Commissioner Aho speaks at JETCC Management School

Earlier this month, Commissioner Aho gave a "Working with State Regulators" presentation at the JETCC Management School.

Her advice ranges from communicating early and often, prepping for meetings to not being afraid to ask questions. She encourages operators to use regulators as a resource.

For Practice
1. The Mean Cell Residence Time (MCRT) is:
   a. The length of time an average microbe spends in the aeration basin.
   b. The length of time an average microbe spends in the secondary clarifier and return sludge line.
   c. The length of time an average microbe spends in the treatment system before being wasted or lost in the effluent.
   d. The ratio of the solids in the aeration basin to the solids in the primary effluent.

2. The term most commonly used for untreated wastewater is:
   a. Aerobic
   b. Septic
   c. Ground
   d. Raw

3. The letters SDS stand for:
   a. Safety Determination Specifications
   b. Safety Data Sheet
   c. Source and Delivery Sheet
   d. Specifications for Determining Safety

4. If a chemical feed pump will supply a maximum of 4,000 pounds per day of a treatment chemical with a specific gravity of 1.0; what is the maximum feed rate in gallons per minute?
   a. 0.13 gpm
   b. 0.33 gpm
   c. 0.42 gpm
   d. 0.37 gpm

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**Industrial Waste Survey**

As of about two years ago, MEPDES permits for POTWs, new or coming up for renewal, have contained the following Special Condition:

**LIMITATIONS FOR INDUSTRIAL USERS**
Pollutants introduced into the waste water collection and treatment system by a non-domestic source (user) shall not pass through or interfere with the operation of the treatment system. The licensee shall conduct an **Industrial Waste Survey (IWS)** at any time a new industrial user proposes to discharge within its jurisdiction, an existing user proposes to make a significant change in its discharge, or, at an alternative minimum, once every permit cycle and submit the results to the Department. The IWS shall identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of the federal Clean Water Act, 40 CFR Part 403 (general pretreatment regulations) or Pretreatment Program, 06-096 CMR 528 (last amended March 17, 2008).

So what does all this really mean?

The National Pretreatment Program is scaled to cities and towns that are generally larger and more developed than those in Maine, so the smaller towns around here tend to wonder what the fuss is about – we know (or at least are pretty sure we know) everything that’s going on in our collection systems. A lot can happen, and a lot can change in areas like Portland, Bangor, Lewiston/Auburn, let alone much bigger places like Boston or New York City. Regardless of community size, or whether or not you have any new facilities (or existing facilities that have changed what they're doing), the Industrial Waste Survey (IWS) is a federal requirement that we have to adopt into our MEPDES wastewater licensing program.

For most Maine communities, the quickest, easiest thing to do is take a day or a few days when not much is going on at the plant, get in the vehicle, & drive the entire extent of your collection system. Take a pad, & make a list of every industrial or large scale commercial facility that is on your system. Right up front you can skip homes, rentals, most restaurants, convenience stores, delis & fast food joints (you may need a FOG/grease trap program for those kinds of places, but that’s a different consideration than an IWS), and most small-scale commercial activity. Even some larger-scale places, like schools, cafeterias, managed care homes, etc., generally have wastewater that is similar in characteristic to residential, just more of it. The IWS list is basically a summary of the dischargers in your system that may have wastewater that is different in characteristic than your standard stuff.

Now, first pass - Take your list (make an Excel spreadsheet or the equivalent if you can; it'll make keeping track of things easier) and compare each facility to this set of conditions:

► Does the facility discharge a monthly average of >25,000 gallons a day of process wastewater?

► Does the facility’s process wastewater discharge make up 5% or more of your daily influent flow?

► Does the facility’s process wastewater discharge make up 5% or more of your daily influent BOD?

► Does the facility’s process wastewater discharge make up 5% or more of your daily influent TSS?
Does the facility's process wastewater have a reasonable potential to adversely affect your POTW operations, cause a problem with your discharge, or cause a problem with your sludge disposal?

If you answer “yes” to any of the above, then the facility is a potential **Significant Industrial User** of your system.

Additionally – this one is a bit more difficult & you may want to contact the State Pretreatment Coordinator [Jim Crowley, 207-287-8898, james.r.crowley@maine.gov] or your Inspector with specific instances or questions once you’ve gone through this exercise –

Does the facility fall under one of the National Categorical Standards, 40 CFR 405 through 471? (see Federal website link: [http://ecfr.gpoaccess.gov/](http://ecfr.gpoaccess.gov/))

If your answer is “yes” to this consideration, then the facility is also a **Categorical Industrial User** of your system.

If any of the facilities on your list meet one or more of those conditions, then you’re going to want to go back and take a closer look at them; find out more detail on their process(es), wastewater characteristics, and discharge pattern. You will likely find that most facilities are not a problem, & that only a few will need closer scrutiny. Note – having industries within your collection system does not automatically require increased regulatory activity on your part; the only uniform requirement is that you know what you have. The first time through the IWS may be a bit of a chore, but once you’ve done it, it is relative easy to update it on an as-needed basis, at a minimum of once every 5 years; hence a spreadsheet format would come in handy.

Though this requirement has only recently explicitly appeared in MEPDES permits, it has actually been a federal requirement all along. Again, the first time through will be a bit of a project, but from then on, it shouldn’t be difficult.

James Crowley

ME DEP

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**Answers to For Practice**

1.  c. The Mean Cell Residence Time is the amount of time a typical biomass cell spends in the treatment system, including the aeration basins, clarifiers and return lines, before it is removed by wasting or loss in the effluent.

2.  d. Untreated wastewater is called Raw Wastewater.

3.  b. SDS stands for Safety Data Sheet.

4.  b. The pump delivers 4,000 pounds/day, dividing by 24 hours/day translates to 166.67 pounds/hour, and dividing by 60 minutes/hour translates to 2.78 pounds/minute. 1 gallon at a
specific gravity of 1.0 (water) weighs 8.34 pounds so the feed rate is 2.78/8.34 = 0.33 gallons/minute

Sterling Pierce

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