DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) Environmental Assessment

Water Protection Bureau

Name of Project: Bigfork WWTP

Location of Project: 108 Harbor Heights Boulevard

City/Town: Bigfork

County: Flathead

Description of Project: The Department of Environmental Quality (Department) proposes to renew the MPDES permit for the Bigfork WWTP discharge, for a five-year cycle. The Bigfork WWTP operates a Membrane Bioreactor facility. The facility is classified as a major Publicly-Owned Treatment Works (POTW), with an average daily design flow of 0.69 million gallons per day (mgd). The system was designed to serve 8,125 residents in the summer and 6,397 residents in the winter. Currently the system serves approximately 3,360 residents in the summer and 2,415 residents in the winter.

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

Applicable Rules and Statute:

Administrative Rules of Montana (ARM Title 17 Chapter 30)

- Subchapter 2 Water Quality Permit Application and Annual Fees.
- Subchapter 5 Mixing Zones in Surface and Ground Water.
- Subchapter 6 Surface Water Quality Standards.
- Subchapter 7 Nondegradation of Water Quality.
- Subchapter 11 Storm Water Discharges.

Subchapter 12 and 13 – Montana Pollutant Discharge Elimination System Standards.

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

Summary of Issues: The receiving water is Flathead Lake (waterbody ID MT760003_010). Flathead Lake is classified as an "A-1" waterbody. It is listed as impaired on the 2016 303(d) list and a Total Maximum Daily Limit (TMDL) has been completed. The probable causes for impairment are mercury, total nitrogen, total phosphorus, and polychlorinated biphenyls. This permit renewal includes technology-based effluent limits and water quality-based effluent limits that are protective of the receiving water body.

Affected Environment & Impacts of the Proposed Project:

- Y = Impacts may occur (explain under Potential Impacts).
- N = Not present of 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] No new impacts present.	
2. WATER QUALITY, QUANITY 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.	
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] No new impacts present.	
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetation communities be significantly impacted? Are any rare plants or cover types present?	[N] No new impacts present.	
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND INHABITANTS: Is there substantial use of the area by important wildlife, birds or fish?	[N] No new impacts present.	
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 2010-issued mixing zone (200ft radius from point of discharge) is continued with this permit renewal. A review of the Natural Heritage database show the bull trout as threatened in the area of the discharge. The westslope cutthroat is listed as sensitive. Pygmy whitefish is also listed as a species of concern. Permit conditions are developed to be protective of aquatic life.	
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 at https;//sagegrouse.mt.gov/? 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 recommendation 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] DEQ verified that this facility is not within core, general, or connectivity sage grouse habitat.	
8. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] No new impacts present.	
9. AESTHETICS: Is the project on a prominent topographic feature? Will I be visible from populated or scenic areas? Will there be excessive noise or light?	[N] No new impacts present.	

10. DEMANDS ON ENVIRONMENTAL RESOURCES	[N] No new impacts present.
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 powerlines or other energy sources	
be needed?	
11. IMPACTS ON OTHER ENVIRONMENTAL	[N] No new impacts present.
RESOURCES: Are there other activities nearby that	
will affect the project?	

IMPACTS ON THE HUMAN ENVIRONMENT		
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES	
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] No impacts are expected at this time.	
14. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] No impacts are expected at this time.	
15. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] No impacts are expected at this time.	
16. DEMAND FOR GOVERNMENT SERVICES: Will sustainable traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N] No impacts are expected at this time.	
17. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] No impacts are expected at this time.	
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] No impacts are expected at this time.	
19. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N] No impacts are expected at this time.	
20. SOCIAL STRUCTURES: Is some disruption of native or traditional lifestyles or communities possible?	[N] No impacts are expected at this time.	
21. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] No impacts are expected at this time.	
22. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N] No impacts are expected at this time.	
23(a). PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police	[N]	

24. Description of and Impacts of other Alternatives Considered: None

25. Summary of Magnitude and Significance of Potential Impacts: 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 [X] 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 B: Kaela Murphy

Date: December 2017

Approved By:

Jon Kenning, Chief Water Protection Bureau Draft Date