Charlotte-Mecklenburg Utilities
System Protection
Industrial Pretreatment
Strategies for Effective Relationships

• Developed the following strategies to help us move from a position of regulatory agency to one of being a stakeholder with industry in protection of the POTW.
• Formed Industrial Users Group to promote cooperation and communication with Utilities.
• Environmental Excellence Awards Luncheon.
2006 Recipients of Charlotte-Mecklenburg Utilities Environmental Management Division/System Protection Award for Environmental Excellence in Industry

Silver Award
Aquasol Corporation • Cargill, Inc. • Charlotte Pipe & Foundry • Charlotte Tank Wash • Chemtron Incorporated • Frito Lay Incorporated • G&K Services • Haz-Mat Transportation and Disposal, Inc. • Herff Jones Inc. (Photo Division) • Herff Jones Inc. (Yearbook Division) • Independent Beverage Corporation • Ingersoll Rand Customer Solutions Center • Masonry Reinforcing Corporation of America • Mecklenburg County 521 Fairhole Landfill • Norfolk Southern Railways – Engine Terminal • Norfolk Southern Railways – M.W. Roadway Shop • PCA International, Inc. • Rohm and Haas Chemicals, LLC • Siemens Power Generation • Southeastern Metal Products, Inc. • Stork Prints America • The Charlotte Observer Publishing Company • Unifirst Corporation • United Technologies Corporation – Carrier • Water Systems • Weyerhaeuser Company

Gold Award
American Circuits • Arjobex America • Biotech, NC • Carolinas HealthCare Systems, Linen Services • Chesapeake Treatment Company, LLC • Cintas Corporation • Continental Tire, North America • Huntsmann International • Pan-Glo Charlotte • Southern Aluminum Finishing Company • Trane, Charlotte

Most Improved
Unifirst Corporation

Crown Award
Industrial Pretreatment: Water Conservation
Chesapeake Treatment Company, LLC • Charlotte Pipe and Foundry

10 Years of Environmental Excellence
Herff Jones Inc. (Yearbook Division) • Siemens Power Generation • Southern Aluminum Finishing Company • Stork Prints America

Charlotte-Mecklenburg Utilities (CMU) would like to recognize these industries for their environmental stewardship. The Environmental Management Division/System Protection of CMU implements a program, which regulates the discharge of pollutants into the municipal sewer system. Industrial facilities subject to this program are required to obtain wastewater permits, which contain limits on the amount of pollutants they can discharge. The recipients of these awards have complied with their permit requirements, cooperated fully with the Division and have taken a proactive and innovative approach to protecting the quality of our water.

Charlotte-Mecklenburg Utilities is committed to protecting the environment by collecting and treating wastewater, reusing residuals beneficially and regulating system discharges. While regulating industrial and commercial users often focuses on environmental problems, we do not want to lose sight of industries in our community, which excel in their commitment to the environment. We therefore would like to take this opportunity to say—Thank You for A Job Well Done.
The IU group requested training in various aspects of permit compliance.

Utilities responded with regular training classes such as: Choosing a Contract Laboratory; Permit Interpretation; Industrial Billing; Data review and submittal of the paperwork.

Publishing of a Quarterly newsletter which covers pretreatment compliance and water conservation.
Communication With Contracted Laboratories Is A Must

Creating a partnership with the qualified environmental laboratory you select to work for you and your company may be the best move you can make. Some of the needs you would discuss before a contract is signed would be: are they certified for parameters of interest, what are the reporting limits for your market, will a subcontractor be used, what is the turnaround time (time it will take them to analyze the samples and get the results back to you), what is the QA/QC requirement for you and them, and a quote of services provided. You may also want to consider an on-site interview if you are sleepwalking around. You could request past audit results, any certifications held, review performance studies, examples of drug packages, and any SOPs or QA manual used. Do they have a well-maintained facility? Is the instrumentation adequate? Did you meet any of the employees? How flexible are they, and can they sample in a niche? You would want to make sure that the technical staff is knowledgeable about the methods and operation of the instrumentation. How are the changes expected initially? Is there a periodic refresher training? Is documentation available to support the training? Would you defer to what you think about who would take the expense of re-analysis if the lab makes an error. A reputable laboratory will have enough staff available to answer any questions you may have. The most important piece of information is that when your business finally does make a decision, make sure the lab gets a copy of your permit, and stay current as your permit may be revised, modified or renewed during the comment period. There may be added parameters or monitoring frequency changes that could affect your compliance. Please call with any questions or concerns.

Environmental Excellence Awards 2008

This year’s Environmental Excellence Awards competition for calendar year 2007 will be held October 2nd at the Lake Dales Water Treatment Plant from 11:30 AM to 1:30 PM. This is an invite only event and you should have received notification of this event by mail if qualified. The awards are given to permanent industrial users that meet the criteria designated by our System Protection staff. The criteria includes having 100% compliance for limits and reporting, no SCN or Tier 3 violations for two years, and no EPA violations for the Silver award, 50% compliance for limits and reporting, no SCN for 2 years and no Tier 3 violations for the Gold award. There are also Energy awards for water conservation, industrial process, and pollution prevention. Please consider your pretreatment operations and staff so you can join us on the 2nd for an award.

Industrial User Process Changes Could Affect Our WWTP’s

In your Industrial User permit, there are a lot of things that you are not covered on, like reporting and sampling, submitting data and renewal information on time, informing co-workers and other responsible parties of the permit’s obligations and so on. One of the more important things that needs to be reported concern changes. Most facilities have the ability to add new lines or products with minor changes without realizing that this could change the characteristics of the wastewater. Part II, General Condition “A” of your permit to your discharge specifically addresses this under “Notification of Production Changes”. It states that the permittee shall give notice to the correct authority 90 days prior to any facility expansion, production increase or decrease, or process modification which has the potential to result in new or substantially increased or decreased discharges or a change in the nature of the discharge. The permittee shall not proceed with any facility expansion, production increase, or process modification until the control authority has given permission. This condition is meant as a protective measure for our WWTPs, giving them a sort of “head up” if the incident is going to change. The flipside of this is that it did overlook a lot of other business dealings that this and any other change would or could impact. This can serve as a question and to the WWTP receiving the wastewater from the potentially permitted, but altered and unreported process change. Whatever the deviation, a WWTP may reflect that change on a trend enough scale that they can pass through or interfere. Foul odor, color, solids and oxygen demanding pollutants can be the byproduct of a production change. A wastewater discharge can also interrupt your scheduled sampling event in a negative way, possibly keeping COD and your private lab sample lost to the factory, causing a non-compliance. Please do your part for water quality and let your Compliance Specialist know if anything changes going to your facility.

Study To Determine COD Loading On Collection System

Effective January 1, 2008 all Industrial Users (SU) received an administrative letter requiring them to sample and analyze for Chemical Oxygen Demand (COD) in wastewater discharges during each regular call-scheduling event. The sampling and analysis should be occurring five days prior to the collection for a minimum of four weeks in the collection system. The samples will be used for monitoring COD during the Industrial Wastewater monitoring event. The additional COD monitoring should continue until December 31, 2008 or later. However, if COD is not your City of Charlotte Wastewater Discharge Permit or a monitored pollutant, you must continue sampling for COD. Charlotte-Mecklenburg Utilities will be performing computer modeling to determine the ratio of COD to BOD to develop and place proper sewer treatment locations and a compensation for billing. It is of the utmost importance that each industrial facility submit their laboratory (more information on other cots) of this COD monitoring requirement. Sampling analysis and reporting protocol, continued in a year permit, must be followed for this as well as other monitoring. If you have any questions or concerns with this, please contact your Compliance Specialist immediately. Missing this required monitoring would result in a violation and not just like your other parameters. The results will be analyzed after one full year of data is collected to allow any changes or problems to the user in regards to billing. Stay tuned for more information and make sure your business keeps sampling for COD.

Industrial User Survey Update

As part of our obligation as a Pretreatment Program, the System Protection Section is required to administer surveys to industrial users surveys to pretreatment standards using our permits. Along with our staff’s efforts, we are using the services offered by the Environmental Assistance Office of the University of North Carolina at Charlotte (UNCC) for support. The survey was sent to industrial users (SU) identified by one or more of three basis sections, including the 2007 NC manufacturers register, water billing records, and the City of Charlotte 2006-2007 business license lists. At this point, and after a screening process used to eliminate industrial users who don’t meet any of the criteria, ar about four hundred eighty surveys out to a large assortment of businesses. Sixty of these surveys came back as inadmissible and the rest were received and assigned to a Compliance Specialist for find further review. As we received the surveys, they were filed and sorted according to what basic they may potentially discharge to. Once sorted, contact is made with the business’s identification as significant industrial users (SU) and then handed off to individual Compliance Specialist for review. On the majority of our visits, System Protection staff were received warmly and without hesitation. We think these businesses for their support.
• Emergency number for after office hours communication.
• Development of our web site to provide information and forms to customers.
• Agreement with Chamber of Commerce to merge our IUG with a large group of city and county agencies to streamline the number of meetings attended by industries.
• Working with the Chamber of Commerce - Economic Development in their recruitment of industries to make the companies aware of pretreatment requirements in the planning stages.
Plant operations

• Formed plant influent teams to evaluate problems that appear to have an outside source. The teams consisted of pretreatment personnel; engineering and maintenance and plant operations personnel.
• Formation of a Preventive action team in which pretreatment participates.
• Certification of one plant for ISO 14001 and formation of a EMS system which will eventually be applied to the remaining four plants.
• Biosolids ISO certification is being developed for all plants now.
• Pretreatment has played a major role, acting as internal auditors and in the writing of SOPs.
Charlotte-Mecklenburg Utilities
System Protection
Grease Free Program
Strategies for Education and Outreach

- **Grease Free Education and Outreach in 2008** provided more than 115 programs for 4,707 people. These programs included, Blue Planet tours, plant tours, schools, events and festivals where we discussed proper grease disposal.

- Utilities sponsored a breakfast at the Greater Charlotte Apartment Association. This gave us access to about 15 property managers in training that day.

- Utilities conducted additional workshops onsite at Multi-family properties; the Plumbers association group and Restaurant Association.
• We set up our Grease Free display at Career Day for high school students
• Grease can pilot program: Provided 350 grease cans with bilingual labeling to a multi-family property with a history of grease problems
• Conducted targeted advertising campaign during the holiday season using the following media outlets:
  • Television advertising Spanish radio advertising from early November to early January.
  • One-fourth page advertisement in December issue of Charlotte Parent Magazine
  • Billing inserts, mailed to 250,000 customers in monthly bill.
  • Spanish version ran in a local Latino newspaper
Field Operations

• Established a system to coordinate investigations of sanitary sewer overflows with collection system crews