DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

PERMITTING AND COMPLIANCE DIVISION
Water Protection Bureau

Name of Project: The Department of Environmental Quality (DEQ) will issue a new Montana Pollutant Discharge Elimination System (MPDES) permit for the United States Army Corps of Engineers (USACE) Fort Peck Project (Fort Peck dam) to discharge wastewater from three sumps and various noncontact cooling water outfalls.

Type of Project: The USACE owns and operates the Fort Peck Project Hydroelectric Power Generation Units (Fort Peck Project). Water is diverted from Fort Peck Lake through four (4) tunnels, two of which are used in the generation of electricity. Two other tunnels are used for flood control. Water from tunnels one and two are used to generate electricity through generators connected to turbines located in Power Plant #1 and Power Plant #2. The electricity derived from this system is marketed through the Western Area Power Administration.

The Fort Peck Project earthen dam was completed in 1940 as part of a jobs creation and flood control project. Power Plant #1, with three turbine/generators, was completed in 1951. Power Plant #2, with two turbine/generators, was completed in 1961. The combined production capacity of both power plants is 186 kilowatts of electricity.

Approximately 344.2 million gallons per day of water (mgd) flow through each of the three generating units (turbine/generator) in Power Plant #1. Approximately 483.1 mgd flow through each of the two generating units (turbine/generator) in Power Plant #2.

The MPDES application requests coverage for wastewater discharges from 11 outfalls. Eight outfalls discharge noncontact cooling water and three outfalls discharge sump water. The total estimated discharge flow from the 11 outfalls is 4.6 mgd. Of this total, approximately 4.4 mgd (96%) is noncontact cooling water for cooling generators and associated oil cooling systems and 0.2 mgd (4%) is wastewater discharged from the sumps located at Outfalls 001, 007 and 010. Sump water includes water collected from leakage through power plant exterior walls, leakage from the tunnels, turbine pits, water stop leakage and gutter drains from various equipment rooms.

Location of Project: #1 Lower Yellowstone Road

City/Town: Fort Peck

County: McCone

Description of Project: Issue new MPDES permit.

Agency Action and Applicable Regulations: The proposed action is to issue a new MPDES permit.

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-chapter 12 and 13 - Montana Pollutant Discharge Elimination System Standards.
Montana Water Quality Act, MCA 75-5-101 et. seq.

Summary of Issues: The Missouri River is listed on the 2008 303(d) list as impaired for temperature.

On September 21, 2000, a U.S. District Judge issued an order stating that until all necessary TMDLs under Section 303(d) of the Clean Water Act are established for a particular water quality limited segment (WQLS), the State is not to issue any new or increased permits under the MPDES program. The order was issued in the lawsuit Friends of the Wild Swan v. U.S. EPA, et al. (CV 97-35-M-DWM), District of Montana and Missoula Division.

The DEQ finds that issuance of this new permit does not conflict with Judge Molloy's Order (CV 97-35-M-DVM) because the Department recognizes that this is a new permit but it is being issued to an existing source which has discharged at the same location since 1951. No new or increased discharge of pollutants is authorized by this permit. The Department believes that issuance of this permit will provide better regulatory control of the discharge and a means to implement any wasteload that is developed as part of a TMDL. Therefore, the Department believes that issuance of this permit does not conflict with the intent of Judge Molly's Order. In addition, the discharge from the Fort Peck Project will not cause a decline in water quality (temperature) for the receiving stream [75-5-703(10)(a)(ii), MCA].

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

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]

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	**[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES**
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 improve effluent quality and protect beneficial uses of the Missouri River.
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]
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N]
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]
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]

IMPACTS ON THE HUMAN ENVIRONMENT	
RESOURCE	**[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES**
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]
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 issue 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: An EIS is not required under the Montana Environmental Policy Act (MEPA) because the project lacks significant adverse effects to the human and physical environment. All of the anticipated effects to the physical and human environment will be mitigated or eliminated during project implementation.

27. **Public Involvement:** A 45-day public comment period will be held.

28. **Persons and agencies consulted in the preparation of this analysis:** None

EA Checklist Prepared By:

EA prepared by: John Wadhams
Date: December 2010

Approved by:

Jenny Chambers, Chief
Water Protection Bureau

Date