

File
DFC
11/7/07
Water Supply
Disinfection By-Products

Crombie, George

From: Schultz, Gary
Sent: Monday, October 29, 2007 11:15 AM
To: Crombie, George; Haskell, Sabina
Cc: Blatt, Eric
Subject: DBP Symposium Background Information

Background:

Disinfectants are an essential element of drinking water treatment because of the barrier they provide against waterborne disease-causing microorganisms. However, disinfection byproducts (DBPs) form when disinfectants used to treat drinking water react with naturally occurring materials in the water (e.g., decomposing plant material). DBPs are most commonly found in water supplies that utilize surface water as their drinking water source.

EPA's Stage 2 DBP rule is intended to reduce potential cancer and reproductive and developmental health risks from disinfection byproducts (DBPs) in drinking water, which form when disinfectants are used to control microbial pathogens. Over 260 million individuals are exposed to DBPs.

This final rule strengthens public health protection for customers of systems that deliver disinfected water by requiring such systems to meet maximum contaminant levels as an average at each compliance monitoring location (instead of as a system-wide average as in previous rules) for two groups of DBPs, trihalomethanes (TTHM) and five haloacetic acids (HAA5). The rule targets systems with the greatest risk and builds incrementally on existing rules. This regulation will reduce DBP exposure and related potential health risks and provide more equitable public health protection.

EPA has projected that the rule will prevent approximately 280 bladder cancer cases per year. Of these cases, 26% are estimated to be fatal. Based on bladder cancer alone, the rule is estimated to provide annualized mean monetized benefit of \$1.5 billion. Additional non-quantified benefits such as those from preventing potential reproductive and developmental risks may also result

There are 13 public water systems that either fail to meet the Stage 1 rule or will likely fail the Stage 2 rule.

System	Issue
Bennington and consecutives	HAA exceedances under Stage 1: WSD has required hydraulic management plan; stage 1 compliance expected, but Stage 2 requirements may be an issue.
Rutland and consecutives	HAA exceedances under Stage 1 in two consecutives, elevated levels in 5 others requiring monitoring. Rutland expects host system compliance when WTP repairs are completed; consecutive exceedances unresolved. WSD has required a hydraulic management plan.
St. Johnsbury and consecutives	THM violations, 2 consecutives on increased monitoring; engineering evaluation being sought.
Alburg FD1	NOAV issued, engineering evaluation required
Alburg Village	Engineering report ordered
Barton	Currently not exceeding MCL. Stage 2 issue possible
Catamount Bolton	NOAV issued, engineering evaluation required
North Hero	NOAV issued, engineering evaluation required
Proctor	Issue being addressed through long range plan
Richford	NOAV issued, engineering evaluation required
South Hero FD4	NOAV issued, engineering evaluation required
Swanton	NOAV issued, engineering evaluation required
Tri Town	Currently not exceeding MCL. Stage 2 issue possible

Because so many communities are facing the disinfection byproducts issue, the Agency decided to convene a symposium where national experts could present treatment options to the affected municipalities and the interested public and discuss their risks (and perhaps relative costs). This symposium is the result of the chloramine flap in the legislature where Jeff and Sharon Moffat signed a letter to Racine saying they would convene work groups to address the chloramine complaints that the Champlain Water District have been receiving. Rather than just focus on chloramines, we thought the best approach was to present the disinfection options and illustrate that there is no magic bullet (disinfection with zero risk). All treatment options carry risks.

Is this enough information? I'll e-mail you a copy of the latest version of the brochure. It has the speakers names, the subject of their talk, and biographies. We're up to 70 who have preregistered. Probably get a dozen or so more. Some other states in the region will be coming as will EPA representatives from Headquarters and Region 1.