CleanConnections

...Birth, Death, but Maybe Not Taxes

JEA Industrial Pretreatment often requires our industrial users to install pre-treatment equipment. This is typically done to receive a discharge permit as part of compliance order requirements, or to meet effluent limits. While industries strive to meet and even exceed environmental requirements, the costs involved with treatment equipment purchases and installation can be a tough pill to swallow.

The Florida Legislature has provided some relief from this burden. Since 1999, manufacturing industries have been authorized a sales and use tax exemption for pollution prevention equipment. According to the Florida Department of Revenues (FLDOR) Tax Information Publication (TIP) #98(A) 1-28, "...this includes transactions for the purchase or lease, reconstruction, repair, or replacement of any facility, device, fixture, equipment, machinery, or structure used primarily for the control or abatement of pollution or contaminants..." To qualify for the sales or use tax exemption, the equipment must be installed to comply with a law implemented by, or a condition of a permit issued by, the Florida Department of Environmental Protection (FLDEP).

So, how does this apply to JEA's Industrial Pretreatment program?

JEA has delegated authority from the FLDEP. Any requirements the local authority imposes are ultimately to comply with FLDEP rules. This allows local industries to be eligible for the exemption. If you need to install new pretreatment or upgrade existing technologies, check with the Florida Department of Revenue to find out more about getting a tax break for your company. The FLDOR TIP sheet provides the details and necessary forms for this exemption. It can be downloaded from: http://dor.myflorida.com/dor/tips/1998.html

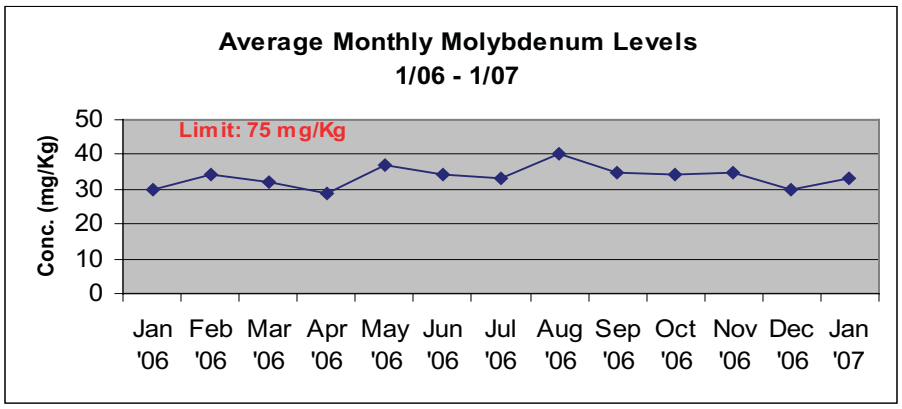
Treatment Plant Update

JEA Regional Water Reclamation Facilities (WRFs) had a great year in terms of environmental compliance in 2006. Combined, the WRFs treated an average 61 million gallons per day of wastewater. Of the five regional facilities, the Buckman, District 2, Southwest and Arlington East WRFs were violation free for the year.

On the residuals side, JEA produced an average 39 tons per day of bio-solids pellets for re-use as a class AA soil amendment. The main pollutant that has interfered with bio-solids reuse, molybdenum, has been well below the ceiling limit established by EPA as seen in the graph below.

Our industrial customers have certainly contributed to these successes by properly managing process wastewater. Since 2000, the industrial non-compliance rate has seen a 63 percent reduction. Keep up the good work, industries!

Molybdenum Concentration in JEA Bio-solids



Compliance Tip
BATCH DISCHARGE! – 24 hour Notification Requirement

Some Industrial Users (IU) who discharge batch wastewater to JEA are required in their IU Discharge Permit to notify JEA at least 24 hours prior to the discharge. This window allows Industrial Pretreatment (IP) the opportunity to schedule sampling and inform the Water Reclamation Facility operators of the additional flow. Notices received fewer than 24 hours prior to discharge could be subject to postponement or may result in a non-compliance. Due to a heavy rain event or some other unforeseen occurrence, an industry may need to perform an emergency discharge of wastewater. In this case, please contact your IP compliance inspector for assistance.

Information required on the notification form includes facility name and permit number, date and time of discharge, volume and duration of discharge and pre-discharge sampling information (if required by permit). A copy of the batch discharge notification can be downloaded from the JEA Website at: http://www.jea.com/about/pub/downloads/ip/batchnotification.pdf

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Got Slugs?

JEA Industrial Pretreatment (IP) is beginning a new series of annual inspections with an increased focus on accidental discharge and slug control plans (ADSCP). Slug discharges are defined as any discharge to the sewer system of a non-routine, episodic nature, including but not limited to an accidental spill or non-customary batch discharge. An ADSCP is designed to prevent accidental spills and slug discharges from entering the collection system.

During the annual inspection process, the JEA inspector will evaluate each industrial user's current ADSCP. If the user does not have a plan, the inspector will determine if a plan is necessary. All ADSCPs are required to contain the following elements, at a minimum:

- General Facility Information
- Description of Discharge Practices
- Spill History
- Security Provisions
- Facility Layout and flow diagrams
- Chemicals Inventory
- Slug Prevention Equipment and Procedures
- Emergency Response Equipment and Procedures
- JEA Slug Notification and Reporting Procedures
- Training Program
- Certification Statements

Spill control plans help minimize slug risks to JEA by identifying potential slug sources and creating a plan to prevent such slugs. An ADSCP benefits both JEA and the industrial user. Through spill prevention, industries can decrease safety and health risks to their workers, lower potential for serious environmental impacts, and protect plant equipment from an accidental discharge.

In April, look for a new ADSCP guidelines and a model ADSCP form online at http://www.jea.com/business/services/industrialpre/index.asp.

This P2's for You!

The Anheuser-Busch brewery in Jacksonville, Florida has perfected its P2 (pollution prevention) methodology, finding alternative uses for substances that are typically treated as waste. The brewery diverts more than a billion gallons of nutrient-rich wastewater per year from the District 2 Water Reclamation Facility to irrigate two nearby turf farms on Main Street and Lem Turner Rd. Nearly 1,100 acres are now under irrigation.

The land application process is simple. Pretreated water, rich in nutrients from raw materials used in the brewing process (rice, barley, corn and hops), travels by pipeline from the brewery to turf, hay and silage crop farms. There, the nutrient-rich wastewater is applied via a center pivot irrigation system. This wastewater provides irrigation and does double-duty as a great source of nitrogen fertilizer. The soil and crops act together to remove nitrogen and solids from the wastewater. Any excess water is carried away by drains and ditches to retention ponds where aquatic vegetation consumes any remaining nutrients before the water enters wetland habitats.

A high percentage of the irrigated land is devoted to silage, which is used as feed for dairy cattle. A turf crop is also grown on the farms. It is sold primarily to golf courses and highway construction projects.

A secondary benefit of the retention ponds and wetlands on these sites is the excellent habitat they provide for native and migratory species of animals and birds. In 1997, the Wildlife Habitat Council certified this wetland as a Corporate Wildlife Habitat.

Anheuser-Busch's P2 efforts do not stop at the sod farm. Their pretreatment system relies on anaerobic bacteria (does not require oxygen) that create methane gas. This methane is recovered and used to generate energy at the plant.

Very few by-products of the brewing process are wasted. For example in 2005:

- 82,000 tons of spent grains were distributed as cattle feed and
- 380 tons of beech wood chips were shipped offsite for composting

By utilizing a proven pollution prevention strategy, Anheuser-Busch significantly reduces its loadings to the treatment works and receives a secondary benefit –a greatly reduced sewer bill.

2nd Annual JEA Industrial Pretreatment Luncheon

Mark your calendars to attend the second JEA Industrial Pretreatment luncheon. The event will be held on **Tuesday, May 1, 2007**, from **12–1:30 p.m.** on the 19th floor of the JEA Tower at **21 W. Church Street**.

Come help us celebrate the efforts of Industrial Users who have had a positive impact on the success of JEA's water reclamation facilities.

JEA will recognize the following achievements:

- **Platinum award**
  Significant Industrial User or Categorical Industrial User that had no discharge violations in 2006 and demonstrated superior environmental performance
- **Gold award**
  Non-Significant Industrial User that had no discharge violations in 2006 and demonstrated superior environmental performance
- **P2 Award**
  Industrial Users that made significant environmental improvements utilizing pollution prevention methodologies
- **Environmental Stewardship Award**
  All Industrial Users discharging process wastewater that were violation free in 2006

Watch for your invitation for more details on the event.

Hail...

If you drop off your compliance reports, you will see a new face here at JEA. Nicole Delaney is a native of Elk Garden, West Virginia. She was raised in Port-au-Prince, Haiti where she attended school. After returning to the states, Nicole began attending Jacksonville University where she is pursuing her degree in Business Administration.

Nicole has more than six years of experience as an Administrative Assistant. She is excited to bring her attention to detail and support to Environmental Services and is looking forward to this new opportunity!

And Farewell...

Karen Forman has moved to a new position within JEA. Karen had been in the Industrial Pretreatment department for over seven years and is known by many industries for her outstanding customer service. We wish Karen all the best.

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Editor: Gary Christiansen

Contributing writers: Ernest Vavrin, EH&S Manager, Anheuser Busch, Inc., Dan Parnell, Karen Foreman, Jason Compton – JEA Industrial Pretreatment

For more information about our program, forms, and past issues, please visit the JEA Industrial Pretreatment Website (http://www.jea.com/business/services/industrialpre/index.asp).