



Milwaukee Metropolitan Sewerage District

Notice of Information Gathering for Proposed Rule Making Regarding Acceptance by MMSD of Discharges of Noncontact Cooling Water

The Milwaukee Metropolitan Sewerage District (District) is considering changing its regulations to allow for noncontact cooling water, such as “single pass” or “once-through” cooling water and cooling tower blowdown to be discharged into the District treatment system. Also, the proposed rule changes are relevant to facilities who produce reverse osmosis concentrate from water supply purification systems and condensate from steam or compressed air systems. The proposed changes would apply to facilities in the separated sewer area and riparian areas of the combined sewer area.

History

Currently, the District prohibits the discharge of noncontact cooling water into the sanitary sewer area and into the combined sewer system from riparian locations in the combined sewer area. The District prohibited noncontact cooling water to conserve treatment capacity in the sewerage system for domestic and process wastewater. This prohibition is from the 1980s, when: (A) the District did not have a wet weather peak flow storage system, (B) the region had more manufacturing, (C) water conservation practices were undeveloped, (D) the District did not have a private property infiltration and inflow reduction program or a green infrastructure program to reduce peak wet weather flows, and (E) phosphorus and other trace pollutants in the noncontact cooling water discharges were not a concern. Also, general permits were available for discharging directly to surface water.

Current Conditions

Today, the District has a large wet weather peak flow storage system, sewer system monitoring and controls are more extensive and efficient, the District has less manufacturing, water use is more efficient, and the water supply often has a significant amount of added phosphorus. A variety of regulatory initiatives create challenges for discharges to surface water, including concerns regarding phosphorus, arsenic, mercury, temperature, and whole effluent toxicity.

Proposed Action

In response to these new conditions, the District is proposing to amend its rules to allow the discharge of noncontact cooling water when the risk is low that the new discharge would cause problems within the sewerage system. Goals are to help businesses comply with increasingly complex requirements, support achievement of the Total Maximum Daily Loads for phosphorus being established for local rivers, and use the District's water reclamation facilities to remove pollutants.

The District will need to coordinate approval of new discharges with local governments to: (A) minimize the risk that the new discharges will cause or exacerbate overflows or basement backups, (B) avoid using capacity allocated for growth, (C) identify any local capacity issues, and (D) implement wet weather protocols to interrupt the discharge, if needed. The District is proposing a process that would include the following elements.

1. A facility identifies the average and maximum flow rates and the discharge schedule for the noncontact cooling water it wants to discharge.
2. The facility contacts the local sewer department to determine whether sewer capacity is available.
3. The facility notifies the District of its intent to discharge noncontact cooling water and provides the finding of sufficient capacity from the local government.
4. The District approves the discharge. Based upon findings by the local government, the District may require that the discharge be interrupted during wet weather.

Other Types of Discharges

In addition to noncontact cooling water, the District currently prohibits reverse osmosis concentrate from water supply purification systems and condensate from steam and compressed air systems. The prohibition applies to the separated sewer area and riparian areas of the combined sewer area. For the reasons described above, the District intends to repeal the prohibition on these discharges. These discharges are less common than noncontact cooling water and volumes are often small. Therefore, a special review process is unnecessary. However, notice to the District is necessary and discharges may commence only after receiving approval from the District.

User Charges

New discharges will be subject to standard sewer user charges from the District and local governments. After the District approves a new discharge, the District will change the water balance used to calculate sewer user charges for existing users. For new users of the District system, the District will require flow data from which sewer user charges will be calculated.

Rule Amendments

To implement the proposed changes, the District needs to amend MMSD Rules, Chapter 11. For secs. 11.202 and 11.204, proposed text is enclosed for your review.

Comments

The District is interested in comments regarding these proposed changes. Please send comments to Sharon Mertens, Director of Water Quality Protection, at smertens@mmsd.com. Please provide comments no later than **September 26, 2017**.

Rule Adoption Process

After receiving comments at this current stage, the District may make changes to the proposed rules. The next step is to seek authorization from the District's Commission to publish a public notice and hold a formal public hearing. At this stage, you will have an additional opportunity to comment. After the hearing, District staff will prepare a summary of the comments for the District Commission and request adoption of proposed amendments. The rules will become effective after adoption and publication.

1. Section 11.202(10) is amended to read:

11.202 Prohibited Discharges

Users may not discharge to the sewerage system:

* * *

(10) at any site that is either served by a separate storm water conveyance system or riparian to waters of the state:

(a) storm water, surface water, or groundwater, except when a remedial action undertaken according to the requirements of the Department or the U.S. Environmental Protection Agency requires the removal of this type of water and a direct discharge to waters of the state would impose unreasonable costs or delays;

(b) roof runoff; or

(c) subsurface drainage;

~~(d) single pass cooling water, cooling tower blowdown, or reverse osmosis concentrate, if the District finds that a discharge has caused or contributed to an overflow or basement flooding, except as provided in subpar 1 and 2:~~

~~1. If a storm sewer is not available, then a user may discharge cooling tower blowdown and reverse osmosis concentrate from December 1 to March 31 and any other period when necessary to protect the public health, welfare, or safety.~~

~~2. Users may discharge single pass cooling water from small scale bench top condensers, except as provided in par. (e)(2).~~

~~(e) from sources constructed after May 1, 2005:~~

~~1. condensate from compressed air or process steam systems, and~~

~~2. single pass cooling water from small scale bench top condensers; or~~

~~(f) any other wastewater for which the Department has issued a general WPDES permit;~~

1. Section 11.204 is created to read:

11.204 Noncontact Cooling Water

- (1) If a user is served by a combined sewer and not riparian to waters of the state, then the user may discharge noncontact cooling water to the sewerage system, subject to the prohibitions of sec. 11.202 and the limits of sec. 11.203.

- (2) If a user is served by separated sewers or is riparian to waters of the state, then the user may discharge noncontact cooling water to the sewerage system, subject to the prohibitions of sec. 11.202 and the limits of sec. 11.203, and according to the following conditions.
 - (a) The user has provided estimates of its average and maximum discharge rates to the governmental unit in which it is located;

 - (b) The governmental unit has:
 - 1. evaluated sewer capacity,

 - 2. concluded that capacity is likely to be available under all foreseeable conditions or needs to be interrupted during peak flow conditions to reduce the risk of overflows or basement flooding, and

 - 3. provided this finding in writing to the user;

 - (b) The user notifies the District of its intent to discharge noncontact cooling water, provides the finding of sufficient capacity from the governmental unit, and provides updated total facility discharge information to the District, according to MMSD Rules, sec. 17.401; and

 - (c) The District notifies the user that the discharge is approved. If a governmental unit has recommended interruption during peak flows, then the approval will identify the conditions when discharge is not allowed.