

DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

PERMITTING AND COMPLIANCE DIVISION
Water Protection Bureau

Name of Project: City of Malta, Wastewater Treatment Facility

Location of Project: 48° 22' 24" N latitude, 107° 51' 16" W longitude

City/Town: Malta

County: Phillips

Description of Project: This is a reissuance of an MPDES permit MT0020389 for the City of Malta Wastewater Treatment Facility (WWTF) which continuously discharges treated domestic wastewater to the Milk River. The WWTF consist of a single-cell aerated lagoon and polishing cell constructed in 2008. The present facilities are the operational part of a 2007 wastewater improvement project (2007 Project) which, when completed in 2010, will include additional storage cells and slow rate land application of effluent that has been treated with ultraviolet light (UV) disinfection. The UV installation was completed at the facility in 2008 but can only treat effluent to be applied to the land. Completion of the 2007 Project is intended to eliminate the discharge of treated effluent to the Milk River.

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

Applicable rules and statute:

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 effluent limits on five-day biochemical oxygen demand (BOD₅) and total suspended solids (TSS) of the previous permit are continued in the renewed permit as interim limits. The fecal coliform bacteria effluent limits of the previous permit have been converted to equivalent *Escherichia coli* (*E. coli*) limits and included in the renewed permit. A numerical effluent limit on oil and grease (O & G) has also been added to the renewed permit. Additional effluent limits on BOD₅, TSS, *E. coli* and total ammonia-N have been included in the renewed permit effective January 1, 2012, along with additional monitoring requirements. It is expected that with completion of the 2007 Project, before the effective date of the additional effluent limits, the discharge of treated effluent from the City of Malta WWTF to the Milk River will be eliminated.

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 Malta WWTF has been at this same location for more than 50 years.
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 interim and final effluent limits and additional effluent monitoring will assure discharge quality for the discharge of treated effluent to the Milk River. The 2007 Project completion in 2010 is planned to eliminate the treated effluent discharge to state waters.
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 Malta WWTF has been at this same location since the 1950s. Effluent limits will assure discharge quality.
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 wetlands identified. No known federally listed threatened or endangered species or species of special concern present. The Malta WWTF has been at this same location since the 1950s. Effluent limits will assure discharge quality.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] No sites identified. The Malta WWTF has been at this same location since the 1950s.
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. 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]
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] Additional effluent limits have been imposed. <i>E. coli</i> bacteria limits established in permit. UV effluent disinfection installed 2008 for land application of treated effluent. Treated effluent discharge to state waters planned to cease in 2010 due to completion of land application project.
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]
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]

