



PRETREATMENT COMMUNICATOR

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COORDINATOR'S DESK

Talk From Tallahassee

Bob Heilman, P.E.
FDEP Pretreatment Coordinator

I apologize for not attending the last FIPA meeting, but due to a death in the family I had to travel up north at the last minute. However, I did hear about the excellent attendance at the Orlando meeting. I would like to encourage everyone in the pretreatment community to attend as many of these workshops as possible. Between the great fellowship and the quality of the agenda items, I'm positive that everyone comes away from these workshops with something of value that will help them in their job. I'm also glad many of you got to meet our newest Pretreatment Engineer, Dawn Marcus, at the Orlando workshop. If not, I guess she'll be seeing you during her inspections and/or audits in the coming months. Congratulations to the 2005 Board of Directors (BOD). I look forward to working with the BOD to enhance the visibility of FIPA and to continue to provide quality training to pretreatment personnel throughout the state. We have begun the planning for the February, 2005 FIPA/DEP Workshop. The preliminary plans are to hold two days of training on the 17th and 18th in Jacksonville.

Good Golly Miss Moly!

Dan Parnell
JEA Industrial Pretreatment

In 2003, JEA commissioned a state of the art Biosolids Reuse Facility. For over 18 months pellitized Class AA residuals were produced for marketing and land application. Instead of hauling the biosolids to the landfill, this material was now a beneficial reuse product. That changed this past summer. Starting in April '04 the concentration of molybdenum (Moly) in the residuals
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The first day will consist of information and training on low level analyte sampling and analyses, specifically mercury. The speakers will include laboratory instrument manufacturers, DEP regulatory personnel, and commercial laboratory analysts. The second day of the workshop will be an introduction to the new Local

Limits Information Development System (LLIDS). This "new" LLIDS will provide the user with a more powerful tool with which to calculate or re-evaluate local limits. We plan to distribute the initial version of a User's Guide for LLIDS to all attendees and also BETA test versions of the actual software for selected pretreatment programs. We will be taking feedback from you on this introduction to determine the level of comprehension of the LLIDS program and to help us establish further training priorities. Due to the unavailability of student PCs at the workshop site, "hands-on" training will not be possible at this workshop. The remainder of the workshop will be presentations on particular industrial categories and presentations from various industrial users themselves. Specific details are not available at this writing. We will try to get the information out to everyone right after the Holidays. From the regulatory arena, we are all still waiting for EPA to finalize the Streamlining Regulations. Once this happens, the Department will open Chapter 62-625, Florida Administrative Code for revisions. These revisions will include the streamlining requirements, as well as, a general clean up of the rule to correct some typographical errors and incorrect rule references. I expect we will also be clarifying annual report requirements in the rule. I would like to wish everyone a very Merry Christmas and pray that you will have a joyous New Year. Be safe out there. I'll see you in February.

TRAINING OPPORTUNITES

February 17-18 FIPA Winter Workshop

Jacksonville

March 28 - April 1 Short School - get more info at
(<http://www.fwpcOA.org/main.html>)

Lake City



A MESSAGE FROM THE PRESIDENT



Well I thought that this would be my last article for "A Message From the President", but I must have done something right to be re-elected FIPA

President. I do appreciate the confidence you all have in me. Over the years I have enjoyed helping and working with most of you at one time or another.

I had a great time at the FIPA Workshop at Universal Orlando and hope everyone enjoyed it also. I would like to thank the speakers, sponsors, and all who attended for making this Workshop a success. I also want to thank Universal Orlando and the Double Tree Hotel for accommodating us with all of the scheduling problems caused by the hurricanes. Hopefully next year will be better!

If there is anything I can do or in some way help, please let me know. If you have an idea that you think will improve FIPA, please let me know.

We are still in need of a facility for the FIPA Workshop in the southern region for the summer of 2005. So be thinking of this for your next workshop. It helps to know the workshop location in advance so our members can plan ahead.

Dan Parnell is the editor for the FIPA/FDEP newsletter and he will have more information on the upcoming February Workshop. If you have an article to share or information that needs to get out to our members, please let him know. Dan is also heading the Education

Committee, so if you are interested in helping with this committee please contact him. We have added the minutes from the November Board of Directors meeting to the FIPA website (<fipaonline.org>) so our members can find out what the Board is doing. I am hoping to see you at the February 18, 2005 FIPA WORKSHOP in Jacksonville.

Sincerely,
Andy Johnson
FIPA President

Changes In Industrial Pretreatment Certification Program

Beginning in late 2005, Florida Industrial Pretreatment professionals will see a major change in the voluntary IP Certification Program. In the past, certification was through the Florida Water Pollution Control Operator's Association (FWPCOA). After the spring short school, certification will be through FIPA.

With FIPA providing the certification, there will be more flexibility in training location, dates of training, and training format. FIPA will be partnering with other organizations to continue to provide CEU's to our members.

A committee will be working to have at least a "C" level class ready for the summer of 2005.

If you would like to help out, there is much work to be done in the areas of accreditation, curriculum, content, and certification policy. To help in the development of this program, please contact Dan Parnell (parndp@jea.com).

A special thanks to Kassandra Barnes, Brian Dean, Mark Mathis, John Parnell, and Paul Salerno for volunteering to help!!

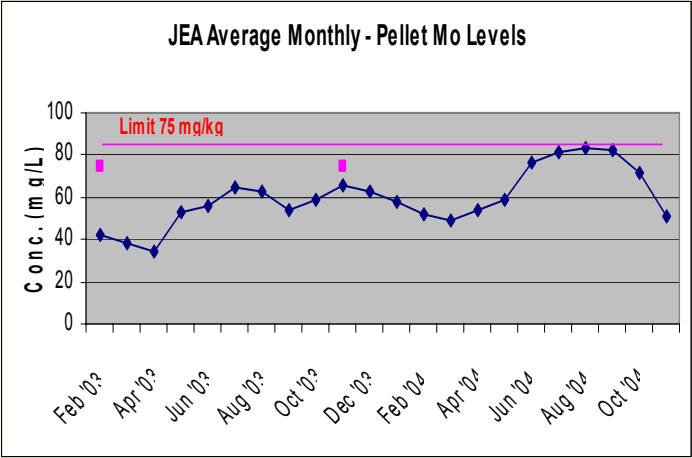
Correction from Last Issue

In the July issue, Rodrigo Moriones, Field Investigator for the Broward County Office of Environmental Services was inadvertently omitted as co-author of the article "Cleaning Up Shop-P2 in Broward Co."

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

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 began to increase dramatically. The ceiling limit established for Moly in land application is 75mg/kg (40CFR 503.13).
 By June, JEA residuals were exceeding this limit. (See graph below)



These exceedances meant that pellets could not be land applied. The only recourse was to haul the pellets to the landfill. This cost an average of \$2000 per day and the loss of a new facility built to reuse residuals.

The first step in an investigation by JEA Industrial Pretreatment (IP) was to determine possible sources of the Moly. Two sources were identified:

- Cooling tower water conditioner – in the form of sodium molybdate is widespread throughout Jacksonville.
- Motor oil – two Centralized Waste Treaters (CWTs) recover, treat and recycle used oil.

The Biosolids Reuse Facility receives sludge from 5 regional Water Reclamation Facilities (WRF). To determine if the Moly was coming from a specific area, IP initiated influent/effluent monitoring at each WRF. IP's next step was to determine if the amount of Moly JEA was receiving from cooling tower blow down and the CWTs was significant.

IP contacted vendors (10 companies) that supply chemicals to cooling towers in Jacksonville. Each vendor was informed of the problems JEA was experiencing and asked to supply information on the use of molybdates in their treatment regimen. The vendors were understanding and helpful in providing the needed information. With this and data from WRF influent/effluent monitoring a rough mass balance was calculated for Moly in sludge. It was estimated that 5.8 lbs./day of Mo in the pellets could be from cooling towers alone. It only takes 5.5 lbs/day of Moly in the pellets to reach the ceiling limit!
 It seemed cooling tower blow down could be the culprit.

Trending data helped confirm this conclusion. Data from the past 2 years (see graph), suggest that Moly levels increase during warmer months and decrease in the cooler ones. This would correlate with cooling tower activity.
 Results from WRF monitoring found that the plant that receives wastewater from most hospitals and the large buildings in the downtown area also received 83% of the molybdenum.
 JEA was still looking at the CWTs.
 Representatives of the CWT's supplied data on Moly from their oil recovery business. It was present, but typically in quantities less than 0.25 lbs/day. One CWT confirmed that they had a used oil customer that could contribute up to 3 lbs. of Moly in a week. The CWT voluntarily stopped receiving used oil from that customer. While IP continued to look for strictly industrial sources of Moly, the data suggested that if we could get Moly out of cooling tower blow down, we would remove
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Biosolids Pellet Drying Drum

2005 FIPA Officers Selected

The following members were selected as FIPA officers for the upcoming year at the Fall FIPA Workshop in Orlando.

President	Andy Johnson
Vice President	Mark Mathis
Secretary	Kim Ouellette
Treasurer	John Parnell
Northern Reg Coord	Dan Parnell
Central Reg Coord	Rob Powers
Southern Reg Coord	Kassandra Barnes
Past President	Brian Dean

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enough from the sludge to get back within the limit. We then focused on controlling this waste stream. In early August '04, we went back to the vendors. Moly is not an active ingredient, but is used as a tracer to determine the concentration of treatment chemical in the tower.

There is a Moly free alternative that is used in other municipalities that have experienced similar problems (such as Tampa and Orlando).

The vendors agreed to start supplying the Moly free chemical as the current inventory at each tower



The Culprit: Cooling Tower Blow Down
Moly Free is the Way to Be!

was exhausted. Unfortunately, these inventories could last up to 4 months and the Moly concentrations in the pellets were still rising.

IP turned to its 85 permitted Industrial Users (IUs) for help. Since many of these industries utilize cooling towers, an appeal was made to try and get an immediate reduction in molybdenum. A letter was sent to each IU informing them of the problem and requesting that if they have cooling towers using Moly to please have their vendor immediately switch to the alternative.

Most IUs were very responsive. Not only did they honor our request, two informed us that they use molybdenum in strictly industrial processes. One of these voluntarily found and switched to a Moly free alternative.

In little over a month after taking these actions, molybdenum was out of 70% of the cooling towers, two industrial processes, and Mo levels in the pellets were dropping. By mid September pellets were within specification and once again available for reuse.

If it were not for the tremendous cooperation we received from our industries and the chemical vendors, we would not have been able to turn this around so quickly.

Looking back, with the many industries we deal with in Jacksonville, pollutants from cooling tower blow down never seemed a major concern - we were proven wrong. Looking forward, we are developing a Best Management Practices for Cooling Tower blow down as a source control of molybdenum and hopefully to prevent another pollutant in this waste stream from surprising us.

2004 National Pretreatment Coordinators Workshop Presentations Available On-Line

If you missed the National Pretreatment Coordinators Workshop October 27-29 in Norfolk, VA, you can find the presentations on the AMSA website at:

<http://www.amsa-cleanwater.org/meetings/04pret/ppt/>

Topics include Local Limits, BMP Implementation, P2 Practices, IP & security, and the waste stream all FL programs are concerned with; Airport De-icing Waste Streams!

***FIPA and FDEP Wishes Everyone
A Happy and Safe Holiday Season !!***

