

**DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER PROTECTION BUREAU
P.O. Box 200901
Helena, Montana 59620-0901
(406) 444-3080**

ENVIRONMENTAL ASSESSMENT (EA)

Division/Bureau: Permitting & Compliance Division, Water Protection Bureau, Montana Pollutant Discharge Elimination System (MPDES) Permit Section

Project or Application: City of Columbia Falls Wastewater Treatment Plant; MPDES permit number **MT0020036**

Location of Project: 600 Veteran's Drive, Columbia Falls, Flathead County, MT

Description of Project: This is for the renewal of a wastewater discharge permit for the City of Columbia Falls Publicly-Owned Treatment Works (POTW) activated sludge wastewater treatment plant with chlorine gas disinfection and alum phosphorus removal. Continuous discharge is to the Flathead River, classified B-1 by the Montana Surface Water Quality Standards.

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

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

Summary of Issues: Previous and new permit limitations are in effect for the proposed permit cycle. The mixing zone is redefined.

Benefits and Purpose of Action: To ensure adequate treatment of domestic wastewater before discharging to the Flathead River.

Description and analysis of reasonable alternatives whenever alternatives are reasonably available and prudent to consider:

None

Listing and appropriate evaluation of mitigation, stipulations and other controls enforceable by this or another government agency:

See Statement of Basis

Affected Environment and Effects from the Proposed Project:

PHYSICAL AND BIOLOGICAL ENVIRONMENT		
Rank	Consideration	Remarks
N	1. SOIL SUITABILITY, TOPOGRAPHIC AND/OR GEOLOGIC CONSTRAINTS (soil moisture, unstable soils or geologic conditions, steep slopes, erosion potential, subsidence potential, seismic activity)	No changes.
N	2. HAZARDOUS FACILITIES (power lines, hazardous waste sites, distances from explosive and flammable hazards including chemical/petroleum storage tanks, underground fuel storage tanks and related facilities such as natural gas storage facilities and propane tanks)	Suitably located facility.
N	3. AIR QUALITY (effects to, or from project, dust, odors, emissions)	None historically or expected to be associated with this facility
N	4. GROUNDWATER RESOURCES & AQUIFERS (quality/nondegradation, quantity/reliability, distribution, uses/rights, number of aquifers, mixing zones)	No changes.
B	5. SURFACE WATER RESOURCES (quality/nondegradation, quantity/reliability, distribution, uses/rights, storm water controls, source of community supply, community treatment, mixing zones)	Mixing zone length is reduced. Increased monitoring of the effluent for water quality has been included. Year-round pathogenic bacteria limitations have been included.
B	6. VEGETATION AND WILDLIFE SPECIES AND HABITATS, INCLUDING FISHERIES AND AQUATIC RESOURCES (threatened, endangered, sensitive species, prime habitat, population stability, potential for human wildlife conflicts, effectiveness of post-disturbance plans)	A review of the Natural Heritage database shows the bull trout as threatened in the area of discharge. The westslope cutthroat trout and Gray Wolf are listed as sensitive. The Latah tule pea and small yellow lady's slipper orchid are listed as sensitive by the US Forest Service. Permit conditions are developed to be protective of aquatic life and cold water fisheries-trout.
B	7. UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES (biologic, topographic, wetlands (within one mile), floodplains (within one mile), scenic rivers, natural resource areas, etc.)	Mixing zone length is reduced. Increased monitoring of the effluent for water quality has been included. Year-round pathogenic bacteria limitations have been included. Permit conditions are developed to be protective of aquatic life and cold water fisheries-trout.
N	8. 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)	No changes.
N	9. HISTORICAL, CULTURAL, & ARCHEOLOGICAL (sites, facilities, uniqueness, diversity)	No changes.
N	10. AESTHETICS (visual quality, nuisances, odors, noise)	No changes.
N	11. DEMANDS ON OR CHANGES IN ENVIRONMENTAL RESOURCES INCLUDING LAND, WATER, AIR, OR ENERGY USE (need for new or upgraded energy sources, potential for recycling, etc.) {See (4), (5), and (8).}	No changes.

Key to Rank

NA	Not applicable	N	No effects
B	Potentially beneficial effects	A	Potentially adverse effects
M	Corrective action required	P	Additional permits will be required

Impacts on the Human Population		
Rank	Consideration	Remarks
N	12. CHANGES IN DEMOGRAPHIC CHARACTERISTICS (population quantity, distribution and density, rate of change)	No changes.
N	13. GENERAL HOUSING CONDITIONS (quality, quantity and affordability)	No changes.
N	14. POTENTIAL FOR DISPLACEMENT OR RELOCATION OF BUSINESS OR RESIDENTS	No changes.
B	15. PUBLIC HEALTH AND SAFETY (medical services and facilities, police, fire protection and hazards [see (2)], emergency medical services [see (8), LAND USE for waste disposal])	Increased disinfection requirements will protect public health for primary and secondary recreational uses.
N	16. LOCAL EMPLOYMENT AND INCOME PATTERNS (quantity and distribution of employment, economic impact)	No changes.
N	17. LOCAL AND STATE TAX BASE AND REVENUES	No changes.
N	18. EFFECTS ON SOCIAL STRUCTURES AND MORES (social conventions/standards of social conduct), DEMANDS ON SOCIAL SERVICES (law enforcement, educational facilities [libraries, schools, colleges, universities], welfare, etc.)	No changes.
N	19. TRANSPORTATION NETWORK (condition and use of roads, traffic flow conflicts, rail, airport compatibility, etc.)	No changes.
N	20. CONSISTENCY WITH LOCAL ORDINANCES, RESOLUTIONS, OR PLANS (conformance with local comprehensive plans, zoning or capital improvement plans)	No changes.

<u>Key to Rank</u>			
NA	Not applicable	N	No effects
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N	<p>21. REGULATORY RESTRICTIONS ON PRIVATE PROPERTY RIGHTS <i>(Are we regulating pursuant to a police power? Does the Agency action restrict the use of the property beyond the minimum necessary to achieve compliance with the Act? What are the costs of such additional restrictions resulting from proposed permit conditions? Are there other, less restrictive ways of achieving the same goal? See your assigned legal counsel for assistance preparing this section. [See the Private Property Assessment Act checklist accompanying this permit for details.]</i></p>	No changes.
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PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

Does the proposed agency action have takings implications under the Private Property Assessment Act?

Query	YES/NO	Remarks/Justification
1. <i>Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?</i>	No	
2. <i>Does the action result in either a permanent or indefinite physical occupation of private property?</i>	No	
3. <i>Does the action deprive the owner of all economically viable uses of the property?</i>	No	
4. <i>Does the action deny a fundamental attribute of ownership?</i>	No	
5. <i>Does the action require a property owner to dedicate a portion of property or to grant an easement?</i>	No	<i>(If NO, then skip to (6).)</i>
a. <i>Is there a reasonable, specific connection between the government requirement and legitimate state interests?</i>	NA	
b. <i>Is the government requirement roughly proportional to the impact of the proposed use of the property?</i>	NA	
6. <i>Does the action have a severe impact on the value of the property?</i>	No	
7. <i>Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?</i>	No	<i>(If NO, then skip to (8).)</i>

<u>Key to Rank</u>			
NA	Not applicable	N	No effects
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a. Is the impact of government action direct, peculiar, and significant?	NA	
b. Has government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?	NA	
c. Has government action diminished property values be more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?	NA	
8. Do taking or damaging implications exist? ⁽¹⁾ Taking or damaging implications exist if the answer to questions 5a or 5b is NO, or if the answer to any other question is YES.	No	

1. If taking or damaging implications exist the agency must comply with 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.

Other groups or governmental agencies contacted or which may have overlapping jurisdiction:

None

Public Involvement:

30-day comment period

Individuals or groups contributing to this EA:

State of Montana, Department of Environmental Quality (DEQ), Permitting and Compliance Division, Water Protection Bureau

Summary of Issues:

See Statement of Basis

Summary of Potential Effects:

See Statement of Basis

Cumulative Effects:

None

Recommendation:

Grant the permit reissue

Recommendation for Further Environmental Analysis:

<u>Key to Rank</u>			
NA	Not applicable	N	No effects
B	Potentially beneficial effects	A	Potentially adverse effects
M	Corrective action required required	P	Additional permits will be required

Prepare an EIS

Prepare a more detailed EA

No further analysis

EA prepared by: Melee K. Valett

Date: December 21, 2009

Bureau Check-off

AWMB _____

CSB _____

EMB _____

IEMB _____

WPB X

Other _____

Approved by:

(Signature)

(Date)

Jenny Chambers, Chief
Water Protection Bureau

Key to Rank			
NA	Not applicable	N	No effects
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