PRETREATMENT Communicator

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Coordinator's Desk

Well, we're in a new Fiscal Year again. We have completed our first five-year cycle since NPDES delegation of the pretreatment program. The state's control authorities have all been audited at least once during that period and inspected every year. I believe Florida's pretreatment programs have matured, and significantly improved, since the Department received delegation in 1995. I know we have all worked very hard together to make improvements to your programs. Among other things, these improvements resulted in updating industrial user surveys, improving significant industrial user (SIU) compliance rates, developing more effective legal authority, calculating defensible local limits, and in some cases, increasing staff and equipment. I am very proud of the accomplishments the control authorities have made in the last five years.

Having come as far as we have, it's time for me and my staff to make some changes in the way we conduct our program oversight activities. I mentioned some of the proposed changes at the last coordinator's meeting in St. Petersburg in June. The changes I refer to are nothing to get alarmed about. I don't think we'll be doing anything, or requiring you to do anything, that will drastically change the way you currently run your programs. The main reason for the changes is to further improve pretreatment program implementation.

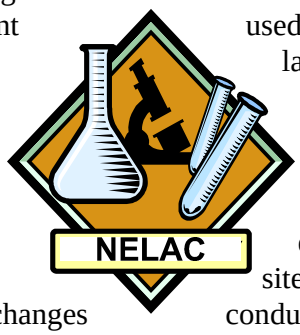
You should be aware of the following

*(See **Coordinator**, page 3)*

Laboratory Modifications and the Pretreatment Program

by Paul Salerno
City of Port Orange

The Florida Department of Health (FDOH) has modified the certification of Florida labs using the new standards compiled by the National Environmental Laboratory Accreditation Conference (NELAC). As a pretreatment coordinator, the use of the laboratory for evaluating industrial discharges is the backbone of your program. Industrial pretreatment requires the use of contract or internal laboratories, and assessing the labs used in your program will provide knowledgeable conformity with the changes being administered. The NELAC program will have labs document from "cradle to grave" any samples they receive. When you are collecting field samples, some modifications in the paperwork will provide a tracking network that will be useful and necessary in the compilation of laboratory results of a permitted industrial site.



The on-site assessment of the lab provided by FDOH "is an integral and requisite part of a laboratory accreditation program and will be one of the primary means of determining a laboratory's capabilities and qualifications. During the on-site assessment, the assessment team will collect and evaluate information and make observations which will be used to judge the laboratory's conformance with established accreditation standards. It is essential that the on-site assessment be conducted in a uniform, consistent manner. Reasons for fostering this consistency include a need to assure the base quality of data coming from the laboratories; to allow more confident comparison of results generated by different laboratories; to facilitate reciprocity; and for the laboratory community to accept the accreditation standards." (NELAC)

In the best interest of the pretreatment program, coordinators should:

- Be familiar with the relevant legal regulations, accreditation procedures, and accreditation requirements.
- Have a general knowledge of the relevant assessment methods and assessment documents.
- Be familiar with the various forms of records, and record review.
- Be cognizant of data reporting, analysis, and reduction techniques and procedures.
- Be technically knowledgeable and conversant with the specific tests or types of tests that your program uses.
- Be technically knowledgeable and conversant with the associated sampling and preservation procedures.
- Be able to communicate effectively, both orally and in writing to the industries within your program.
- Contact the internal and contract labs to be confident the program is compliant with the State of Florida rules and regulations. By a single assessment visit to the lab, reassurance of their data is accomplished.

The use of checklists in a pretreatment assessment will be an asset in both performing the inspection and providing a lab verification that will be a positive feature to the program needs. The following items are a guidance, although not complete for your specific program. These can be used to begin evaluating the lab and provide usable data. The use of a chemist, consultant, or chemistry knowledgeable associate to accompany the inspection will help in providing a second opinion in cases where the lab procedures do not follow current EPA required standard operating procedure (SOP), but do provide accurate data using an alternate method. NELAC's concern is documentation of any standard or alternative operations being performed by certified laboratories.

When visiting the lab, some considerations are:

- The size, appearance, and adequacy of the laboratory facility.
- Organization and management of the laboratory.
- Qualifications and experience of laboratory personnel.
- Receipt, tracking and handling of samples, especially the Chain of Custody requirements.
- Proficiency Testing (PT) documentation review. Each analyte tested and certified in the lab will have new proficiency scores every six months (or earlier). Should the lab not meet PT standards in two of the last three trials for a specific analyte, that analyte will be removed from the labs certification until new PT standards are met. When an analyte is removed from certification, this will effect the legal standing of the industrial pretreatment program for accepting the data of that analyte, and for assessing significant non-compliance in their industries permit.
- Listing/inventory, condition, and performance of laboratory instrumentation and equipment of tests used in your program.
- Source, traceability, and preparation of calibration/verification standards.
- Test methods including the adequacy of the laboratory's standard operating procedures as well as confirmation of the analyst's adherence to SOPs, and the analyst's proficiency with the described task.
- Data reduction procedures, including an examination of raw data. Confirmation that final reported results are derived from raw data and original observations.
- Quality assurance/quality control procedures, including adherence to the laboratory's quality assurance plan and adequacy of the plan.
- Minimum Detection Limit (MDL) analysis. The MDL is a requirement that is an important factor in meeting FDEP rules and regulations. An example is the use of finding the lab MDL for each analyte you use in the issuance of permits, and matching the MDLs listed in the EPA standards used in the development of the local limits, or matching the MDLs as required in your operating permits.

The Florida Department of Health in conjunction with the Florida Department of Environmental

Protection has accomplished an excellent preparation of the laboratories to the NELAC standards. Industrial pretreatment programs should be aware of the certification changes, and understand the purpose of the sample documentation as an important requirement of quality data. The FDOH, NELAC, and FDEP websites are excellent sources of information. Their web addresses are:

FDOH- http://www. doh.fl.us.
NELAC- http://www. epa. gov/ ttn/ nelac
FDEP- http://www. dep. state. fl.us

The time used to assess the internal or contract labs used in your industrial pretreatment program will add to the quality of data used in reporting the compliance of your permitted industries.

Editor's Note: Although laboratory certification is not yet a requirement of the DEP, laboratory sampling and analysis must be performed in accordance with the DEP Standard Operating Procedures (DER-QA-001/92) to comply with Rule 62-625.600(1)(e), F.A.C. and Chapter 62-160, F.A.C.

Coordinator ... *(Continued from page 1)*

changes to our Pretreatment Compliance Inspection and Pretreatment Program Audit procedures during FY 2001:

- We will give a one-week notice, instead of a two-week notice, when we visit your program for an inspection or audit.
- We will send a pretreatment program profile form to your program approximately one week prior to our inspection or audit. The coordinator must complete the form before the inspection or audit. The form requests relevant program information that, if not completed prior to our arrival, will delay the inspection or audit process.
- We request that control authorities not give their SIUs prior notice of IU inspections nor notify them that we will be in their area. This is particularly important if you are conducting a sampling event at the time of the inspection. Inspections should be unannounced, whenever possible.

During pretreatment program inspections or audits, we will check for documentation that control authorities are using acceptable quality assurance techniques during sample collection and analyses. Documentation can include a letter from a contract laboratory that states that they have an approved QA plan on file with DEP, or a statement of the methods used for QA (e.g., trip blanks, equipment blanks, field blanks, split samples, etc.). If the control authority or the IU does its own sampling, the same documentation is necessary. Also, to ensure that the IU is following the DEP Standard Operating Procedures, we recommend that the control authority observe an IU self-monitoring event, and document the visit in their file.

- IU files will be reviewed to ensure that all compliance data, both self-monitoring and control authority monitoring data, is being tracked and evaluated for compliance. This information should be part of the IU file and must be readily available during inspections or audits. An evaluation of compliance must be done every quarter using a six-month rolling average in accordance with EPA policy. The data can be tracked using computer programs, spreadsheets, or hand calculations.
- During inspections or audits we will compare IU information from the program's annual reports to the IU file information. Specifically, we will look at the number of monitoring/inspection events and enforcement actions. The annual report and the documentation in the files should agree.

As most of you know by now, Gary Millington left the pretreatment program back in February. I am pleased to announce that Mr. Paul Brandl started with us on June 1. Many of you have already had the opportunity to meet Paul at the last coordinator's meeting or during the last few fiscal year inspections. To get to know Paul a little better, he has included a short article about himself in this issue of the *Communicator*. We welcome Paul to our staff and know that you'll welcome him too.

With the replacement of a staff member, I have again reassigned program responsibilities (sorry about that). Besides Paul and Sal having program oversight responsibilities, Ms. Divina Ruiz, who has been with us for several years, will be assigned a few programs of her own. She will conduct inspections and audits, along with other program review requirements. Divina will not exclusively review local limit and annual report submissions anymore. Each staff member will now review ALL material submitted by a program assigned to them. This should improve program contact continuity and foster better working relationships between DEP and the approved programs.

Well, I hope no one is too overwhelmed by the above changes. Most people don't like changes, but please be open to what we are doing. I feel the proposed changes in our program oversight will continue to improve Florida's pretreatment programs. If you would like to discuss any program-related issues, please contact me anytime. Thanks for your cooperation as we start this new fiscal year.

Robert Heilman

AMSA Pretreatment & Hazardous Waste Committee Meeting

by Dr. John Parnell
City of St. Petersburg, Florida

The following items are highlights of the AMSA Pretreatment and Hazardous Waste Committee Meeting on July 18, 2000, in Louisville, Kentucky.

On effluent guidelines development, Guy Audlett reported that the revised **Metal Products & Machinery** rulemaking is scheduled for proposal in October 2000. However, many of the facilities such as shipyards, auto dealers, rail-yards and water transportation services that will be included in the rule are already being regulated by pretreatment programs under local limits. Since local limits are already responsible for removing the majority of pollutants from the facilities, the extra pollutant loadings that "may" be saved, if the EPA were to declare these facilities categorical, will therefore be very expensive in terms of dollars per pound of "extra" pollutant poundage saved and may not prove to be allowable by the OMB. **Iron and Steel** rulemaking is scheduled for an October 2000 proposal and a projected 2002 adoption. **Transportation Equipment Cleaning** rulemaking is now headed more towards best management practices in lieu of categorical limits.

On the **Strategic Goals Program**, some pretreatment programs such as Chicago are going ahead with incentive programs with the metal finishing industry. If anyone has metal finishing industries that are signed up for the program in their area, the POTW is requested to sign up as well and work closer with these industries to cut costs and achieve enhanced compliance.

Lindane (gamma benzene hexachloride) in influent has been shown to be toxic at 19 ppt levels. Sources of this substance have been traced to "headlice prescriptions" in California. It is reported that these prescriptions are so concentrated that one treatment can raise 6 million gallons of wastewater to the allowable limit. A ban on prescriptions is on the books in California.

The revision of the **local limits guidance manual** is now scheduled for draft form in September 2000. It is reported that there will be no new methods and no new inhibition data.

The **mercury workgroup** reported that better sampling and analytical methods for mercury revealed that up to 2 ppt of mercury was present in influents to POTWs that had originally been below detectable levels. Sources of mercury in the wastestream included approximately 15 percent from domestic household materials. Over 80 percent was attributable to amalgam fillings in teeth leaching mercury through the alimentary canal to be continuously discharged in human feces. Chemical toilet waste was shown to be particularly high in mercury content.

The next scheduled meeting is the 2000 AMSA-EPA Pretreatment Coordinators' Workshop at the Double Tree Hotel at Reid Park, Tucson, AZ, November 15 -17, 2000 ... hope to see you there!

Misuse of Sodium Dimethyldithiocarbamate

Memorandum from Michael B. Cook,
EPA Director of Office of Wastewater Management

Potential problems can arise from the misuse of sodium dimethyldithiocarbamate and associated compounds. Sodium dimethyldithiocarbamate is used to aid the precipitation of metals in industrial wastewater treatment and pretreatment systems. When used appropriately it can effectively enhance the removal of some difficult to treat pollutants, without impacting the environment or POTW operations. However, sodium dimethyldithiocarbamate is toxic to aquatic life and can combine to form, or break down to, a number of other toxic chemicals, including thiram (an EPA registered fungicide) and other thiurams, other dithiocarbamates, carbon disulfide, and dimethylamine. Thiram is known to be toxic to aquatic life at the following levels: LC50 less than 10 µg/l (parts per billion) including some less than 1 µg/l for several varieties of catfish, carp, rainbow trout, daphnia, and harlequinfish; LC50 between 10 and 100 µg/l in other studies (AQUIRE database at http://www.epa.gov/medecotx/quicksearch.htm).

The US Department of Justice, on behalf of US EPA, filed a complaint on April 27, 2000, which alleges that a metal plating facility in Indiana discharged the above chemicals during closure operations (http://www.epa.gov/region5/news00/00opa084.htm). The State of Indiana has filed a similar suit. (http://www.state.in.us/idem/macs/factsheets/whiteriver/complaint.pdf). Specifically, the complaint alleges that greater than normal amounts of sodium dimethyldithiocarbamate and other treatment chemicals were used to treat more concentrated wastewaters than those encountered during routine production. This resulted in discharges that caused inhibition and disruption of the local Publicly Owned Treatment Works (POTW), and discharges of pollutants to the river. Pollutants discharged into the river included ammonia, Thiram, and other thiurams, amines, and carbamates. Shortly thereafter, hundreds of thousands of fish, 117 tons, died along a 50-mile stretch of the White River, and the ecosystem of the river was severely damaged.

Based on the above, municipalities and industrial facilities using sodium dimethyldithiocarbamate should be alerted to exercise caution in the handling and use of this chemical. Since there are no categorical or water quality standards for this chemical, it is unlikely that industrial facilities are required to monitor wastestreams for this chemical and others associated with it. **Control Authorities must ensure that their industrial users are aware of their responsibility to provide information regarding industrial production and treatment operations.** Consistent with those responsibilities, industrial facilities must provide notice of any substantial change in the volume or character of pollutants in their discharge (40 CFR 403.12(j)). In addition, potential operational problems or concerns must be promptly reported to the appropriate permitting authority or pretreatment Control Authority (40 CFR 403.12(f)). Any use of sodium dimethyldithiocarbamate in a manner or amount that could result in measurable discharge of this chemical, including complexed or combined forms, to a sewer system or water body should be avoided.

For more information, contact Timothy Connor, Office of Science and Technology, Engineering and Analysis Division at (202) 260-3164, or Jan Pickrel, Office of Wastewater Management, Water Permits Division at (202) 260-7904.

Regulatory Update ...

- The final rule for *Effluent Limitations Guidelines and Standards for Transportation Equipment Cleaning* was signed by the EPA Administrator on June 15, 2000. This regulation provides technology-based effluent limitation guidelines, pretreatment standards, and new source performance standards for the discharge of pollutants by existing and new facilities that perform transportation equipment cleaning operations. Examples of facilities covered by this rule are tank trucks, rail tank cars, and tank barges.
- The proposed rule for *Effluent Guidelines and Standards for the Iron and Steel Manufacturing Point Source Category* is scheduled for October 2000. EPA will propose amendments to reflect significant industry changes related to consolidation and modernization within the U.S. steelmaking industry as well as advances in manufacturing technologies, in-process pollution prevention, water conservation practices, and end-of-pipe wastewater treatment.

Source: EPA Water Update

Technical Tip ...

The control authority is responsible for verifying that an industrial user's contract laboratory has an approved Quality Assurance Plan (QAP) on file with DEP. The information in the industrial user self-monitoring report provided to the control authority must be in accordance with the laboratory's QAP. The control authority should either have a copy of each industrial user's contract laboratory QAP on file or require the laboratory to identify their state issued QAP certification number and expiration date on each industrial user self-monitoring report.

Pretreatment Program Assignments

As mentioned in the Coordinator's Desk column, the pretreatment programs have been reassigned. Below is a list of active pretreatment programs and the assigned inspector.

Paul Brandl

Clearwater
Davie
Daytona Beach
Deland
Ft. Myers
Ft. Pierce
Holly Hill
Largo
Loxahatchee ECD
Manatee County
Melbourne
Miramar
Orange County
Orlando
Ormond Beach
Palm Bay
Plantation
Port Orange
Reedy Creek Improvement District
Rockledge
Sanford
Sarasota County
Seminole County
Sunrise
Tampa
Titusville
Vero Beach

Sal Resurreccion

Altamonte Springs
Apopka
Auburndale
Boca Raton
Broward County
Casselberry
Clay County
Ft. Lauderdale
Gainesville
Hillsborough County
Hollywood
JEA
Lakeland
Leesburg
Marion County
New Smyrna Beach
Ocala
Oldsmar
Palm Beach County
Pasco County
Pinellas County
Plant City
Polk County
Seacoast Utilities Authority
South Central WWTP
St. Augustine
St. Johns County
St. Petersburg
Tarpon Springs
West Palm Beach
Wildwood
Winter Haven

Divina Ruiz

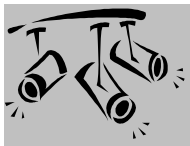
Bay County
Escambia County
Lake City
Madison
Milton
Okaloosa County
Categorical Industrial Users
Panama City
Perry
Port St. Joe

Reminder ...

The next Pretreatment Coordinators Meeting is scheduled for October 6 in the City of Largo. Contact Brian Dean at (727) 518-3076 for more details.

We look forward to working with the City of Clearwater, whose pretreatment program was recently approved!

Florida now has fifty-nine approved pretreatment programs.



In the Spotlight

Cheryl Staley-Archer, pretreatment coordinator for Orange County, received the Herndon Award for Pretreatment. Congratulations!

Quick Quiz ...

1. An industrial pretreatment facility consists of wastewater treatment processes designed to remove pollutants from wastestreams prior to discharge to streams and rivers.
   A. True
   B. False
2. The potential of an unannounced inspection at any time serves as an effective deterrent to noncompliant dischargers.
   A. True
   B. False
3. The EPA's pretreatment program requires that POTW agencies notify and help industrial companies to interpret and implement the federal regulations.
   A. True
   B. False
4. It is much easier to accomplish regulatory goals with industry through enforcement actions than it is through cooperation with industrial personnel.
   A. True
   B. False
5. Pretreatment inspectors may be involved in industrial chemical spills.
   A. True
   B. False
6. A representative sample is
   A. Collected during minimum flows.
   B. Obtained when industrial representatives are present.
   C. Similar to the larger body of wastestreams being sampled.
   D. Transported to a laboratory for analysis.

7. What is the main focus of pollution prevention?
   A. Disposing of the waste generated.
   B. Minimizing the amount of waste generated.
   C. Recycling the waste generated.
   D. Treating the waste generated.
8. What is waste minimization?
   A. Detoxification of hazardous waste.
   B. Storage of hazardous waste.
   C. Treatment of hazardous waste.
   D. Reduction of hazardous waste.
9. What is the primary role of the pretreatment facility inspector?
   A. Enforce regulations intended to protect the POTWs and the environment.
   B. Ensure proper disposal of industrial sludges.
   C. Prevent sewer overflows.
   D. Require industry to develop a pollution prevention program.

Answers: 1-B; 2-A; 3-A; 4-B; 5-A; 6-C; 7-B; 8-D; 9-A.

Florida Petroleum Residual Organic

An Alternative Method to Total Recoverable Petroleum Hydrocarbons by 418.1 or 9073

The Florida Department of Environmental Protection (FDEP) identified a need to find more environmentally sensitive replacement methods for the referenced tests because the currently approved methods use freon as a solvent. A Technical Advisory Committee (TAC) was formed during the rule development activities of Chapter 62-770 for the purpose of identifying a suitable method.

The FDEP expressed the need to have information concerning petroleum products in the diesel and motor oil range. Rather than adopting two or even three methods that would cover this range of product types, the FDEP and the TAC developed a method that combined several of the commonly used methods so that the targeted range of petroleum could be analyzed in a single method. A state-wide validation study was performed by thirteen volunteer laboratories.

FL-PRO utilizes a methylene chloride extraction with analysis by a gas chromatographic equipped with a flame ionization detector (GC-FID).

The Bureau of Waste Cleanup's programs whose rules specify the use of 418.1 or 9073 will now also accept data that has been generated by FL-PRO, and will ultimately amend their rules to require its use. This method is available for immediate use and may be obtained by calling the Quality Assurance Section at (904) 488-2796 and requesting "Method FL-PRO", revised November 1, 1995 or by downloading the method from the Quality Assurance Bulletin Board System, QUASI-BBS.

Laboratories who decide to use this method will need to amend their Comprehensive QA Plan (CompQAP) to include the method in their analytical capabilities. At a minimum, this will require the addition of the method to Section 5.0 of a 15-Section CompQAP or Section 2.0 of a CompQAP that has adopted the FDEP's Standard Operating Procedures. Amendments to other sections will be required if other changes are made in order to use this method (e.g., purchase of a GC, purchase of sample preparation equipment, etc.).

NOTE: Wastewater facilities may not use this method for TRPH or Oil and Grease. The use of this method is only applicable to the activities of the Bureau of Waste Cleanup that addresses Chapters 62-761, 62-762, 62-770, 62-773 and 62-775, or other corrective actions such as consent orders.

For more information, please contact John Watts, john.watts@dep.state.fl.us

Memorandum from Doug Jones, Bureau of Waste Cleanup and Silky S. Labie, Quality Assurance

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The **Pretreatment Communicator** encourages participation from its readers and any other individuals interested in pretreatment in the State of Florida. Please submit your letters, information, or articles to Pretreatment Communicator, Domestic Wastewater Section, Florida Department of Environmental Protection, 2600 Blair Stone Road MS 3540, Tallahassee, Florida 32399-2400. The **Pretreatment Communicator** reserves full editorial rights to all submissions.

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Please recycle or pass this newsletter on to other pretreatment staff.

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