

**DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment**

**Permitting and Compliance Division
Water Protection Bureau**

Name of Project: Town of Stevensville, Wastewater Treatment Plant

Location of Project: 600 W. 2nd Street

City/Town: Stevensville

County: Ravalli

Description of Project: This is a modification to MPDES permit MT0022713 for the domestic wastewater treatment plant (WWTP) used by the Town of Stevensville. The Town requested a permit modification to allow continued discharge to an intermittent side channel of the Bitterroot River rather than be required to pipe the discharge to the mainstem Bitterroot River. The Town has discharged wastewater treatment plant effluent to the same location for more than 45 years.

Agency Action and Applicable Regulations: The proposed action of the Department is to modify the MPDES permit to allow continued discharge to the intermittent side channel of the Bitterroot River. Additional effluent limitations are proposed to be imposed on the discharge on ammonia-N, effective August 1, 2010.

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 Town will complete ultraviolet light treatment facilities for disinfection of the WWTP effluent to meet Montana water quality standards for *E. coli* bacteria by August 1, 2010. In addition, a leaking polishing pond will be decommissioned and standby power generation will be provided by August 1, 2010 as Phase 1 of a plan to upgrade the WWTP over the next several years. Effluent limitations effective August 1, 2010 will result in meeting of technology-based effluent limits for publicly owned treatment works as well as water quality-based effluent limits for the receiving water.

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
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 45 years. Soils in the vicinity of the treatment facility consist primarily of loam, gravel, cobbly and gravelly sandy loams to depths of about 5 feet. Alluvium predominates below surface soils. No fragile, erosive or unstable soils are noted and there are no identifiable unusual or unstable geological features.
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 45 years. The area around the treatment facility is a shallow groundwater area with well logs showing static water levels in the range of 3 to 20 feet below the surface. The polishing lagoon cell is suspected of leaking and the oxidation ditch takes in groundwaters. 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]
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] The wastewater treatment facility has been at this same location for more than 45 years.
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 45 years and the permit modification is not expected to adversely impact threatened or endangered species, species of special concern or wetlands.

IMPACTS ON THE PHYSICAL ENVIRONMENT

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 45 years and no historical, archaeological or paleontological resources are affected. Historic Saint Mary's Mission in the Town of Stevensville and the Fort Owen site located approximately one mile north of the WWTP are significant area historical sites, neither of which will be impacted by the WWTP or permit modification.
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] The wastewater treatment plant has been at this same location for over 45 years and the permit modification will have no impact on 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. Phase 1 of the WWTP project includes construction of standby power generation capabilities.
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N] None known or anticipated. Phase 1 upgrades will improve effluent quality.

IMPACTS ON THE HUMAN ENVIRONMENT

11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] No impacts expected. Phase 1 upgrades will improve effluent quality.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] No impacts expected. Phase 1 upgrades will improve effluent quality.
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 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 45 years.

IMPACTS ON THE HUMAN ENVIRONMENT

<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] No impacts expected. No wilderness or recreational areas accessed through this site and no potential for recreational development. The Lee Metcalf Wildlife Refuge is located about 2 miles north of the WWTP. The WWTP has discharged to the same drainage, which travels near the Refuge, for more than 45 years. No impact expected from modification. Phase 1 upgrades will improve effluent quality.</p>
<p>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?</p>	<p>[N] No impacts expected.</p>
<p>19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>[N] No impacts expected.</p>
<p>20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?</p>	<p>[N] No impacts expected.</p>
<p>21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</p>	<p>[N] No impacts expected.</p>
<p>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.</p>	<p>[N] No impacts expected.</p>
<p>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.</p>	<p>[N]</p>
<p>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.</p>	<p>[]</p>

23. Description of and Impacts of other Alternatives Considered:

A. No Action: Refuse to approve modification application. Discharge has been at same location for more than 45 years. Effluent quality is improving and meets national secondary treatment standards; will meet water quality standards by August 1, 2010. Costly to move outfall for direct discharge to mainstem Bitterroot River and Town would likely have to condemn land for right of way.

B. Approval with modification: No modification of request considered.

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 Town of Stevensville to continue to discharge to the intermittent side channel of the Bitterroot River as has been the case for more than 45 years. Additional effluent limits on ammonia-N were imposed effective August 1, 2010 to protect water quality. Planned Phase 1 WWTP upgrades will include UV disinfection to meet *E. coli* bacteria water quality standards by August 1, 2010. 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:** August 2009

Approved By:

Jenny Chambers, Chief
Water Protection Bureau

Date