

OPEN CHANNEL NEWS

MCES Industrial Waste & Pollution Prevention

Issue #30/ January 2009



Metropolitan Council Environmental Services

Metropolitan Council Environmental Services (MCES) is one of three divisions of the Metropolitan Council, a regional public agency working for the seven-county metropolitan area. The mission of MCES is to provide wastewater services that protect the public health and environment while supporting regional growth.

Services provided by MCES ensure that:

- (1) sufficient sewer capacity exists to serve planned development, and sufficient capital investments are made to preserve the region's water quality;
- (2) wastewater collection and treatment services are provided in a cost- and quality-competitive manner for 105 communities and nearly 800 industrial clients; and
- (3) local plans provide for adequate water supply and nonpoint source pollution prevention in the region.

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New homes built in the Elko New Market area.

New Communities Join the Metropolitan Disposal System

MCES currently provides wastewater collection and treatment for 105 communities, but this number will increase within the next few years. MCES is in the process of building infrastructure to incorporate four new communities into the Metropolitan Disposal System (MDS): Carver, East Bethel, Elko New Market, and New Germany. The city of Dayton connected to the system in 2008. These rural communities are experiencing suburban-style growth and need appropriate wastewater treatment strategies to accommodate the growth. For Elko New Market, the city was looking at expanding its local wastewater treatment plant, which discharges into the environmentally sensitive Vermillion River. MCES is among many stakeholders that have studied capacity issues of the Vermillion River and determined the best long-term solution is to extend a regional sewer interceptor to serve Elko New Market by 2010. Extending a regional sewer interceptor also will accommodate rural growth in Carver. New Germany and East Bethel are too far from the current MDS to connect by interceptor. Local wastewater treatment facilities will better serve these areas. MCES is working with the city of New Germany to acquire and expand its existing treatment plant; and plans to construct a new facility to serve portions of East Bethel.

There are 188 communities within the seven-county metropolitan area, each having a 20-year comprehensive plan that represents how it will grow and develop. These plans are updated every 10 years. The Metropolitan Council reviews the plans from the perspective of consistency and impact to the regional system plans. The review determines how communities' planned actions relate to the interests of the entire region over the long term. From this, the Council develops strategies to accommodate growth, provide infrastructure, and protect natural areas to preserve the region's quality of life.

Important Dates:

January 15, 2009 - Liquid Waste Hauler reports due at MCES offices for all LWH permittees.

January 16, 2009 - Coon Rapids Disposal Site will close.

January 30, 2009 - All Regular and Special Discharge quarterly, semi-annual and annual reports due at MCES offices.

February 20, 2009 - Plymouth and Forest Lake Disposal Sites will close.

Mail Reports to: MCES, IWPP Section, 390 North Robert Street, St. Paul, MN 55101-1805.



One of two discharge ports at Fridley LWR

Fridley LWR Facility Now Open

MCES's Fridley LWR (Liquid Waste Receiving) facility opened on January 7. A well-attended open house was held the same day to give haulers an opportunity to tour the facility. The site has an indoor truck bay with two discharge ports. Domestic septage, holding tank, and portable toilet waste are accepted. The site is currently open Monday through Friday from 8 a.m. to 4:30 p.m. and Saturday from 8 a.m. to noon. Extended summer hours are being considered. With the opening of this facility, the existing northern sites will close. The Coon Rapids site is scheduled to close at end of day on January 16. The Plymouth and Forest Lake sites are expected to close February 20.

LWH Transition to Metro LWR Facility

The Metro LWR facility is opening in January. Haulers will be transitioned from the 3rd & Commercial site to the Metro site during January and February. This site will be open 7 days per week, 24 hours per day. The 3rd and Commercial site will remain open during the transition in case problems arise at the new facility.



Trucks discharging their loads at Metro LWR

To get up-to-date information of activities involving all MCES disposal sites, please refer to our Website at www.metrocouncil.org/environment/IndustrialWaste/announcements.htm

PFCs in Wastewater

MCES is in the process of developing a strategy to determine the amount of perfluorochemicals (PFCs) that enter the sanitary sewer system from industrial sources. A survey will be sent early this year to selected industries asking them to inventory all chemicals used to determine if they contain PFCs.

PFCs are a family of chemicals used to make products that resist heat, oil, stains, grease, and water. PFCs are made by replacing the hydrogen atoms of a hydrocarbon with fluorine. Their chemical properties make them an excellent surfactant and therefore are commonly used in many industrial processes. Examples include: electronic industries use PFCs in insulation for wires and cables; metal-finishing industries use PFCs in nickel, copper and tin-plating baths and in the electroplating of chromium; and PFCs are used as wetting agents for etching, as defoamers in pollution control equipment, and in fire suppression foams.

The chemical structures of some PFCs are extremely stable, and therefore resistant to degradation in the environment; larger, less-stable compounds break down to the stable 6-8 carbon chains that bioaccumulate in the environment. Chemicals of the PFC family which are currently the focus of regulatory concern in Minnesota are perfluorooctane sulfate (PFOS), perfluorooctanic acid (PFOA), perfluorobutanoic acid (PFBA) and perfluorohexansulfonate (PFHxS). While some PFCs have been shown to bioaccumulate in humans and animals and are being found in the environment and blood serum studies of various species, the long-term effects of chronic exposure are not yet known. Sources of PFCs in wastewater treatment systems, as well as the breakdown and treatment of PFCs in conventional wastewater treatment processes (like those used at MCES), are also not well established.

Based on available data, the MPCA is monitoring PFCs in the environment and has developed water quality criteria for surface water discharges of PFOA and PFOS. The MCES Seneca Plant NPDES Permit now requires monitoring of 4 PFCs in the final effluent. This monitoring is also expected to be included in the renewed permits for the Metro and Eagles Point plants. A survey will be sent early this year to selected industries asking to inventory all chemicals used, to determine if they contain PFCs. Survey results will be used to develop and implement a strategy for addressing PFCs that come into the MCES system – including potential industry-specific educational campaigns, pollution prevention projects, sampling projects, or other methods of assessing and controlling input of the pollutant into the system.



Local Plating Company Violates Clean Water Act

ECO Finishing, a metal finishing firm in Fridley, was sentenced on February 15, 2007, following its guilty plea to knowingly violating the Clean Water Act. The company was fined \$250,000 and placed on three years probation. After a criminal trial, ECO Finishing's chief executive officer and president was convicted of one count of felony conspiracy to defraud the United States, two counts of felony violations of the Clean Water Act, and 10 counts of negligent violations of the Act. The plant manager was convicted of eight counts of negligent violations of the Clean Water Act. These two executives were sentenced in October 2008 to imprisonment, fines, and community service. In May 2006, a company chemist was imprisoned after pleading guilty to three violations of the Clean Water Act.

ECO Finishing performs metal finishing processes including chromium, nickel and zinc plating. The company holds an MCES Industrial Discharge Permit and is subject to EPA Metal Finishing Category Pretreatment Standards. In January 2005, MCES received information that the company was knowingly violating its discharge permit and not reporting it. MCES learned that in-house monitoring showed numerous and repeated violations that were not reported, the cyanide destruction system was not working properly, very acidic wastewater was sometimes discharged without neutralization, and wastewater flow was altered in order to achieve compliance during MCES monitoring projects.

MCES responded by conducting extensive monitoring of the company's wastewater discharge in March 2005, in cooperation with the EPA. Violations were found for chromium, nickel, zinc, cyanide, and pH from the monitoring.

In April 2005, MCES assisted the EPA Criminal Investigation Division and FBI agents in executing a search warrant of the ECO Finishing facility, during which computers and files were confiscated, employees were questioned, and treatment processes were documented. ECO Finishing was issued an MCES Notice of Violation (NOV) and Order to Appear (OTA) based

on the monitoring results, and was required to modify processes to achieve ongoing compliance with its discharge permit limits. The company's Industrial Discharge Permit was also revised to require daily monitoring and additional reporting.

ECO Finishing consequently hired a private environmental consulting firm to assist in achieving and maintaining compliance, and on October 6, 2005, signed an MCES Compliance Statement. The company continues to perform daily monitoring and comply with its MCES permit.

MCES reminds permittees that they are required by both the Waste Discharge Rules and their MCES permits to report all violations within 24 hours of becoming aware of them. This allows MCES to work with permittees to bring them back into ongoing compliance as soon as possible.

MCES Once Again Defers Community Surcharge

For the third consecutive year, MCES will defer surcharges on the wastewater bills of all communities identified as having excessive inflow/infiltration (I/I), due to local commitments to continue reduction efforts.

At the end of 2008, nine of the 47 communities identified three years ago by the Metropolitan Council as adding excessive I/I to the regional wastewater collection system will have completed their reduction programs. All the remaining communities have committed to doing the level of work needed in 2009 to achieve the Council's reduction goals.

Communities will spend an estimated \$12 million in 2009 to reduce I/I – about the same as 2008 and a little less than the \$14 million spent in the first year of the program. The Council estimates that if the problem were not solved at the local level, the cost to add interceptor and treatment capacity to handle the excess flow from I/I would top \$900 million.

Any communities that have not eliminated their excessive I/I by 2012 could face an annual demand charge on their wastewater bills to cover the extra cost of treating the clear water.

“Communities have recognized that this is a regional issue and are taking the steps needed to address it,” said Bill Moore, general manager of Metropolitan Council Environmental Services. “We really appreciate their continued efforts.”

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2009 Rates and Fees

Rates and fees affecting industrial users for 2009 are as follows:

Strength Charge rates for wastewater generated within the Council's region and discharged on site will be \$0.152 per excess pound of total suspended solids (TSS) and \$0.076 per excess pound of chemical oxygen demand (COD).

Full-cost recovery rates for treatment of industrial wastewater hauled to approved MCES disposal sites will be \$0.311 per excess pound of TSS and \$0.1555 per excess pound of COD. There is an additional \$10 per 1,000 gallon service fee for out-of-region loads.

Liquid waste haulers' standard load charges will be \$42.71 per 1,000 gallons. Holding tank wastes will be charged \$2.41 per 1,000 gallons. The Portable Toilet Waste rate will be \$55.68 per 1,000 gallons. Collar county domestic waste load charges will be \$52.71 per 1,000 gallons.

The Service Availability Charge (SAC) will be \$2,000 per unit, and the associated Add-on Service Charge rates will be \$1.00 per 1,000 gallons.

For all permittees, permit fees will range from \$525 to \$5,250, depending on permit status. General permit fees for special user groups will range from \$50 to \$500.

For more information regarding rates and fees, please contact your MCES engineer or visit: www.metrocouncil.org/environment/IndustrialWaste/news_rates.htm. The 2009 rates will be posted on this site following final 2008 billings in February 2009.