation located at the outside toe of the lagoon dikes. Effluent limits are the National Secondary Treatment Standards and completion of the UV disinfection project will improve water quality. |
| 3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)? | [N] The modified final pathogen limits effective date will have no impact on air pollution and the upgraded wastewater treatment facilities should reduce odors that occur with the present facilities, especially odors that emanate from land application of water from the ditch that receives the lagoon effluent. |
| 4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present? | [N] Impact of construction of the UV disinfection system on area vegetation will be insignificant and any disturbed areas will be revegetated as part of the wastewater treatment plant upgrade project. The permit modification itself has no impact. |
| 5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish? | [N] The wastewater treatment facility has been at this same location for more than 50 years and the permit modification will not impact wildlife, birds or fish. |
| 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] The wastewater treatment facility has been at this same location for more than 50 years and the permit modification is not expected to adversely impact threatened or endangered species, species of special concern or wetlands. The MT Natural Heritage program identified the Gray Wolf, Eastern Bluebird and Grizzly Bear as species of concern in the area whose range may include the wastewater treatment facility area. |
| 7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present? | [N] The wastewater treatment facility has been at this same location for over 50 years and no historical, archaeological or paleontological resources are known to exist in the immediate vicinity. |
| 8. AESTHETICS: Is the project on a prominent topographic feature? Will it be | [N] The wastewater treatment plant has been at this same location for over 50 years and the permit modification will have no impact on |

IMPACTS ON THE PHYSICAL ENVIRONMENT

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| visible from populated or scenic areas? Will there be excessive noise or light? | aesthetics. |
| 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) | [N] No impacts associated with the permit modification. |
| 10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project? | [N] None known or anticipated. |

IMPACTS ON THE HUMAN ENVIRONMENT

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| 11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area? | [N] No impacts expected. |
| 12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities? | [N] No impacts expected. A farming operation diverts water from the receiving stream immediately downstream from Outfall 001 and applies to hay ground by sprinkler irrigation. The amount of water available for diversion will not be reduced by the permit modification and water quality of the effluent will be improved by the UV disinfection system completion. |
| 13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number. | [N] No impacts expected as a result of the permit modification. |
| 14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue? | [N] No impacts expected as a result of the permit modification. |
| 15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed? | [N] No continuing impacts impacts expected as a result of the permit modification. |
| 16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect? | [N] No impacts expected as a result of the permit modification. The wastewater treatment facility has been at this same location for over 50 years. |
| 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] No impacts expected. No wilderness or recreational areas accessed through this site and no potential for recreational development. |
| 18. DENSITY AND DISTRIBUTION OF | [N] No impacts expected. |

| IMPACTS ON THE HUMAN ENVIRONMENT | |
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| POPULATION AND HOUSING: Will the project add to the population and require additional housing? | |
| 19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible? | [N] No impacts expected. |
| 20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area? | [N] No impacts expected. |
| 21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES: | [N] No impacts expected. |
| 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 impacts expected. |
| 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. | [] |

23. Description of and Impacts of other Alternatives Considered:

A. No Action: Refusal to modify the effective date of final pathogen limits is not feasible given the realities of project financing. A major portion of financing requires approval of the 2009 Legislature, with start of construction estimated to be May 2010.

B. Approval with modification: The Department did not approve the City's application to delay the effective date to final pathogen limits to January 1, 2012. A modified date of

September 30, 2010 was approved, which coincides with the expiration date of the current permit and is reasonable and realistic given a July 2010 estimated completion date for completion of construction of the UV disinfection system.

- 24. Summary of Magnitude and Significance of Potential Impacts: None
- 25. Cumulative Effects: None
- 26. Preferred Action Alternative and Rationale: Modify the MPDES permit to allow the City of Choteau until September 30, 2010 to meet final pathogen effluent limits. The MPDES program provides the regulatory mechanism for protecting water quality by enforcement of the terms of the permit.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

Rationale for Recommendation:

- 27. Public Involvement: The Department intends to issue a public notice and solicit public comment on this action. All substantive comments will be considered in development of the final permit modification.
- 28. Persons and agencies consulted in the preparation of this analysis: None

EA Checklist Prepared By: James F. Brown **Date:** January 2009

Approved By:

Jenny Chambers, Chief
Water Protection Bureau

Date