PRETREATMENT COMMUNICATOR

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COORDINATORS DESK

Dawn Templin
FDEP Pretreatment Coordinator

Rulemaking activities associated with revisions to Chapter 62-625, F.A.C., continue. The Department held a public workshop on July 22 and has received some comments on the draft revisions. The Department is in the process of revising the draft rule based on the comments that were received. A revised draft of Chapter 62-625, F.A.C., can be found on the internet at: http://www.dep.state.fl.us/water/rules_dr.htm#waste

Celina Dozier left the Department to attend school in Texas. We are working on replacing her. If Celina was your inspector and you have questions regarding you pretreatment program, please contact me until a replacement is hired.

Pretreatment inspections for the 2009-2010 year will begin in October, so please watch your emails for the inspection notice and respond to your inspector to confirm the inspection date and time.

As always, the Department is here to assist you concerning your pretreatment program. Please contact Hsiang Chou-Hoofman at (850) 245-7566, Sam Jinkins at (850) 245-8609, or me at (850) 245-8601, if you need assistance or have questions.

START YOUR ENGINES AND RACE TO FIPA'S FALL WORKSHOP AND CERTIFICATION COURSES!

Port Orange will host both the FIPA Voluntary Certification courses and Fall Workshop during the first week in November.

Industrial Pretreatment level C & B as well as the new FOG Management classes will be held November 3-5.

On November 6 FIPA's Fall Workshop will include the following topics:

- Latest news from FDEP on 62-625 FAC modifications
- Priority Pollutants
- Sources of metals
- Metal finishers and powder coating

Seats are limited so register early!

Visit: http://www.fipaonline.com/ for more information.

TRAINING OPPORTUNITES

Oct 10-14	WEFTEC http://www.weftec.org/home.htm	Orlando, FL
Nov 3–5	FIPA Voluntary Certification Courses http://www.fipaonline.com/	Port Orange, FL
Nov 6	FIPA Fall Workshop http://www.fipaonline.com/	Port Orange, FL
Nov 3–6	WEF Industrial Pretreatment Training http://www.wef.org/ConferencesTraining/EventCalendar/	Arlington, VA
May 12-14	NACWA 2010 Pretreatment & Pollution Prevention Workshop http://www.nacwa.org/index.php?option=com_content&view=article&id=37&Itemid=37	Phoenix, AZ

A MESSAGE FROM THE PRESIDENT

Mark Mathis
FIPA President

Breaking News…Explosive Situation Collection System Emergencies

Sometimes it seems like the Pretreatment Program is the catch all, do all, and be all in a public utility. I know that is not the case, but it seems that way at times. After all, Pretreatment Programs are responsible for protecting the wastewater facility which starts at the point at which customers connect and ends at the point of effluent disposal. It is easy to become so involved in day-to-day program activities that we miss important opportunities. Have you ever considered how your program, department, or, public utility, would manage an actual collection system emergency?

In many cases industrial users develop spill control and countermeasure plans that evaluate vulnerability and provide guidelines for an organized response. Developing such plans is a good exercise. When done properly spill control and countermeasure plans force industrial users to take a serious look at their facility, how it operates, chemical storage practices, and so on. The same can be said for developing Toxic Organics Management Plans (TOMPs), which may be of interest to those of you that regulate metal finishers and certain other categorical industrial users.

So what happens though when things go wrong? For example; a chemical transfer pipe at an industrial facility bursts releasing petroleum based solvents. A flammable solvent slug is introduced into your collection

(Continued on p. 3)

JOIN THE NOMINATION NATION

Nominate an outstanding member or IP program for the 2009 FIPA Awards Program.

The **John Parnell Award** is presented to the individual FIPA member that has made significant contributions in promoting the industrial pretreatment program in Florida.

The **Robert Heilman Award** is presented to an Industrial Pretreatment program demonstrating a dedication to promoting the FIPA goals of enhanced education and utilizing innovative communication and regulatory approaches to achieve compliance and protect the environment. Nomination forms can be found at: http://www.fipaonline.com/

All nominations should be sent to:
Susanna.Littell@ocfl.net

The **Pretreatment Communicator** is a semi-quarterly production of the Florida Industrial Pretreatment Association (FIPA). The **Pretreatment Communicator** encourages participation from its readers and any other individuals interested in pretreatment in the State of Florida. Please submit any comments, ideas, or articles to Pretreatment Communicator c/o Dan Parnell, 21 W. Church St. T-8, Jacksonville FL 32202 or email to parndp@jea.com. The Pretreatment Communicator reserves full editorial rights to all submissions. FIPA 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 FIPA.
Editor – Dan Parnell

FUELING GOOD

With the shift to sustainable fuel sources, comes potentially new waste streams for pretreatment professionals to evaluate for compatibility with the publicly owned treatment works (POTW). Biodiesel, an alternative fuel derived from various natural oil stocks, is becoming common place in many utility and municipal fleets.

Used restaurant grease can be a feedstock for biodiesel production. This is typically the fryer or yellow grease that is collected in grease recycling bins. Grease recovered from interceptors ,or brown grease, has proven too cost prohibitive for biodiesel production.

Utilizing yellow grease has created a market for the slippery substance. Market pressure in turn encourages food service establishments to recover grease rather than washing it down the drain and into the trap. Less grease in the trap means less grease in the sewer system. Besides yielding a locally produced alternative fuel source, biodiesel can help protect the utility's collection pipes.

Yellow grease is not the only feedstock. Certain crops are also grown and processed for their oil. These practices have come under criticism as not truly sustainable due to the energy requirements needed to grow and harvest the crops. But that's the subject of a different article in a different newsletter.

Regardless of the source of the feedstock, biodiesel production follows the same general steps. The first waste stream generated are solids filtered from the oil. If recycled restaurant grease is used, then there is no telling what could be captured. It is doubtful that any POTW has a collection system forgiving enough for that material!

The oil stock is then combined with a mixture of caustic and methanol. The ensuing reaction strips glycerin from fatty acids. Two distinct layers are created as glycerin settles leaving biodiesel floating on top. The glycerin along with some un-reacted methanol is then pulled from the bottom as the next waste product. The ratio of glycerin to methanol in this gooey volatile mess can vary. Frequently the methanol is recovered and

(**Continued on p. 4)**

FIPA Responds to FDEP Proposal

The Florida Department of Environmental Protection has proposed modifications to the state industrial pretreatment regulation, Chapter 62-625, Florida Administrative Code. The intent of the FDEP proposal is to clean up the existing rule and incorporate the federal streamlining rule of 2006.

Representing member's concern's with the proposed changes, FIPA has provide a written response to FDEP. FIPA's response is published on our web site at: http://www.fipaonline.com/

(Message, Continued from page 2)
system through the industry's floor drains over night. During routine maintenance, lift station crews detect solvent odors the next morning. The lift station crew reports the solvent odor to their supervisor, who then notifies you that the gas detector indicates an explosive atmosphere in the wet well.

Other departments in the utility may have this situation well in hand and only involve the pretreatment program when the "who done it" time comes. What would be an appropriate response, however, if one day you are faced with this type of situation? A good starting point would be to immediately go into the isolate and contain mode, which by the way, carries several different considerations. First, isolate the lift station from the rest of the collection system, both incoming and outgoing. Then, contain the solvent contaminated wastewater until it can be properly identified and neutralized, or, removed from the system for alternate treatment and disposal.

It may be a good idea to have the water distribution folks shut off the water supply to the industrial park and other customers that discharge to the affected lift station. Utilities crews will be needed to trace the solvent upstream so that it too can be isolated and contained. Isolate and contain also applies to the health and safety of utilities employees, customers and the general public. So, if conditions

(Continued on p. 4)

Message, Continued from p. 3
are favorable for a fire or explosion, appropriate action should be taken prevent harm to individuals and infrastructure. That means the fire and police departments will very likely become involved.

By this time everyone in the chain of command up to the Mayor's office should have some awareness of the situation. These folks are going to have a lot of questions and will want good answers. So it would be a good idea to pass all information through the utilities communication officer. Keep in mind that your local Health Department should be notified as well as the State of Florida Warning Point. And yes, television stations will have their helicopters buzzing overhead and cameras will be rolling to provide, "Breaking News! Fire and Police are on the scene in an industrial park where utilities official say that…" One can see how a situation like this snowballs quickly to involve multiple utility departments as well as multiple outside agencies.

Can you imagine responding to a real situation like this off the cuff with no emergency plan in place? Don't let this happen to your utility. Be prepared. Ask around and find out if your utility already has this type of emergency plan in place. If the answer is, yes, find out if the plan includes the pretreatment program. What role does the pretreatment program have in the plan? Does the role for the pretreatment program seem realistic?
We all hope that we will not have to respond to a collection system emergency like the one described here. It is not enough to hope that it will not happen. We need to have a plan!

For More Information

EPA has guidance manuals intended to help your IP program prevent or deal with nuisance and dangerous industrial discharges.

Guidance Manual for Preventing Interference at the POTW http://www.epa.gov/npdes/pubs/owm0194.pdf

Guidance To Protect POTW Workers From Toxic And Reactive Gases And Vapors

http://www.epa.gov/npdes/pubs/owm0256.pdf

Guidance Manual for Control of Slug Loadings to POTW http://www.epa.gov/npdes/pubs/owm021.pdf

(Fueling, Continued from p. 3)
re-used. This waste stream can range from 70% glycerin/ 30% methanol to nearly 100% glycerin depending on the extent of methanol recovery. Even with as little as 2% methanol, this mixture can still exhibit a flashpoint less than140 F and be considered hazardous waste.

Glycerin has a high viscosity which may cause problems in the collection system. If it actually made it to the plant, glycerin is biodegradable; but this concentrated form could exert too high of an oxygen demand for typical treatment works. However, some POTWs have had success using this waste stream as a carbon source for de-nitrification under controlled conditions.

The final waste stream is created when the biodiesel is rinsed with water. Descending through the biodiesel, the water removes excess glycerin entrained in the fuel. Since this glycerin is diluted it may be more compatible with both the collection system and the treatment facility. Even with dilution the oxygen demand should be evaluated prior to authorizing discharge.

Both private and public entities are turning to biodiesel as a means to reduce fossil fuel consumption and emissions. Pretreatment professionals can best facilitate these sustainable endeavors by understanding the waste streams generated and providing guidance how they should be properly managed.

The EPA recently posted a letter detailing biodiesel production's applicability to categorical pretreatment standards. It can be found at:
http://www.epa.gov/npdes/pubs/memo_biodieselpretreatment_aug08.pdf