

Fluridone Water Quality Monitoring Results - Summer 2013

Cayuga Lake and Inlet, Ithaca NY

rev November 22, 2013

New York State Department of Health (NYSDOH) Maximum Contaminant Level (MCL) for fluridone in drinking water: MCL = 50 ppb. Results below are in ppb. Fluridone application initiated 8/13/13.		Back-ground	24 hrs	48hrs	72 hrs	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Site	Location	Prior to 8/13/2013	8/15/2013 (Thurs)	8/16/2013 (Fri)	8/17/2013 (Sat)	Week of 8/19/2013	Week of 8/26/2013	Week of 9/2/2013	Week of 9/9/2013	Week of 9/16/2013	Week of 9/23/2013	Week of 9/30/2013	Week of 10/7/2013	Week of 10/14/2013	Week of 10/21/2013	Week of 10/28/2013	Week of 11/4/2013
NYSDEC Required Sampling - bottom of water column																	
S12-CC	Shoreline - 0.5 mile upstream on Cascadilla Creek		< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5			< 0.5					
S12-I	Shoreline - 0.5 mile upstream on East Side of Inlet		< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5			< 0.5					
S12-BB ²	Shoreline - 0.5 mile upstream on West Side of Inlet		< 0.5	< 0.5	< 0.5		1.1	< 0.5	< 0.5			< 0.5					
S12-89W	Shoreline - 0.5 mile on west lakeshore close to Rt 89		< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5			< 0.5					
S12-SM	Shoreline - 0.5 mile upstream on Sixmile Creek		< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5			< 0.5					
S12-SP	Shoreline - 0.5 mile on east lakeshore at Stewart Park		< 0.5	< 0.5	< 0.5		< 0.5	1.8	< 0.5			< 0.5					
SePRO FasTest Samples																	
BP-I ¹	Bolton Point intake ~70' below lake surface	< 1.0				< 1.0				< 1.0							
BP-ID*	Bolton Point intake - CSI duplicate	< 0.5				< 0.5				0.5				< 0.5			
Within the application area																	
CI-1						5.9	6.4	< 1.0	4.5	5.9	6.2	5.8	6.0	4.3	< 1.0		
CI-1D	CSI duplicate					0.98		< 0.5		2.0		2.4		1.0			
CI-4							10.1	2.0	6.3	6.9	< 1.0	10.4	8.9	7.6	< 1.0		
CI-4D	CSI duplicate					est.10 - 20	13.9	1.0		10.2		**10		1.0			
CI-6						2.1	7	< 1.0	5.1	5.1	4.1	7.4	6.2	6.4	< 1.0		
CI-8						3.1	6.2	6.0	4.4	4.2	7.1	5.9	5.8	6.0	4.0	2.4	2.3
CI-9						3	4.7	3.0	2.6	< 1.0	3.0	4.3	2.6	3.4	< 1.0	< 1.0	
CI-9D	CSI duplicate					est. 6	8.7	3.0		1.6		4.2		2.4		< 0.5	
CI-12						4.4	4.5	4.1	3.6	3.3	3.1	4.7	5.1	4.9	< 1.0	< 1.0	
CI-13						2.8	2.8	2.4	1.1	< 1.0	< 1.0	< 1.0	1.2	1.8	< 1.0		

Notes:

- Additional samples may be required depending on concentrations detected.
- Concentrations must be below 1 ppb for irrigation and hydroponic use.

** Estimated, accurate within ± 20%

¹Required by TCHD

²S12-BB cannot be located 0.5 mile upstream due to hydraulic constraints. The sampling point is in the application area.

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Additional Notes:

NYSDEC

- Sampling to continue for a minimum of one month and then until results are less than the detectable limit of .5 ppb outside the treatment area.
- If concentrations are found above detectable limit at any NYSDEC site, an increased sampling protocol of 0.25 mile intervals, as well as notification of the riparian owners and users will be required as determined by the Department until concentrations are below detectable limits.
- Samples must be collected at the end of the application period to establish concentrations <1 ppb.
- Concentrations must be below 1 ppb for irrigation and hydroponic use.

TCHD

Bolton Point Intake: After the first 2 weeks, sampling continues monthly while the application continues.

If results exceed 10 ppb at the intake, a sample must be collected from the entry point to the distribution system.

CI-1D, CI-2D, and CI-9D: Samples to be analyzed weekly for the first month, then biweekly for the duration of the application period.

In the event that concentrations are detected > 10 ppb, the Tompkins County Health shall be notified and the monitoring plan revised.