

PRETREATMENT Communicator

January 2000, Volume 4 Issue 3

PUBLISHED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Coordinator's Desk

Happy New Year, Happy New Century, Happy New Millennium, etc., etc., etc. I trust you all survived the Y2K transition OK and you are probably as tired as I am about hearing about Y2K. So, without further discussion, let's talk about pretreatment.

It looks like we're hitting the ground running this New Year. There is a lot on the horizon for this year. For starters, I am sure we all are aware the proposed pretreatment streamlining regulations were published in the Federal Register and the comment period ended November 19, 1999. I hope you sent your concerns/comments to EPA in time. It appears that both AMSA and WEF are teaming up to make one last appeal to EPA to modify two key sections of the proposed regulations. Both organizations are still not satisfied that an industrial user would be in significant noncompliance if a report were more than 30-days late. They would like to see the requirement modified to 45-days and insert a clause stating that industrial users will not be deemed in significant noncompliance if they comply with pretreatment standards, no matter how late the report is received. Another area of concern is the pH limitation of not less than 5.0 at anytime. Both WEF and AMSA feel that the regulation should have a window to allow a pH of below 4 or 5 for no more than 60 minutes. The WEF and AMSA are preparing a "white paper" to address these and

(See *Coordinator*, page 3)

FDEP Pollution Prevention Program

by Betsy Galocy and Julie Abcarian
Florida Department of Environmental Protection
Division of Waste Management

Would you consider making simple changes to the way you do business in order to reduce costs, minimize liabilities, and reduce waste? What if these changes innately included the additional benefit of protecting the environment? Many of Florida's local governments and industries have found that "green politics" can also result in "green profit." Examples are plentiful, and all sectors of the economy can benefit:

- Pinellas County's Highway Department initiated chemical substitution, process changes, best management practices and on-site recycling to reduce hazardous and toxic air pollutants by 5.12 tons per year and expenditures by \$160,000 per year.
- A furniture manufacturer switched to water base adhesives and reduced toxic emissions by over 90%, eliminating the need for a costly USEPA Title V Air Permit.
- The Naval Air Depot in Jacksonville substituted a vapor degreaser with an aqueous parts washer and saves \$172,487 per year in solvent purchase and disposal costs.

Efforts such as replacing, conserving, or reusing materials that are the source of pollution, keeping containers covered and cool to eliminate evaporation, and using a "first-in, first-out" inventory control are all simple examples of pollution prevention. More complex solutions may include process improvements or replacing old equipment with new technology that prevents, rather than controls, pollution. Many businesses find that increasing the efficiency of business operations also lowers raw materials and labor costs. Other benefits may include eliminating hazardous waste management fees, expenses associated with pollution control, potential clean-up costs and long-term cradle-to-grave liabilities. Pollution prevention can also decrease worker exposure to toxins, decreasing absenteeism and insurance claims.

DEP's Pollution Prevention Program

The Pollution Prevention (P2) Program engineers offer non-regulatory services to assist Florida businesses and governments to prevent pollution. To date, over 400 requests for on-site P2 assessments have been provided, typically to small businesses with fewer resources to research and implement P2 options. Industries have included electroplaters, painters, boatyards, fiberglass manufacturers, and vehicle maintenance facilities, as well as port and airport authorities. Assistance has also been offered to non-point industries such as agriculture.

Services include telephone consultations, technical assistance visits, and site or process-specific research. An extensive Resource Center, which includes videotapes, industry publications, tip sheets, and case studies, is also available for your use. Requests for information may be phoned to the toll-free P2 Hot Line or transmitted through the P2 Program's web site. Copies of *P2 Links* newsletter are available at this site or by request. Recent issues include P2 in surface finishing and electroplating industries, and replacing mercury-containing devices in the medical industry with non-mercury substitutes.

P2 Program engineers have provided information to several trade associations and trade organizations, and organized training sessions for many local governments initiating their own local programs. Speakers are available to update the P2 knowledge of attendees at industry or government workshops.

District P2 Coordinators

A pollution prevention coordinator is available in each DEP district to assist industry and government by request, often in conjunction with the P2 Program. This service, which is also non-regulatory and free of charge, ensures that P2 concepts are readily available to the public throughout the state. This year, each coordinator will organize a P2 team to make recommendations within the district.

Local Government P2 Coordinators

Many counties and some cities also have pollution prevention coordinators who can provide P2 options for your consideration. Training classes held by the P2 Program over the past three years provided basic and advanced techniques to local governments interested in starting or expanding a P2 program.

Florida Pollution Prevention Roundtable

The Florida Pollution Prevention Roundtable (FLPPR) is a group composed of local government representatives organized to coordinate pollution prevention efforts in the state, improve the transfer of information, and maximize local efforts. The P2 Program budget provides travel and funding assistance to this effort, and staff time is contributed for meetings and conference calls.

A web site at <http://flppr.org> contains the Roundtable's current workplan. FLPPR's next board meeting will be held February 24-25, 2000, in Clearwater. For more information, contact Kay Gervasi at 954-519-1257.

Upcoming P2 Conference

The Fourth Annual Statewide Pollution Prevention Conference will be held June 7-9, 2000, in Clearwater, featuring speakers from government, large industry, and small businesses, as well as vendors and consultants. Government sessions will address pollution prevention in local programs, regulatory programs, and enforcement. Industry sessions will include process innovations for marinas, airports, and ports. Building construction and land development issues will also be discussed. For more information, contact Dawn Jenkins at the University of Florida TREEO Center at 352-392-9570, ext. 127, or at e-mail address djenkin@treeo.doce.ufl.edu.

Joint Statewide Thermometer Exchange

In conjunction with National Pollution Prevention Week, Sept. 20 - 26, 1999, P2 Program staff organized a statewide medical mercury thermometer exchange in twenty-nine

Florida counties. County and city representatives advertised the local events and collected mercury thermometers from the public in exchange for a mercury-free alternative. The mercury thermometers were then sent to a central processor for recycling. The project, which was funded by the US Environmental Protection Agency, DEP and participating local governments, was the largest mercury thermometer exchange in the nation to date. Over 14 kilograms of mercury were collected during this effort.

The services provided by the P2 Program are set forth in the State of Florida Pollution Prevention Act of 1991. To speak with a representative of the P2 Program, please call 850-488-0300, or SUNCOM 278-0300. To leave a message on the P2 Hot Line, call 1-800-741-4337. You can also send an electronic message via the P2 Program web site at <http://www.dep.state.fl.us/waste/programs/p2>. A

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other issues such as, the definition of nonsignificant industrial user, general permits, best management practices, and removal credits. It looks like EPA will have to continue its battle to resolve these matters and may delay final regulation promulgation. Stay tuned!!

We have received several requests for additional pretreatment training this year. While most of the state's pretreatment personnel received the "basic" and/or the "advanced" pretreatment training provided by EPA last February, not everyone was able to attend. Unfortunately, at this time I don't know if or when we would be able to arrange to have that same training in Florida again. It is continually offered by WEF at various locations throughout the US. However, as was decided at the last Florida Pretreatment Coordinator's Workshop in Melbourne in October, the City of Gainesville will host the next workshop and we plan to conduct some training on a few key areas of the pretreatment program. So if you want training, plan to attend the February workshop. See the announcement elsewhere in this newsletter for more details.

I would like to update you on the status of our State

Guidance Manual (SGM) for pretreatment program development and implementation. If you remember, a voluntary committee of pretreatment program personnel from various utilities was formed to review documents (i.e., forms, reports, permits, etc.) being used by the approved pretreatment programs. These documents would become part of a SGM to assist utilities in either developing or implementing a pretreatment program. After several meetings, the selected documents were sent to an EPA contractor under a grant from EPA. The contractor's job was to compile the documents, get them all in the same text style and format, and to add explanatory text to each set. Sometime later we received a draft of the SGM. The committee reviewed the draft manual and comments were sent back to the contractor in August 1998. Unfortunately, the contract amount was exhausted so EPA decided to complete the final changes themselves.

For over a year, I heard nothing from EPA regarding the status of the SGM. I made several e-mail inquiries, but did not receive any response. At the 1999 National AMSA/ EPA Pretreatment Coordinator's Workshop in November, I received a set of computer diskettes from EPA containing most of the SGM. Several parts are missing and, due to formatting problems, we cannot download the text directly. At this point we are still waiting for the remaining sections of the manual and are trying to correct the format problems. Once we receive the balance of the SGM and get the formatting problems corrected, we can begin the final review process. My hope is that we will be able to finalize, print, and distribute the SGM by the end of this year.

Unfortunately, I must report that Gary Millington, PE, will be leaving the Department. Gary has been an asset to the pretreatment program and will be missed by all. His last day with DEP is February 4. We all wish Gary the best of luck in his new position with Enterprise Florida.

As a result of Gary's resignation, we will need to change some program assignments until the vacant position is filled. Please bear with us as we replace Gary. If you have any program related questions, please contact me or Sal Resurreccion.

Finally, I would like to congratulate all the approved pretreatment programs for the fine job that they are doing. We have seen many improvements to the programs in the last several years. Our inspections generate fewer and shorter noncompliance letters. Generally, our letters require minimal response to correct minor deficiencies. Most programs have revised their sewer use ordinances and local limits since DEP took delegation from EPA. We appreciate the effort you have put forth to improve your pretreatment programs. Thank you and keep up the great work.

Robert E. Heilman



Technical Tips

The following ideas for preventing sanitary sewer overflows have been developed by the Central District Department of Environmental Protection problem solving team known as Team SOS, in conjunction with Orange County personnel. These ideas are made available to utilities with the hope that by implementing any or all of them, they will help “Keep Florida Beautiful”, clean and safe.

- Hydrogen sulfide can cause the electrical contacts to become brittle and short out, resulting in power interruptions at lift stations. Open ends of electrical conduits should be sealed with caulking to prevent hydrogen sulfide gas from entering the control panels.
- A vent stacks and blowers can be installed at large stations to reduce the hydrogen sulfide gas concentration in the ambient air to stop the electrical control panel metal degradation and contact burnout.
- Automatic telephone dialers can be installed at the lift stations to alert response personnel of power interruptions.
- Cell phone dialers may be most cost-effective in areas without phone lines, and can be relocated when phone service becomes available.
- Dialers should be programmed so that if a call rings more than three times without being answered the call will be automatically forwarded to the next responsible party.
- Equipment grounding requirements are spelled out in the National Electrical Code as a maximum of 25 ohms. Lift stations should be checked for adherence to the code to prevent unnecessary outages from power surges.
- New quick connect/disconnect large electrical connectors should be installed to reduced time to provide emergency generator power to a lift station experiencing a power outage.
- Lift stations that use a sensitive above ground single circuit breaker designed to interrupt power to protect the smallest motor may need to be retrofitted to provide individually sized circuit breakers for separate equipment. This not only reduces trouble shooting time if a breaker trips, but in many cases may prevent a complete power outage at the lift station.
- More emergency generators may need to be purchased and strategically located near sites that have recurring power problems.
- Battery operated audio warning devices that will function during a power outage should be installed at lift stations, in addition to the flashing light system, to attract the attention of home owners nearby.
- Magnetic stickers containing emergency response numbers may need to be provided to the residences adjacent to lift stations. These will make it much easier for them to call for a repair crew if the alarm goes off in the night or during a thunderstorm.
- Meetings can be held with the local power company to solicit their help in reducing overflows due to power outages. The time delay set by the power company May be creating false “outage” reports. By adjusting their time delay (to, say, 35 seconds) when they reset their power lines, they may eliminate many of these “false alarms.” Then three trip/signals occurring within 30 seconds will not result in an invalid power outage call and the maintenance crew can spend their time going to sites with real problems.
- Meetings may need to be held with the local power company to explain that if the power is restored to the residences first and the lift stations later, it will result in the citizens flushing and using water as soon as the lights go on. With no power at the lift stations, the sewage surcharges the lines and has no place to go, resulting in an overflow. The power company may agree to place a higher priority on restoring power to the lift stations so that the power is turned on at the lift station before it is restored to the area the lift station serves.
- The local power company may be willing to give a “hot line” phone number to the utility representative to be used only by key county personnel in cases of an emergency. This will be a big help in restoring power in cases where the public health is endangered by sewage flowing down the street.
- The float level for the “pump on” switch may need to be lowered, resulting in more frequent pumping of the wet well increasing its reserve volume. By maintaining a low wastewater level you are buying time for the response team to arrive and correct the malfunction before an overflow occurs.
- Sewer lines involved in an overflow situation should not only be cleaned, but also should be televised to determine the cause of the overflow so the problem can be corrected.
- Manholes may need to be rehabilitated in areas where overflows occur regularly or in areas prone to overflow conditions.
- A two tier approach should be taken in the preventive maintenance plans. Tier 1. effort should be used for normal lines that have not experienced an overflow condition. Tier 2. efforts may be needed to double the maintenance requirements on lines with flat slopes or

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lines that had a history of multiple overflows.

- Educate restaurant owners on the proper way to dispose of grease - as a solid waste rather than as wastewater. In Orange County a brochure was developed for this purpose. Over 700 of these brochures were sent to food establishments in the monthly utility bill mail-outs. In areas with chronic grease problems, the County inspectors discussed the brochure with the individual owner/managers.
- A Sewer Use Ordinance may need to be adopted to allow for fees to be collected to increase maintenance where needed and for enforcement action to be taken against chronic offenders.
- ARV, Air Relief Valves, should be inspected and cleaned to prevent the overflows that occur when the valves stick in the open position.
- ARV specifications may need to be upgraded to require that they be designed and sized specifically for each application rather than using a universal fit approach.
- Reduce the number of breaks during construction projects by increasing contractor awareness, improving supervision and locating sewer lines as accurately as possible.
- Emergency response telephone numbers can be stenciled on the utility line marker flags to reduce the response time for getting the correct people to the site for clean-up and repairs in the case of a sewer main break during construction.
- Emergency telephone numbers for key response people should be spelled out on the construction drawings for faster response to line breaks in the field.
- Improved notes for construction drawings may need to be adopted to establish the contractor's financial liability when an active sewer main is broken. Hopefully, this would be a deterrent to careless construction techniques.
- Manhole covers can be removed during and/or after a severe rainstorm to observe the depth of water in the manholes, as an indication of inflow problems. If the manhole appeared to be surcharging (filling with water) the lines entering it could be scheduled for maintenance at once.
- Check suspect sewer lines at 2 am to look for clear rapid flow that would indicate infiltration and therefore would overload the lift station during peak hours.
- Examine the lift station floors for any cracks that would allow an upwelling of groundwater that would constantly surcharge the station, reducing the available storage and increasing the flow to the treatment plant.
- Conduct smoke tests on large expanses of the sewer

lines to locate any cross connections between the sanitary sewer and the storm sewer or to identify any broken sewer lines.

- Conduct tests where dye is added to the storm sewers during a period of heavy rainfall to determine if the stormwater is entering the sewer system and creating an overflow condition. A

DEP Secretary Narrows Focus on Domestic Waste

Aims to cut significant violations by wastewater plants

On October 25, 1999, the Florida Department of Environmental Protection (DEP) Secretary David Struhs announced a decision to ramp-up efforts to cut significant violations by domestic wastewater plants in Florida. The decision was based on data in the latest edition of the *Secretary's Quarterly Performance Report* and analysis by DEP's Division of Water Resource Management.

Analyzing a year's worth of data from 4400 inspections, DEP found more than twenty percent of the wastewater plants significantly out of compliance. Water Resource staff will evaluate the causes of this non-compliance to focus DEP's efforts at the root causes.

"The first thing we want to do is look behind the data," said Mimi Drew, Director of the Division of Water Resource Management. "Once we determine the causes of the violations, we can focus on the most important ones — those that affect the environment and public health."

An action plan to cut those violations is expected early in 2000.

"We're committed to driving our efforts and determining success based on environmental data and performance measures," said DEP Deputy Secretary Lisa Edgar. "This project is just one example of that commitment."

For more information please see the *Secretary's Quarterly Performance Report* on the internet:

<http://www.dep.state.fl.us/ospp/report/intro.htm> A

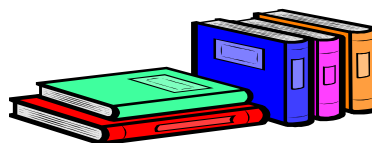
Announcemer

The *Guidance Manual for the Control of Wastes Hauled to POTWs*, September 1999, is now available from EPA. The document number is EPA 833 B 98 003.



Regulatory Upc

- The final rule for *Effluent Guidelines and Standards for Centralized Waste Treatment* is scheduled by the Environmental Protection Agency (EPA) for August 2000. The rule will address facilities that receive hazardous and non-hazardous waste from off-site locations for treatment or recovery (excluding solvent recovery).
 - The final rule for *Effluent Limitations Guidelines and Pretreatment Standards for the Landfill Point Source Category* was published in the Federal Register January 19, 2000. The rule establishes technology-based effluent limitations for wastewater discharges associated with the operation and maintenance of new and existing hazardous and non-hazardous landfill facilities regulated, respectively, under Subtitle C and Subtitle D of the Resource Conservation and Recovery Act (RCRA). The final rule does not establish pretreatment standards for the introduction of pollutants into publicly owned treatment works from the operation of new and existing landfills regulated under Subtitle C or Subtitle D of RCRA.
 - Promulgation of proposed *Effluent Limitations Guidelines and Pretreatment Standards for the Industrial Waste Combustor Subcategory of the Waste Combustors Point Source Category* was planned by EPA for November 1999. The rule would limit the discharge of pollutants into waters of the United States and the introduction of pollutants into POTWs by existing and new facilities in the Industrial Waste Combustor Subcategory of the Waste Combustors Point Source Category.
 - The final rule for *Effluent Limitations Guidelines and Standards for Transportation Equipment Cleaning* is scheduled for June 2000. The rule contains effluent limitations guidelines and standards for transportation equipment cleaning facilities which clean the interiors of tank trucks, intermodal tank containers, intermediate bulk containers, rail tank cars, tank barges, ocean/sea tankers, and other similar transportation equipment.
 - The final rule for *Guidelines for Establishing Test Procedures for the Analysis of Pollutants; Available Cyanide in Water* was published in the Federal Register on December 30, 1999. The rule amends the Guidelines Establishing Test Procedures for the Analysis of Pollutants under section 304(h) of the CWA to augment currently approved available cyanide test procedures with Method OIA-1677, and provides another procedure for measuring available cyanide.
 - On October 26, 1999, EPA promulgated the final National Emission Standards for Hazardous Air Pollutants (NESHAP) for new and existing publicly owned treatment works (POTW). The primary hazardous air pollutants (HAP) emitted by these sources include xylenes, methylene chloride, toluene, ethyl benzene, chloroform, tetrachloroethylene, benzene, and naphthalene. Each of these HAP can cause adverse health effects provided sufficient exposure. For example, exposure to methylene chloride can adversely affect the central nervous system and has been shown to cause liver and lung cancers in animals, while benzene is known to cause cancer in humans. With this final rule, the EPA is requiring air pollution controls on a new or reconstructed treatment plant at a POTW that is a major source of HAP. The standards also require that new and existing POTW treating regulated waste streams from an industrial user, for the purpose of allowing that industrial user to comply with another NESHAP, meet the treatment and control requirements of the other relevant NESHAP. For the final rule, background information document, and fact sheet, visit the following website: <http://www.epa.gov/ttn/oarpg>
- Please anticipate receiving a memo from the Department of Environmental Protection Division of Air Resources Management explaining the details of how the NESHAP may or may not apply to your POTW. You can also call DEP staff member, Cindy L. Phillips at (850) 921-9534 for more information. The memo may also be printed in a future edition of the *Pretreatment Communicator*.



Source: EPA Water Update, January 2000

Pretreatment Program Activities

Contact the Tallahassee DEP pretreatment program for more information on any of the following:

- DEP staff member, Richard Addison attended the 1999 Water Environment Federation Technical Exhibition and Conference in New Orleans, LA, and picked up the following pretreatment related papers:

H Utilizing "Clean" Sampling and Analytical Methods to Establish Site-Specific Data for Developing Industrial Pretreatment Limits

H "Opening the Line of Communications" Technical Assistance and Industrial Pretreatment Regulatory Flexibility Initiatives

H Local Limit Data Utilized to Streamline Chesterfield County's Industrial Pretreatment Program

H Trends in Reduction of Toxic Pollutants

H Refinement of the EPA's POTW Pass-Through Analysis Method for Application to the Pharmaceutical Manufacturing Industry

H An Analysis of Boeing's Alchem Process: Reuse of Aluminum Scraps for Industrial Wastewater Treatment

- The City of Lakeland Water Utilities Department developed a web page on the internet. The City's main website address is <http://www.city.lakeland.net>. Click on the Water Utilities link, the wastewater operations link, and then the pretreatment link to find out about the City of Lakeland pretreatment program.
- The City of Lake City Wastewater Facilities also has a website: <http://www.isgroup.net/wastewater>
- A paper entitled "DEP Pretreatment Program Requirements" written by the City of Hollywood pretreatment program staff members was published in the December 1999 Florida Water Resources Journal.

According to EPA ...

Thirty-one of forty-two NPDES States have approved Pretreatment programs ...

Approximately 1,600 POTWs are required to implement Pretreatment programs ...

Pretreatment POTWs receive 80% of national wastewater flow (~ 30 billion gal/day) ...

An estimated 270,000 industrial users discharge to POTWs, of which there are 31,842 Significant Industrial Users (SIUs); 14,914 of the SIUs are subject to categorical standards; 16,928 of the remaining SIUs are defined by one of the following criteria: 25,000 gallons per day process flow; 5% of hydraulic or organic flow of POTW; reasonable potential to cause pass through or interference ...

Welcome to the Pretreatment Family

New pretreatment programs have been approved for the City of Miramar, the City of Ormond Beach, the City of Palm Bay and the Reedy Creek Improvement District.



We now have fifty-seven approved pretreatment programs in Florida ...

Pretreatment Communicator

In order to evaluate Florida's response to grease problems in collection systems, we ask that you complete the following survey. Please provide as much detail as possible and attach any requested information. Return the survey to:

Department of Environmental Protection
Domestic Wastewater Section - Pretreatment Program
2600 Blair Stone Road, MS 3540
Tallahassee, Florida 32399-2400

Grease Control Program Survey

Pretreatment Program Name _____

Contact Person _____

Telephone Number _____

1. Do you have problems associated with oil and grease discharges (e.g., sewer system overflows, blockages)? Yes___No___
2. Do you have a program to control grease discharges to your collection system? Yes___No___
(If YES, how long has the program been active? _____)
3. Is there a grease control program being developed? Yes___No___
(If you answered NO to questions 1-3, thank you...you're done)
4. Is the program mandatory or voluntary? Mandatory___Voluntary___
5. Are the program requirements contained in the sewer use or pretreatment ordinance?
Yes___No___
(If YES, please attach a copy of those requirements)
(If NO, where are the program requirements specified?
_____)
6. How many facilities are regulated by your grease control program? _____
7. Are grease discharging facilities issued permits? Yes___No___
8. Does your program require grease traps in all grease producing facilities? Yes___No___
9. Does your program require grease trap pumping? Yes___No___
(If YES, how often?_____)
10. Do you or other local agencies permit grease haulers? Yes___No___
11. Are manifests or other tracking mechanisms required for grease haulers?
Yes___No___
12. What recordkeeping requirements do dischargers have?

Additional Comments: _____



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The **Pretreatment Communicator** is a quarterly publication of the Pretreatment Program of the Florida Department of Environmental Protection.

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.

Anyone with questions or comments about this newsletter or wanting to be included on the mailing list should contact the pretreatment program staff at the above address or at (850) 488-4524. The Department of Environmental Protection assumes no responsibility for the statements or opinions expressed in this newsletter. Views and information contained in this newsletter are those of the authors and do not necessarily reflect those of the Department.

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