



Inside Pretreatment Newsletter

February 27, 2009

2009: Get Ready for an Interesting Year

Wow! This year is going to be quite a ride. I hope that you get something useful from these newsletters. This one was somewhat of a challenge. I tend to try to interject humor (always in the eyes of the beholder) into these newsletters. Have you ever said anything and then laughed at the absurdity of what you just said? Of course, even I know that when you get into civil and criminal court, you need to be careful on where you inject humor (but there are times it is really useful for the judge and jury to recognize absurdity)! I take a lot of things seriously, even when I am expressing some humor. Local limits, legal authority, due process, public participation, enforcement, permitting, inspections, etc. are very serious topics. Pretreatment programs (approved and non-approved) are charged with protecting our water quality through controlling discharges to their sewer systems. Oh, as always, I apologize for any typos or grammatical errors in my newsletters. I will fire my technical editors for their lack of due diligence in adequately reviewing this Newsletter.... soon.

Training for Local Governments

I just finished local limits training in Lakewood, Colorado. I really enjoyed the three days and I think the attendees found the training very useful. Do you know what the decisions are yours vs. that of the Approval Authority? Did you adopt your local limits and meet the public participation requirements that allow you to enforce your standards? See a previous newsletter for many of the questions you need to ask when revising local limits.

If you would like to talk to people that have taken this training, let me know, and I can provide you with their contact information. Register for one of the sessions listed below:

Local Limits Training: March 31-April 2, 2009. [Indianapolis, IN.](#)

Local Limits Training: April 28-30, 2009. [Arlington, Texas.](#)

Local Limits Training: June 9-11, 2009. [Portland, Oregon.](#)

Local Limits Training: July 14-16, 2009. [Orlando, FL.](#)

Other training:

IU Inspectors Training: May 11, 2009. [Cody, Wyoming.](#)

These courses are for POTW Pretreatment staff and managers that work for local programs.

Be sure to go to: www.CWACS.com and click on the Training Courses tab. Workshop attendance is limited. This website is updated as registrations are received. On the website, you will find all meeting locations, registration information, registration deadlines, and whether or not spaces are available.

Question for Pretreatment Professionals – Hospitals as SIUs

Background: I was at a meeting this week and listened to a discussion between EPA and POTWs that dealt with the general question: “When are Hospitals SIUs and Must be Permitted?” EPA said that it is up to the POTW to make those decisions. So much for clarity (but you cannot criticize the transparency)!

I set-up and then posed a question to EPA that I thought was pretty straight forward: It went like this:

One criteria for whether or not an industrial user is a SIU includes (403.3(v)(1)(ii)): “Any other industrial user that has a reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standard or Requirement”.

If a hospital discharges a hazardous waste and fails to notify the POTW, state and EPA, as required by 403.12(p), the hospital (or any user) is in violation of a Pretreatment Requirement (this is a SNC level violation). In addition to the pretreatment violation, you would also have a RCRA violation (Don't you have to be in compliance with this Clean Water Act requirement to get the Domestic Sewage Exclusion (DSE))?

Question: If a hospital has violated a Pretreatment reporting requirement, would that hospital be an SIU by definition?

EPA Answer: It is up to the POTW to evaluate this.

My typical answer would have been: “I want to be firm yet flexible, prescriptive yet general, broad yet focused in my approach to that question. I will be providing a position paper on that very subject in the future”. Well, maybe not, but someone in the audience would have smiled. I wanted to follow-up with “Can we just blow off this reporting violation and move on with our programs?”, but the moderator looked at me in the eyes and clearly (non-verbally) communicated to me (correctly so) to stop torturing the poor EPA person and let's move on. Sometimes I just want to see if I can get a regulator to say *yes* or *no* to anything.

CWACS Note: Congress was very concerned with these RCRA discharges and made EPA establish regulations in the early 1990s (DSS regulatory changes). Hospitals are not exempt. Hospitals are like any other IU: They must fully disclose what they discharge to a POTW. I understand that POTWs do not always ask hospitals to list all chemicals that are discharged to the POTW. Why, I do not know. It is simple to add this requirement to report to an Industrial Waste Survey and permit application. Caution: I did an inventory recently for a large hospital. If the hospital does not already have a good database (most do not), it will take them significant effort to evaluate and characterize all of the departments (many lab chemicals and pharmaceuticals are RCRA listed wastes). After meeting with a number of hospitals in a training session in 2008, none of them indicated that they had an accurate inventory available.

What other data should you collect to determine if a hospital is an SIU? How much data is enough? Can you make them an SIU for a year or two and then declassify them after they are in compliance? What wastestreams make up a “process wastewater” from a hospital? What are pollutants of concern that can be effectively regulated? What BMPs are applicable for hospitals? When does the concept of “Permit as a Shield” protect the hospital? How should a POTW estimate flows from internal wastestreams? Sounds like another newsletter! Ask your Approval Authority for guidance in writing! Maybe EPA and the states can work on this at their meeting in March.

The On-going Saga: Methylmercury

I have provided information in previous newsletters about the forthcoming Methylmercury Criteria and Permitting Guidance that EPA is issuing. This will have **MAJOR** impacts on POTWs and pretreatment programs. As a disclosure: I was a reviewer on the draft permitting implementation document for EPA Region 8 in my last life. The guidance is on-again, off-again, on-again. You can download a copy of the “Final” documents at: <http://www.epa.gov/waterscience/criteria/methylmercury/guidance-final.html> It was final, but now is set for Agency review.

POTWs should email EPA and request that the document be provided for comment (email addresses below) in the Federal Register. The POTW community (not just big POTWs) will be significantly impacted. The amount of useful guidance (it also establishes *requirements through guidance*) specific to pretreatment programs is very minimal. The technical information (science) appears to be good; the adoption of requirements by states are discussed at length (with problems); and the implementation section for the regulated community is very incomplete. It seems that there is a good understanding on most material other than implementation by POTWs.

A few items of concern include:

1. When states adopt the Fish Tissue Criterion, existing state water quality standards for mercury go away (unless the state decides on its own to maintain the existing standard until they get TMDLs completed – which could take decades). Numeric standards allow the regulated community to know what they have to do. What happens when the legal basis for your local limits goes away? EPA is taking the resource intensive implementation approach – something that is probably not achievable by states due to today’s resource limitations. Look at the sampling costs to even begin to implement this guidance! I guess someone wanted mercury regulations to go away for a long time.
2. EPA “recommends” that states could put a mercury numeric “goal” or “trigger level” into the POTWs permit (or MMPs discussed below). What the heck are these and how would enforceable numbers be developed by the state?
3. EPA “recommends” that POTWs be required to use Method 1631 for analyzing mercury (the method needed to evaluate effluent compliance with existing mercury water quality standards) to trigger additional requirements in the POTW NPDES permit. Note: EPA uses the term “recommends”. States would be free to require a less sensitive method, eliminating most POTWs from this MMP process and allowing no additional action to control effluent mercury. As a note,

almost everything is “recommends” or “should” or “may”. This will guarantee that there will be inconsistent approaches by states and EPA regional offices. It is not “Divide and Conquer”, but rather “Confuse and Dismantle”.

4. Watch how the document addresses “Reasonable Potential” and “Antidegradation”. It is already interesting. Can you create regulations through guidance?

5. Mercury Minimization Plans (MMPs): These are required by an EPA region in some POTW discharge permits. The requirement to submit the MMP is mandatory. However, the content of the MMP was based upon negotiations with EPA Region 5, the American Dental Association (ADA), and others. The MMP concept avoided all mandatory requirements that would make dentists install amalgam separators to reduce discharges to POTWs, even when the facts indicated that these dischargers were a significant source of mercury to POTWs. Now, EPA has avoided the use of the regulatory term “Best Management Practices (BMPs)” that was promulgated for pretreatment programs. Why? The Streamlining preamble suggests that treatment at dental facilities would be a BMP. Why does EPA continue to fight this issue? Even the ADA grudgingly accepts that BMPs include amalgam separators (though they will be quick to qualify this).

EPA tried to push this document out the door at the end of the Bush Administration. It appears that the “Final” designation is being evaluated per the current Administration’s review requirements. Can EPA issue a guidance document that is so different from the original without public notice? Sure (but who would pay attention?). Should they? No. Should they collect further comment, especially from POTWs who are impacted the greatest? Absolutely. Should they establish requirements or enforceable provisions through guidance? Call the Office of General Council (OGS) in Washington, DC and ask them!

Here are the contacts to send your request for the document to go through further comment (remember the transparency pledge?) because of the need for additional review and comment from the municipal government community (the most impacted sector). Organizations such as NACWA represent the largest POTWs. However, most pretreatment programs are not member and are not well represented in these matters. You must make sure your voice is heard.

Document Name: Methylmercury Fish Tissue Criterion: Guidance for Implementing the Methylmercury Water Quality Criterion. January 2009. EPA 823-R-09-002.

If you want time to review and comment on the “Final” document, please send your request to all of the following contacts ASAP and ask them to publish it in the Federal Register:

Jim Hanlon	hanlon.jim@epa.gov
Linda Boornazian	boornazian.linda@epa.gov
Ephraim King	king.ephraim@epa.gov

Remember, most EPA staff care about science and the environment (thankfully, since that is their mission). Let's give them a chance to do the right thing now they have the chance.

This document really is pretty complicated to read, but for pretreatment programs, Section 7 and parts of Section 8 are the most relevant. I know that I would like to be allowed to review and provide formal comments.

EPA, NACWA and ADA MOU

I previously referred to the MOU that was signed between EPA, NACWA and the American Dental Association (link to this on my website). This is an interesting data collection effort. It has been generally accepted by POTWs that amalgam separators are reasonable to reduce the loading of mercury discharges to POTW from dental facilities.

Do I believe that the ADA has any intent to be constructive in their efforts to get dentists to reduce mercury in their discharge? Well, the following is an email that was sent to Arkansas pretreatment programs by an attorney representing the State Dental Association. Has the ADA contacted this State ADA group and requested that the email be retracted or clarified? Not that I know of. Has the ADA sent out its own clarification? Not that I have seen. The ASDA email reads, in parts, as follows **[with my emphasis and comments included]**:

From the attorney for the ADSA:

“I am corresponding with you on behalf of the Arkansas State Dental Association (ASDA). The ASDA retained me as environmental counsel to assist its member dentists in evaluating the Clean Water Act pretreatment notification requirements relating to amalgam wastes. “

“In addition, this is an issue **[Mercury from dental amalgam]** lessening in importance on its own. **[Really? Just because he says so? There may be many regulatory, POTW and congressional people that disagree]**. Primarily due to aesthetic concerns, tooth-colored fillings which do not contain mercury are now the most common filling material in use. Additionally, dental offices implement best management practices (BMPs) designed to capture amalgam fillings before they ever reach the wastewater system, so that mercury and silver in the amalgam fillings can be recycled. The Arkansas State Dental Association (ASDA) and the American Dental Association (ADA) have been pro-active in providing education and training for dentists, so that dentists understand and appreciate this issue, and so that they implement appropriate BMPs at their offices to address amalgam waste **[ADA BMPs include amalgam separators]**. The ADA recently entered into a Memorandum of Understanding with the United States Environmental Protection Agency (EPA) and the National Association of Clean Water Agencies that promotes use of ADA's voluntary BMPs and tracks the progress of dental offices in implementing the recommended BMPs” **[To EPA's credit, they clearly indicated that the MOU was not intended to interfere with mandatory programs]**.

“ADEQ has requested that you advise dentists who operate offices that are users of your system regarding the industrial pre-treatment notification requirements at 40 CFR 403.12(p). 40 CFR 403.12 requires industrial users to notify you **[whoops, don’t forget to report to the state and EPA]** if they are disposing of a substance that would meet the definition of “hazardous waste” if it were not discharged into the sewer. A material is considered hazardous in one of two ways: it is either listed as such or it fails a particular test. No one contends that waste amalgam is a listed hazardous waste (it is not) and testing conducted by the ADA supports the conclusion that it does not fail the TCLP test as a characteristic hazardous waste either. See *Fan PL and Chang CS, Environmental hazard evaluation of amalgam scrap, Dental Materials, 8:359-361, 1992*. Soon after the hazardous waste rules were enacted in 1979 (when mercury containing amalgam fillings were predominant) EPA provided guidance to dental offices that testing performed by the American Dental Association indicated that amalgam wastes did not meet the “hazardous waste” criteria and that dentists could rely upon ADA data.” **[Who at EPA published that? Let’s get a copy of the EPA legal opinion! Does anyone have this EPA guidance? I would love to see this waiver from testing and notification that was specific to 403.12(p). Oh wait, in 1979 we did not have 403.12(p). It was not until after Congress required EPA to publish the DSS regulations in the early 1990s because of all the hazardous waste going down the sewer, that 403.12(p) was adopted!]**.

“In 2008 a comprehensive study of dental wastewater samples was undertaken by a group of independent scientists, which included Army and Navy research offices, and the results confirmed that dental wastewater “did not meet the criteria of a hazardous waste.” *2957 TCLP Analysis of Chairside Dental-Unit Wastewater Samples*, Berry, et al (2008). This study reported that the results were supported by the United States Navy’s Bureau of Medicine and Surgery. In short, sampling has demonstrated that typical dental wastewater is not “hazardous waste” and therefore not subject to the reporting requirements of 40 CFR 403.12(p). “ **[What is typical? Is it that 5 gallons of wastewater that has sat in the lines overnight with cleaning agents and that is flushed to the sewer first thing in the morning? Someone should critique this study that is truly independent and provides a representative sampling design to define if any 15 kg of wastewater discharged to a POTW exceeds the 403.12 reporting limit. Did they use grab samples, composite samples over an entire day, or did they capture each 15 kg of wastewater discharged and analyze it? Remember, this was a research project, not compliance monitoring. If you are going to do research and draw conclusions this email represents, then the study design is critical. To conclude that a 24 hour composite (or a grab) sample does not exceed TCLP is a lot different than concluding that the 403.12(p) reporting levels were never exceeded during the day at the dental sites evaluated.**

The email continues: “Furthermore, pretreatment reporting requirement expressly incorporates the Conditionally Exempt Small Quantity Generator regulations which exempts from most regulation waste (even if otherwise hazardous) from entities which generate less than 100kg per month. Virtually every dentist in the country falls within this category. Finally, pretreatment reporting is only required if the generator discharges more than 15 kilograms (33 pounds) of hazardous (mercury) wastes into the sewer in a calendar month. It is very highly unlikely that any dental office discharges more than 15 kg of mercury (or even waste amalgam) in any month.” **[This attorney**

evidently misses the point that it is 15 kg of wastewater (just a few gallons of wastewater) not the pollutant mercury that has to meet the 15kg reporting limit.]

CWACS: You can contact the State or the local pretreatment programs for the full email. This really is the kind of disinformation that does not provide any comfort that the ADA has any intention of working constructively with regulatory agencies. I would tell the POTWs in Arkansas to read such emails with caution. Ask questions. Challenge statements. Support your State pretreatment staff in their efforts to help protect the POTWs and streams and lakes in the State.

Newsletters reflect the opinions of CWACS. They are not intended to change what a specific state or EPA may require.

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