DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

PERMITTING AND COMPLIANCE DIVISION
Water Protection Bureau

Name of Project: Renewal for Montana Pollutant Discharge Elimination System (MPDES) permit MT0028665 wastewater discharge permit for the Sun Prairie Village County Water & Sewer District (Sun Prairie Village) Wastewater Treatment Facility (WWTF) in Cascade County.

Type of Project: The Department of Environmental Quality Water Protection Bureau (DEQ) proposes to renew the MPDES permit for the Sun Prairie Village WWTF wastewater discharge for a five-year cycle. The Sun Prairie Village WWTF is an existing two-cell "accelerated facultative" lagoon system. The average daily design flow is 0.189 million gallons per day (mgd). The WWTF was designed to handle a population of 1,835 but currently serves a population of approximately 1,400 people.

Location of Project: Sun Prairie Village WWTF, 1595 Adams Boulevard, Great Falls, MT

Agency Action and Applicable Regulations: The proposed action is to renew the MPDES permit to reflect updated conditions.

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, Subchapters 12 and 13 – MPDES Standards.
Montana Water Quality Act, MCA 75-5-101, *et seq*.

Summary of Issues: This permit renewal maintains the current technology-based effluent limits for 5-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH. It corrects the BOD_5 mass-based limit. This permit renewal also maintains the current water quality-based effluent limits for *Escherichia coli (E.coli*) bacteria. Total ammonia, as N effluent limits will become effective beginning October 1, 2017. Monitoring frequency has remained at least as frequent as the previous permit. Lastly, Special Conditions in the permit renewal include annual reports on reduction progress for ammonia, total nitrogen, and total phosphorus; conformance with a plant operation & maintenance plan; and completion of an infiltration/inflow (I/I) study during this permit cycle.

Benefits and Purpose of Action: The permit will ensure compliance with the Montana Water Quality Act and protection of the beneficial uses of the Sun River.

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.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	**[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES**
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] No impacts should occur since this is the renewal of an existing source, and effluent limits are the same or more stringent than previous limits.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] No impacts should occur since this is the renewal of an existing source, and effluent limits are the same or more stringent than previous limits. However, should structures need to be altered or if cultural materials be inadvertently discovered, the State Historic Preservation Office (SHPO) should be contacted.
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]
9. 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]
10. 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**
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] Effluent limits will protect public health.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N]
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N]
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N]
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N]
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N]
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]
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N]

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	**[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES**
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N]
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N]
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]
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]
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.	[N]

23. **Description of and Impacts of other Alternatives Considered:** None

24. **Summary of Magnitude and Significance of Potential Impact**: None

25. **Cumulative Effects:** None

26. **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 [X] 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.

27. **Public Involvement:** A 30-day public notification/comment period will be held.

28. **Persons and agencies consulted in the preparation of this analysis:** NA

EA Checklist Prepared By:

EA prepared by: Christine A. Weaver, Date: August 2012

Approved by:

Jenny Chambers, Chief
Water Protection Bureau

Date