

Wastewater Collection and Treatment Facilities

Cost Eligibility Guidelines for the Clean Water Revolving Fund Program

The purpose of this guidance is to give municipalities, planners, and engineers an overview of how the Minnesota Pollution Control Agency (MPCA) will review cost eligibility for proposed wastewater collection and treatment facilities projects through wastewater financial assistance program in Minn. R. 7077. More specifically, this document will identify items eligible for funding in the Clean Water Revolving Fund (CWRWF) program related to the construction, improvement, rehabilitation, expansion, or replacement of wastewater collection and treatment facilities. It will provide guidance, and specific examples of facilities or infrastructure items that are eligible, and also those that are not eligible for funding under these programs.

Background

The CWRWF program receives federal capitalization grants under Title VI of the federal Clean Water Act (CWA). The CWA Title VI, SRF Section 603 (c) defines projects eligible for assistance as:

"the amounts of funds available to each state water pollution control revolving fund shall be used only for providing financial assistance

(1) to any municipality, intermunicipal, interstate or state agency for construction of publicly-owned treatment works (as defined in Section 212 of this Act)." CWA Title II, Construction Grants Program Section 212.

(2)(A) states: "The term "treatment works" means any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature to implement Section 201 of the CWA, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, outfall sewers, sewage collection systems, pumping power, and other equipment, and their appurtenances; extensions, improvements remodeling, additions, and alterations thereof; elements essential to provide a reliable recycled supply such as stand-by treatment units and clear well facilities; and any works, including site acquisition of the land that will be an integral part of the treatment process (including land use for the storage of treated wastewater in land treatment systems prior to land application) or is used for ultimate disposal of residues resulting treatment."

Guidance

The guidelines for determining eligibility for funding under the CWRWF program for wastewater treatment and collection facility planning, design and construction will be as follows:

1. General Wastewater Treatment and Collection Facility Eligibility

- a. Publicly Owned Treatment Works (POTW) related to the collection, conveyance, and treatment of wastewater for a technically adequate and cost effective alternative for a 20-year planning period are eligible.
- b. Sanitary sewer collection and conveyance system eligibility is for the POTW portion only and will extend from the public right-of-way to the treatment facility.
- c. Items necessary to return non-wastewater related items affected by construction to their original condition are eligible.
- d. Pretreatment facilities which are owned, operated and maintained by the local unit of government are eligible.
- e. Project cost estimates, bid tabulations, and plans and specifications submitted to the MPCA for review and approval shall clearly show any items that are not eligible, and separate the costs of items that are not eligible from those that are eligible.

2. Treatment Facility Ancillary Items

The eligibility of ancillary items such as garage space, out buildings, maintenance equipment, etc. will be based on their documented usage relative to the wastewater collection and treatment facilities.

a. Ancillary Item Eligibility

- Only the portion of a municipal water supply system necessary to supply a portable water source to the wastewater treatment facility is eligible.
- The construction of garages or out buildings for the storage of equipment used for the operation and maintenance of the wastewater treatment and collection system are eligible.
- Maintenance equipment and vehicles necessary for the operation and maintenance of the wastewater treatment and collection facilities, and the sites they are located on, are eligible.

b. Ancillary Item Eligibility Examples

- A 12-inch water main is proposed to serve the wastewater treatment facility and future development in the area. A four-inch water service line is all that is required to meet the needs at the wastewater treatment facility (including fire protection requirements). The costs for construction of the water service line that are greater than what would be needed for the four-inch line are not eligible.
- A three-stall garage for a city which requires room for a sludge load out area, a sludge hauling vehicle, and space for the pickup assigned to the wastewater treatment facility is eligible.
- A ten-stall garage is proposed to store three vehicles assigned to the wastewater treatment plant, and the remainder of the spaces used to store the city snow plowing equipment, street sweeper, backhoe, etc. The city may be able to justify one or two additional spaces; however, the loan cannot be used for the ten-stall city maintenance yard. Only the costs associated with construction of a garage to store the vehicles necessary for operation and maintenance of the collection and treatment facilities are eligible.
- An all-terrain vehicle with a lawn mowing attachment, utility trailer, and snow plow attachment for maintaining the treatment facility grounds is eligible.
- A boat, boat ramp, and a short-term chemical storage tank at the pond site for the application of alum to a secondary stabilization pond for phosphorus removal is eligible.

3. Storm Sewer Collection, Conveyance, and Treatment Systems

Storm sewer collection, conveyance, and treatment systems are most appropriately funded under the requirements of Minn. R. 7077.0115, subp. 4(C). However, some storm sewer facilities may be eligible for funding as part of a wastewater collection and treatment project. To be eligible for funding as part of a wastewater collection and treatment facilities project, storm water facilities shall directly benefit the wastewater collection and treatment facilities.

- Storm sewer construction that is considered to “directly benefit” the wastewater collection and treatment facility is eligible for funding as part of a wastewater collection and treatment project if it is part of a cost-effective alternative to remove clean water inflow sources from the sanitary sewer system. Direct clean water inflow sources to the sanitary sewer include:
 - Sump pumps.
 - Foundation/footing drains.
 - Roof leader (downspouts).
 - Cross connections between the storm and sanitary, such as catch basins.
 - Surface runoff entering manholes through vented lids.
- Storm sewer construction that is not considered to “directly benefit” the sanitary sewer is not eligible for funding as part of a wastewater collection and treatment project. This type of project shall be submitted according to the requirements for funding stormwater treatment systems. Examples of work that is not eligible as part of a wastewater collection and treatment project include:
 - Replacing existing leaking storm sewer systems is not eligible as part of wastewater treatment and collection project. Even though the leaking storm sewer may contribute to groundwater elevations that indirectly become a part of the infiltration into the sanitary sewer, it is not eligible. Projects to remove infiltration from the sanitary sewer system should consist of improvements directly to the sanitary sewer system to be eligible.

- The construction of a new storm sewer system to address surface flooding which may result in increases in groundwater levels or inundate sanitary sewer manhole covers is not eligible.
 - Infiltration into the sanitary sewer system should be directly addressed, with improvements to the sanitary sewer pipes and manhole structures, which would be eligible.

c. Storm Sewer Eligibility Examples:

- Main Street has a sanitary sewer approximately 2,000 feet long in town that has stormwater catch basins connected to it, and two large drain tiles from the highway located north of town. Part of the cost effective alternative for the wastewater treatment and collection system is to construct a storm sewer extension of 1,500 feet to provide for removal of these inflow sources from the sanitary system. This storm sewer construction is eligible.
- Five years ago, a new 50-home subdivision was constructed and city sanitary sewers were extended to provide wastewater collection for the area. The stormwater was to flow via surface drainage to an existing stormwater pond adjacent to the subdivision. Now, due to street settling and other drainage problems, the area is not draining properly and periodically experiences flooding. The city proposes to construct a stormwater collection system for the subdivision as part of a new sanitary sewer extension project to serve a recently annexed area. This stormwater construction is not eligible for funding as part of a wastewater collection and treatment project (this may be eligible for stormwater treatment project funding).
- The city has discovered from smoke testing and video inspection that there are old storm sewer connections and foundation drains from homes connected to the sanitary sewer within an eight-square block area. The existing storm sewer system in the area is undersized to accept all the stormwater volume removed from the sanitary. In order to remove the stormwater from the sanitary sewer and utilize the existing storm sewer system without replacing it, a stormwater pond is proposed upstream of the area to control the volume and rate of storm water flow. This stormwater collection and treatment work is eligible as part of the wastewater collection and treatment project.
- The city's sanitary sewer system is old vitrified clay pipe in poor condition, and is subject to high levels of infiltration. There is no existing storm sewer system, and some areas of town are subject to flooding. The city proposes to replace the existing sanitary sewer and, at the same time, install a new storm sewer system. The storm sewer work is not eligible as a wastewater collection and treatment project.
- The city's sanitary sewer system is old vitrified clay pipe in poor condition, and is subject to high levels of infiltration. The city is proposing to replace several blocks of the old pipe with new to reduce infiltration. In order to install the new sanitary sewer pipe to meet minimum slope requirements, portions of the existing storm sewer system must be relocated. The relocation of the storm sewer system to avoid conflicts in alignment with the sanitary sewer is eligible.
- A city is building a new mechanical treatment facility and to control drainage at the site, a stormwater collection system is needed. In addition, the new facility will disturb one or more acres of land, and is required by an National Pollutant Discharge Elimination System (NPDES) Construction Erosion Control permit to construct a stormwater treatment pond. All storm sewers within the treatment facility site and the stormwater treatment pond to comply with the NPDES construction permit for control of the stormwater from the wastewater treatment facility are eligible as part of a wastewater collection and treatment project.

4. Street and Road Construction

Wastewater collection facilities are usually installed within the right-of-way of streets and roads. Street and roadway construction that is necessary to return the disturbed area to its previous condition is eligible as part of a wastewater collection and treatment project.

Example:

As part of a sanitary sewer infiltration/inflow removal project, a city plans to replace existing sanitary sewers with new pipes. The existing streets are oiled gravel and do not have curb and gutter. Since the project will involve trenching within the existing right-of-way, the city will take the opportunity to improve the streets by paving them, and adding curb and gutter. The costs for paving the streets and the curb and gutter are not eligible for funding as part of a wastewater collection and treatment project. Only the portion of the road work necessary to restore the street to its original condition is eligible.

5. Other Non-sanitary Sewer Utility Construction

Wastewater collection facilities are usually installed within the right-of-way of streets and roads where other utilities are also located. In order to construct the sanitary sewers to meet minimum slope requirements, some of the existing utilities (water, gas, electrical, communications, etc.) must be off-set or relocated. The non-sanitary utility construction necessary to return it to its original condition and function is eligible as part of a wastewater collection and treatment project.

6. Land

The CWA defines land that is an integral part of the treatment process (including land that is used for the storage of treated wastewater in land treatment systems prior to land application) or is used for ultimate disposal of residues resulting from treatment are eligible.

- a. Land for the construction of a new stabilization pond system that discharges to land (spray irrigation, rapid infiltration, etc.) is eligible. The land for both the ponds and the land disposal sites is eligible.
- b. Land for the construction of a new stabilization pond system with a surface water discharge is not eligible.
- c. Land for the construction of a new mechanical wastewater treatment facility with a surface water discharge is not eligible.

Questions about cost eligibility for specific projects should be directed to the MPCA engineer assigned to your project. A link to a directory of Municipal Wastewater Section engineering staff in regional offices can be found at:

<http://www.pca.state.mn.us/index.php/about-mpca/mpca-overview/agency-structure/mpca-offices/mpca-offices.html>.