



# Inside Pretreatment Newsletter

June 9, 2008

## **Really Spring Now!**

All of the snow is gone and it is warm! Winter seems so far away. A-Basin Ski Resort closed yesterday (but they got 2 inches of fresh powder the night before). I guess if we are lucky, it will be November before the white stuff flies.

## **Methylmercury**

Some of you heard my recent platform presentation on this subject at the Region 8 pretreatment conference in Durango. Many others on the mailing list have probably heard very little. However the potential impact on your pretreatment program is significant. *Disclaimer: This reflects what I believe the final document will say. The final document is expected to be distributed in June (this month!), but dates always seem to slip.*

The original Methylmercury Water Quality Criterion document was published in 2006 (2001 document): [www.epa.gov/waterscience/criteria/methylmercury/](http://www.epa.gov/waterscience/criteria/methylmercury/). Since that time, EPA has been working on the final document. This is one of the workgroups I was on prior to leaving EPA.

Methylmercury will have the water quality criterion and an associated implementation document. These documents reflect a new way of applying water quality standards for EPA.

Here are some items of general interest:

- ✓ The water quality criterion comes with an implementation document that specifically addresses adoption by states, NPDES permitting, and pretreatment.
- ✓ Methylmercury is highly bioaccumulative in fish.
- ✓ The water quality criterion will be recommended at 0.3 mg/kg wet weight fish tissue.
- ✓ Methylmercury analysis uses Method 1630 (and there are 3 others) giving MDLs of 0.01 to 0.05 ng/L in water. The fish tissue method sensitivity is as low as 0.002 mg/kg.
- ✓ In a perfect world, the fish tissue number (0.3 mg/kg) would be translated

to a water column number and then a TMDL would be completed to get an NPDES permit limit. EPA recognizes that this is fraught with complexity (I always wanted to use that word).

- ✓ When states adopt the fish tissue number as a state-wide number, the existing numeric mercury water quality standards would go away (think about this). That means that existing local limits for mercury would no longer have a technical basis (environmental standard).
- ✓ The standard still allows for variances, but these would be greatly reduced or eliminated due to the recommended implementation procedure for NPDES permitting (and pretreatment). Most implementation would be through a Best Management Practices (BMP) approach.

### **Implementation Scenario (Example and Hypothetical)**

1. State adopts a state-wide methylmercury number (the POTWs made this happen). The state wants to protect human health from mercury contamination in consumed fish (great spin, good for people and fish).
2. The existing mercury water quality standards go away (why have them when you are now relying on methylmercury numbers?).
3. The state does not have enough money to do site specific translation of the fish tissue number. Therefore, it decides to take a different approach.
4. The state requires the permittee to monitor for effluent mercury (whoops, the state forgot that many POTWs already have mercury data, thus delaying things). If mercury is detected in a municipal or industrial effluent using a sensitive method (EPA requires 1631E or 245.7, so sell your stock in 245.1) then the POTW will be required to take additional action. See the EPA memo referenced in an earlier newsletter.
5. The state will probably want permittees to capture and test fish in receiving waters (since states generally do not have the extensive monetary resources that individual dischargers have). Now... how do I collect fish that are really mine and not Metro's? How will the state interpret high methylmercury numbers in fish that I know move through other effluents?
6. The state will require that the municipal discharger (POTW) to implement BMPs for mercury. This includes BMPs and amalgam separators for dentists. Amazing that just when this document was

scheduled to go final last fall, the ADA included amalgam separators in its Dental BMPs. Sorry, I am paranoid (I love movies about conspiracies).

7. Hopefully states will call these BMPs, BMPs rather than MMPs (Mercury Minimization Plans). We have enough acronyms and MMP terminology went away when BMP language was incorporated into the current Federal regulations.

8. POTWs: how will the Approval Authority measure BMP success? Will they attempt to install an arbitrary number in your NPDES permit? An enforceable number? Watch this.

9. Everyone lives happily ever after.

### **The POTW should....**

I believe that POTW should read these documents carefully when EPA issues them (I will provide notice). It may be in your interest to lobby the state to adopt this human health number. In all cases, every POTW and pretreatment program should be fully involved with the state on this issue. Being from Region 8, we have few POTWs that have been given variances for mercury. However, many variances have been given nationwide. This approach would make variances go away for the most part. EPA believes that the BMP approach makes better sense. I would tend to agree that his approach would be good if the POTW:

- ✓ Does good job at evaluating its influent and non-domestic users.
- ✓ Has a coherent implementation plan for applying BMPs (not just for dentists).
- ✓ Has adequate legal authority to apply BMPs to all users.
- ✓ Has a good and comprehensive on-going mercury monitoring program to demonstrate effectiveness of its program.
- ✓ Has provided adequate training to POTW sampling staff for clean sampling.

Without national standards for what is a good implementation procedure and what would be an inadequate one, little environmental protection would be realized (whether through discharges to surface waters or to sewage sludge). States really need to be definitive on the requirement up-front (with input from pretreatment professionals).

There is so much more in the documents. I can only scratch the surface. At EPA mercury policy and guidance is very sensitive. It will be interesting to see if they move forward and the spin put on this document. It has good parts (protect

public health at a minimum) and bad parts (should, may, EPA recommends, EPA suggests). Take the time to read it. Have people speak on it!

**Training Courses Scheduled!**

Designing and Implementing a Grease Control Program (1 day)  
Local Limits Development (3 days)  
August 11-15, 2008.  
Lakewood, Colorado

You can learn more at: [CWA Training Services](#) Information on cost, lodging, etc. will be provided to registrants. This course is limited to 65 people and is only open to municipal or district employees.

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