Presentation: "SDWA Regulatory Update"

Speaker: Ms. Jill Korte, EPA Region 9

Ms. Korte is an environmental engineer with EPA Region 9. During her 12 years at EPA, Ms. Korte has implemented the drinking water program on Indian lands in Arizona and, most recently, she provides oversight for the State of Arizona's drinking water program. Ms. Korte holds degrees in sanitary engineering and public health from the University of California at Berkeley.

Handout: "US EPA Drinking Water Regulatory Update – July 2002"

"Arsenic and Clarifications to Compliance and New Source Monitoring rule: A Quick Reference Guide," EPA 816-F-01-004, January 2001

"Variances and Exemptions from Drinking Water Maximum Contaminant levels (MCL) (A Summary), 7/11/02"

Notes:

Ms. Korte provided an update on new Safe Drinking Water Act requirements, including new rules: Arsenic, Stage 1 Disinfectant Byproducts, Enhanced Surface Water Treatment, Filter Backwash Recycling, and Radionuclides Rules.

A final rule for the arsenic drinking water standard was approved in January 2002. The MCL for arsenic is now 0.01 milligrams/L (mg/L) (10 ppb). Drinking water systems must be in compliance by January 23, 2006. The rule requires monitoring at each entry point, and the monitoring frequency is the same as for other inorganic constituents.

A final rule for the radionuclides drinking water standard was approved in December 7, 2000. The rule is effective December 8, 2003 and applies only to community water systems. The rule addresses uranium; radium; and gross alpha, beta, and photon emitters.

A final rule for radon is expected in late 2002. This rule will likely set the MCL at 300 pCi/L. An alternative MCL of 4,000 pCi/L may be applicable if the state has a multimedia radon mitigation program that provides equal risk reduction. The multimedia mitigation program addresses only the highest levels in water. Since most radon risk is found in indoor air and not water, the focus is on lowering air levels.

The Long-Term 1 Enhanced Surface Water Treatment Rule (ESWTR) applies to surface water systems serving more than 10,000 people. A final rule was approved in January 2002, and most provisions will be enforced beginning in 2005. This rule tightens turbidity monitoring and standards and requires disinfection profiling when applicable.

The filter backwash recycling rule became final on June 8, 2001. This rule is intended to reduce the potential for introduction of pathogens to finished water. The rule applies only to surface water systems with conventional or direct filtration that recycle within the treatment plant.

A final groundwater rule is expected in early 2003 to require hydrogeologic assessments for undisinfected systems to determine if the source is vulnerable/sensitive to microbial contamination. Monitoring of the source will be required if the source is determined to be sensitive or if fecal bacteria are found in the distribution system.

The Long-Term 2 ESWTR is currently in development. This rule provides for additional disinfection to control cryptosporidium. This rule is linked to the Stage 2 disinfection/disinfection by-product rule (D/DBPR) expected in mid-2003.

The Stage 2 D/DBPR will require trihalomethane and HAA5 MCL compliance at each monitoring point in the distribution system. This rule will not allow for averaging across the distribution system and would control for hot spots.

EPA must review all regulations every 6 years, and a notice of proposed rulemaking was made in April 2002. No chemical MCL revisions are proposed but several revisions are proposed for TCR. A final decision on the revisions is due in August 2002.

Discussion:

Regarding	Questions/Remarks	Response*
Arsenic Rule: Entry Point Monitoring	Where are the entry points where monitoring must occur?	The monitoring points are at every entry point to the distribution system after treatment. If you have two separate water treatment plants, you would sample at each plant after treatment. If you have several wells, and they're all manifolded together, you can sample at one so-called entry point where all the well water comes together. Some smaller systems have several wells that pump straight into a storage tank, and you could use a sampling point right after the tank as your entry point into the distribution system. The entry point varies, depending on the system configuration. Also, you might have a system with a well field, where an individual well might pump directly into the system without being manifolded together or mixed or blended with others wells, and in that case you would probably have to sample that individual well after treatment, if there is any. The rule lists best available technology for treatment of arsenic. The technology your system might use would depend on your water chemistry. Whether or not a particular treatment will be successful is

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		dependent on the water chemistry. EPA is finishing a draft document called "Arsenic Treatment Technology: Design Manual for Small Systems," which should be out by the end of the year. It has decision trees that walk you through a design choice for your particular water quality. The state of Arizona, with financial support from the EPA, is developing an arsenic master plan, which will also have a design component dealing with specific qualities that we find in the Southwest.
Radon rule	How can you mitigate radon in existing structures?	Barriers can be placed underneath the building, if there's a crawl space or a raised basement. Vents can also be installed inside a house to vent the air better and get the radon gas out. If you'd like to talk to someone about radon mitigation methods for indoor air, contact Louise Hill in EPA, Region 9 at 415-947-4192 or hill.louise@epa.gov.
Long-Term 1: Enhanced Surface Water Treatment Rule	Please discuss compliance responsibility when water is provided from another source.	If you're receiving water from another entity, the assumption is that the other entity is complying with the ESWTR. If you are only purchasing finished water, then you would not have to comply with ESWTR; however you'd want to be assured that the entity that you're buying from is complying with the rule.
Groundwater rule	How does this rule relate to California's required source water assessment?	I don't know exactly what the state's source water assessment looks like, but hopefully they've been thinking about this rule and the assessments mesh; it's something we're really encouraging states to do.
	Concern about pharmaceutical products in drinking water.	One thing that we do whenever we develop a regulation is conduct occurrence monitoring, which is part of our unregulated contaminants monitoring rule. We require systems to monitor for contaminants that are not yet regulated. We need to get a feel for their occurrence, considering the cost of monitoring, especially for something that is just not occurring regularly.
Chrome 6	Hexavalent chromium	Chrome 6 is a contaminant that we looked at in the 6-year review, and EPA decided

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		that there wasn't evidence of oral ingestion or of chrome 6 having any health endpoints like cancer. When I say that there was no evidence, I mean that there were gaps in our data. The experimentation hasn't been done, and because it hasn't been done, EPA felt there was no basis on which to make a revision to the chromium standard. But the national toxicity program has agreed to do studies of chrome 6, both toxicity and carcinogenicity studies by the oral ingestion route over the next couple of years. We expect those results to be out in the next 3-5 years. At that point, EPA will review the data and decide whether or not to regulate specifically chrome 6. In fact, the state of California, which reviewed chrome 6 last summer came up with the same conclusion as EPA. They had been looking at a study that lacked positive peer review and decided that the evidence just wasn't there.