

# OPEN CHANNEL NEWS

MCES Industrial Waste & Pollution Prevention

Issue # 14 / July 2003

## 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.

MCES provides water resources management services to 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 103 communities and more than 800 industrial clients;

(3) local plans provide for adequate water supply and nonpoint source pollution prevention in the region; and

(4) local action is catalyzed through water quality grants.

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To find out more about MCES visit us at [www.metrocouncil.org/environment](http://www.metrocouncil.org/environment)



*Photo of the Metro Plant effluent channel*

## Excellence in Region's Wastewater Treatment Continues

Metropolitan Council Environmental Services' (MCES) eight wastewater treatment plants continue to perform at exceptional levels, achieving a collective 99.8 percent compliance with their clean water discharge permits in 2002. And as clean water flows back into the environment – some 100 billion gallons yearly – the awards continue to flow in.

The latest are Peak Performance Awards from the Association of Metropolitan Sewerage Agencies (AMSA). This organization represents the nation's 300 largest wastewater collection and treatment utilities, which operate more than 500 treatment plants. All of the MCES plants that were eligible received awards in May for their performance in calendar year 2002.

Six plants recorded 100 percent compliance with their clean water discharge permits. The Seneca, Empire and Blue Lake plants earned Gold Awards for this level of compliance. The St. Croix Valley, Hastings and Eagles Point plants earned the Platinum Award for achieving five consecutive years of complete permit compliance (1998-2002). This makes it back-to-back Platinum Awards for the St. Croix Valley and Hastings plants, marking full compliance since 1993 – the base year for AMSA's first issuance of Platinum Awards. The Hastings Plant's string of full compliance actually goes back to 1991, while the St. Croix Valley's dates to 1992.

*Continued on next page...*

### Important Dates:

**July 15, 2003** – Liquid Waste Hauler reports are due at MCES offices

**July 30, 2003** - Regular and Special Discharge quarterly and semi-annual reports due at MCES offices

**August 14, 2003** – Transportation Equipment Cleaning (40 CFR Part 442) final compliance date

**September 16, 2003** - Industrial Discharge Permit Workshop

**December 22, 2003** – Centralized Waste Treatment (40 CFR Part 437) final compliance date

## Excellence in Region's Wastewater Treatment Continues

*Continued from front page*

MCES's Metro Plant received a Silver Award for having five or fewer permit exceedances in 2002. An award is pending for the eighth MCES plant – the Rosemount Plant, which recorded perfect compliance during 2002. Under AMSA's recently amended award eligibility requirements, the plant should now qualify for a Gold Award.

Earlier this year, seven of the eight MCES wastewater treatment plants received Certificates of Commendation from the MPCA's Minnesota Wastewater Treatment Facility Operational Award Program. These awards are more stringent than AMSA's in that they not only require full compliance with effluent limits, they also require all reports to be timely and complete, and that the plants' associated interceptor system experience no bypasses, enforcement actions or non-compliant inspections.



*Butch Schultz, Barb Grondahl, and Gary Paulson of the Hastings WWTP with AMSA award*

## MCES Excellent Performance Will Continue

MCES work is critical to protecting the public health and the environment. It is necessary that we continue to deliver quality and cost-effective wastewater treatment as the region expands and the demand grows. This is accomplished by investing in infrastructure to accommodate growth, meet more stringent treatment standards, and to rehabilitate facilities as they age. Below is one example of a facility upgrade currently under way. The complete list can be viewed in our Capital Improvement Program found at: <http://www.metrocouncil.org/environment/CapitalProjects/>

### Metro Plant Improvements

A comprehensive upgrade of the Metropolitan Wastewater Treatment Plant has been under way since 1999. This upgrade includes the installation of fluidized-bed incinerators for solids processing, biological phosphorus removal in liquids processing, and many other smaller changes that will improve plant performance and overall efficiencies and reduce air emissions, phosphorus and odors.

## Permittee Workshop Scheduled for September

The Industrial Waste & Pollution Prevention Section will continue to offer the Industrial Discharge Permit Workshop for interested permittees. The workshop serves as a good forum for permittees to develop a better understanding of their permit and find out what it takes to maintain compliance.

Specifically, the workshop addresses the administration of permits, monitoring and reporting requirements, and applicable fees. An overview of wastewater sampling and flow-measuring techniques and monitoring equipment is also provided. During the workshop, attendees will be given the opportunity to speak with staff to address any questions or concerns they may have.

The next workshop is scheduled for September 16, 2003, from 1:30 to 3:30 p.m. If you are interested in attending this workshop, please contact Tina Nelson at 651-602-4728 or via e-mail at [martina.nelson@metc.state.mn.us](mailto:martina.nelson@metc.state.mn.us).

## Industrial Waste Customer Forum Review

The third Industrial Waste Customer Forum was held on May 29, 2003. About 30 industry representatives attended the forum, which focussed on the 2004 MCES budget and rates, the 2004 annual permit fees, and the new IW business management system.

Jason Willett, MCES finance manager, gave an overview of our rate system, discussed our 2004 proposed rates, and provided information on the MCES Capital Improvements Program, including expenses projected through 2012.

Leo Hermes, IWPP section manager, provided information on the 2004 annual permit fee increase recommendation of 6.1 percent. This is 3 percent above the Municipal Wastewater Rate (MWR) increase, and is based on a long-term plan to increase recovery of direct program costs.

Bob Pohlman, IWPP principal environmental scientist who handles database and revenue functions, gave a brief introduction to the new IWPP centralized business and information management system, which is expected to be online in 2004. This system will consolidate and manage all IWPP section data as well as perform numerous business functions and will position us well for the future in terms of using an e-business approach with our industrial customers. More information will be provided as we integrate this system into our daily functions.

## Everything You Always Wanted to Know About SAC, But Were Afraid to Ask

SAC, or Service Availability Charge, is a connection fee based on the volume of wastewater discharged to the sanitary sewer. MCES uses SAC to pay a portion of costs for capital improvement to the treatment plants and their conveyance system, such as replacing a section of aging sewer. All users connecting to the Metropolitan Disposal System after 1973 pay SAC at the time of original construction. This includes private and public housing, and commercial, institutional and industrial buildings. A building or plumbing permit is the “trigger” for most SAC charges. Although there are different criteria for commercial SAC charges, the most common is square footage. One SAC unit is equal to 7,000 square feet of warehouse area or 2,400 square feet of office space. Most industries are assessed SAC based on volume for process areas and commercial criteria for office and warehouse areas. One SAC unit equals 274 gallons of wastewater discharged to the sanitary sewer per day.

All Industrial Users (IUs) permitted by MCES are automatically reviewed for SAC every three years as part of their permit renewal process. Some industries in the metropolitan area were growing rapidly during the 1970s and '80s. At that time, there was no mechanism to track wastewater volume increases if a building permit was not issued. In 1991 the Metropolitan Waste Control Commission (the predecessor to MCES) established a SAC baseline for all permitted companies based on the average wastewater volume from that year. Most companies starting up after 1991 have documented SAC payment records from their respective cities or contractors which are used as their baselines.

SAC units typically remain with a given address, even if a company moves. When a building is demolished and new use established for the site, the city has the option of declaring SAC credits for site-specific or citywide use. Companies having multiple buildings located in close proximity to each other (campus) may share units between buildings, making efficient use of SAC units. SAC units cannot be traded or sold between companies. Companies leasing space are assigned a SAC baseline calculated from the percentage of leased space times the SAC units assigned to the total property.

All SAC transactions occur between the company and the city where the property is located. Cities may assess local charges based on MCES SAC determinations.

If the three-year review identifies a SAC liability, IUs may choose to do a 30-day volume study to demonstrate reduced wastewater volumes. MCES calculates the average wastewater flow during the operating days of a 30-day consecutive period and uses this number to determine a final SAC liability. If this number is greater

than an IU's baseline, the IU is required to pay for this increase in flow. MCES staff remain committed to helping companies with their water and wastewater reduction goals and staff will work with the Minnesota Technical Assistance Program (free service through the University of Minnesota at 612-624-1300) to assist IUs to formulate water reduction plans. **The good news is many companies are able to reduce or eliminate any anticipated SAC charges through flow evaluations, or process change.**

For more information on the SAC program, refer to: <http://www.metrocouncil.org/environment/RatesBilling/RatesCharges.htm#SAC> If questions remain, please contact Paul Neubauer at 651-602-4720.

## Technical Plating Reduces Wastewater Volumes and Avoids Paying SAC

Technical Plating Incorporated is a small metal finishing company located in Brooklyn Park. Their Industrial Discharge Permit was up for renewal in October 2002. We notified them that our review of their wastewater discharge volume showed they were exceeding their SAC baseline of 40,500 gallons per day (gpd) and may need to pay \$56,000 in additional SAC units. The company was given two options: first, to pay for additional SAC units equivalent to the increased discharge based on the review, or second, to conduct a 30-day wastewater volume study if they plan to initiate wastewater reduction measures.

Technical Plating chose the second option, but not solely for the purpose of avoiding additional SAC payment. Lowering their discharge volumes would also alleviate some of the stress put on their pretreatment system with the increased flows.

After working with a summer intern from MnTAP, Technical Plating instituted two process modifications to reduce wastewater volumes. They installed a rinse water reuse system that consists of a collection tank, a sand filter, and a supply tank where clean water is stored and then fed back into the plating line. Next, they installed flowmeters on one plating line and implemented specific operating instructions for employees to follow to improve flow controls on the line. The 30-day volume study, conducted after these changes were made, showed wastewater volumes well below their SAC baseline. From these simple changes the company managed to avoid the additional SAC payment, and benefits from a more efficiently operated pretreatment system.

The MnTAP intern came up with some other very innovative ways for Technical Plating to reduce their wastewater volumes, particularly with their barrel rinsing, which may be instituted in the future. View the full project summary at <http://mntap.umn.edu/>

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## 2004 Rates and Fees

The Metropolitan Council approved the following rates affecting Industrial Users for 2004:

For communities within the Metropolitan Council's region, the Municipal Wastewater Rate will be \$1.34/1,000 gallons.

Strength Charge Rates for wastewater generated within Council's region will be \$0.123 per excess pound of total suspended solids (TSS), and \$0.0615 per excess pound of chemical oxygen demand (COD).

Full cost recovery rates for treatment of wastewater generated outside of the Council's region will be \$0.232 per excess pound of TSS and \$0.116 per excess pound of COD.

For Liquid Waste Haulers, standard load charges will be \$16.21/1,000 gallons. Holding tank wastes will be charged \$1.34/1,000 gallons. Collar county load charges will be \$41.21/1,000 gallons. A new rate for portable toilet waste (PTW) was approved effective January 1, 2003. The 2004 PTW rate will be \$21.34/1,000 gallons.

Add-on-service charges will be determined when the Council approves 2004 Service Availability Charges (SAC) later this year.

For all permittees, permit fees will increase by 6.1% for each user class.

For more information regarding rates and fees, please contact your MCES permit engineer or visit:

[http://www.metrocouncil.org/environment/industrialwaste/news\\_rates.htm](http://www.metrocouncil.org/environment/industrialwaste/news_rates.htm)