

Byproduct Blues – Part II

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When you are out there in the woods hunting this Fall, you' ll have a lot of time to think about things. So, ask yourself this question: As the operator of a small groundwater system (serving <10,000 customers), what do I have to do to comply with the Disinfectants/Disinfection Byproduct Rule (D/DBPR)? (It could happen!)

Well, hopefully you remembered to collect your disinfection byproduct samples last August or September. Remember those little 40 ml glass vials that were so hard to put the cap on, while keeping the air bubbles out? Or that amber bottle that you didn' t know what to do with at first? Yea, those samples! If you forgot to collect your disinfection byproduct samples, you may want to call the lab right now while there is still time! Remember, not collecting the right samples during the year can be considered a monitoring violation.

So, you' ve got your TTHM & HAA5 results back from the lab, now what do you do? First pay the lab bill! (Hey, they have to make a living too!). Next sit down and compare your results to the EPA' s Maximum Contaminant Levels (MCL). The MCL for Total Trihalomethanes (TTHM) is 0.080 mg/L, and the MCL for Haloacetic Acids (HAA5) is 0.060 mg/L. If your results fall below these numbers, you are in the clear!

As a matter of fact, if your results are below 0.040 mg/L for TTHM' s, and 0.030 mg/L for HAA5' s for 2 consecutive years, you can ask the State DOH to go to reduced monitoring. Or if your results are below 0.020 mg/L for TTHM' s, and 0.015 mg/L for HAA5' s for only 1 year, you can also ask the State DOH to go to reduced monitoring. Reduced monitoring requires sampling only once every 3 years (Sorry, testing labs!).

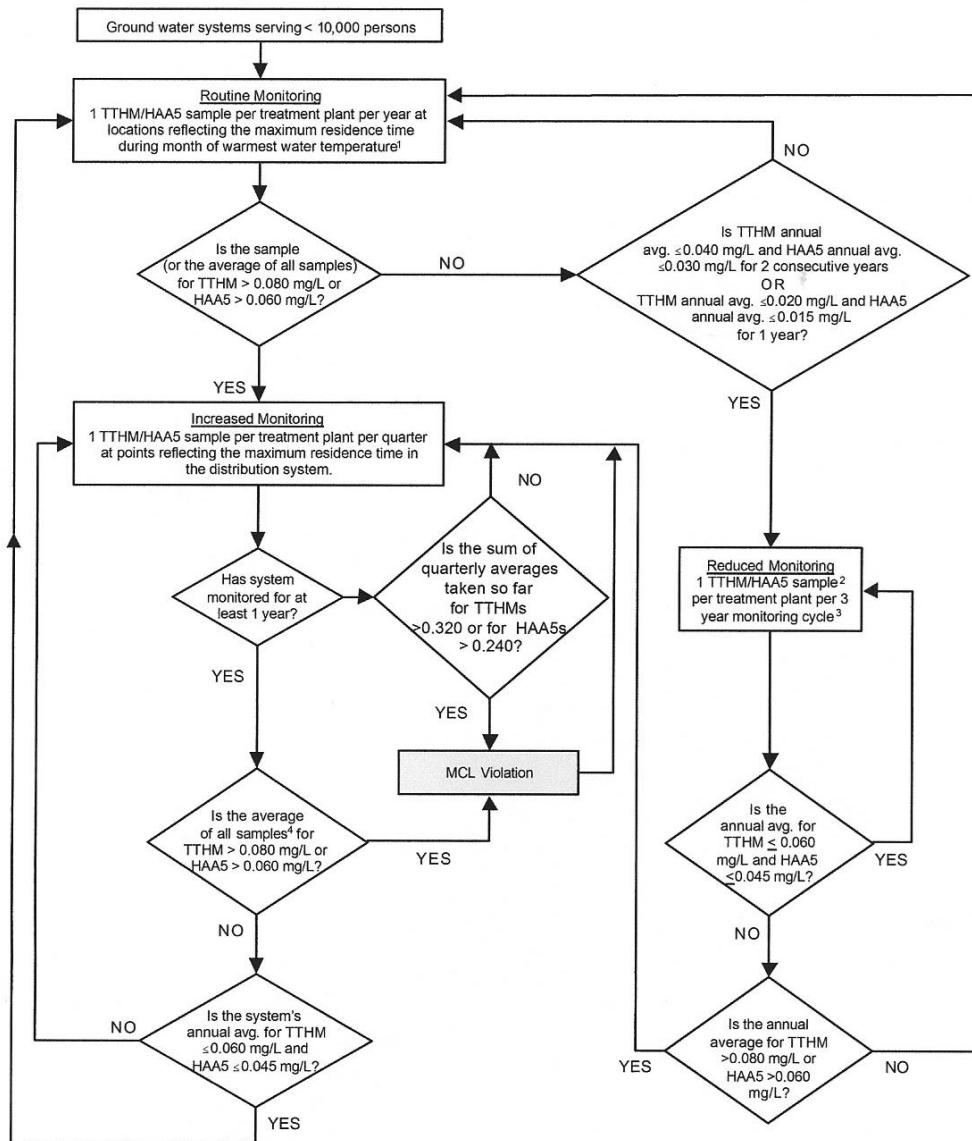
Now, what if your results are higher than the MCL' s? Don' t panic, the sky isn' t falling. If your results exceed the MCL' s, your system has to increase monitoring to once every quarter or 4 times a year (Call the lab again!). If, after a year, the average of your quarterly samples still exceeds the MCL' s, you are now in violation. You will have to notify your customers and report to the State DOH that the MCL' s were violated.

What do you have to report to the State DOH to stay in compliance with the D/DBPR? For TTHM' s and HAA5' s, you have to report the number of samples taken during the last year, the location, date and result of each sample, the arithmetic average of all samples taken over the last year, and whether or not an MCL was exceeded. For Chlorine monitoring, you have to report the number of samples taken each month of the last quarter, the monthly arithmetic average of all samples in each month, the arithmetic average of all monthly averages for the last 12 months, and whether or not the MRDL of 4.0 mg/L Free Chlorine was exceeded.

Systems required to sample only once a year, must report to the state within 10 days after the end of each monitoring period in which samples were collected. Systems required to sample quarterly, must report to the state within 10 days after the end of each quarter in which samples were collected.

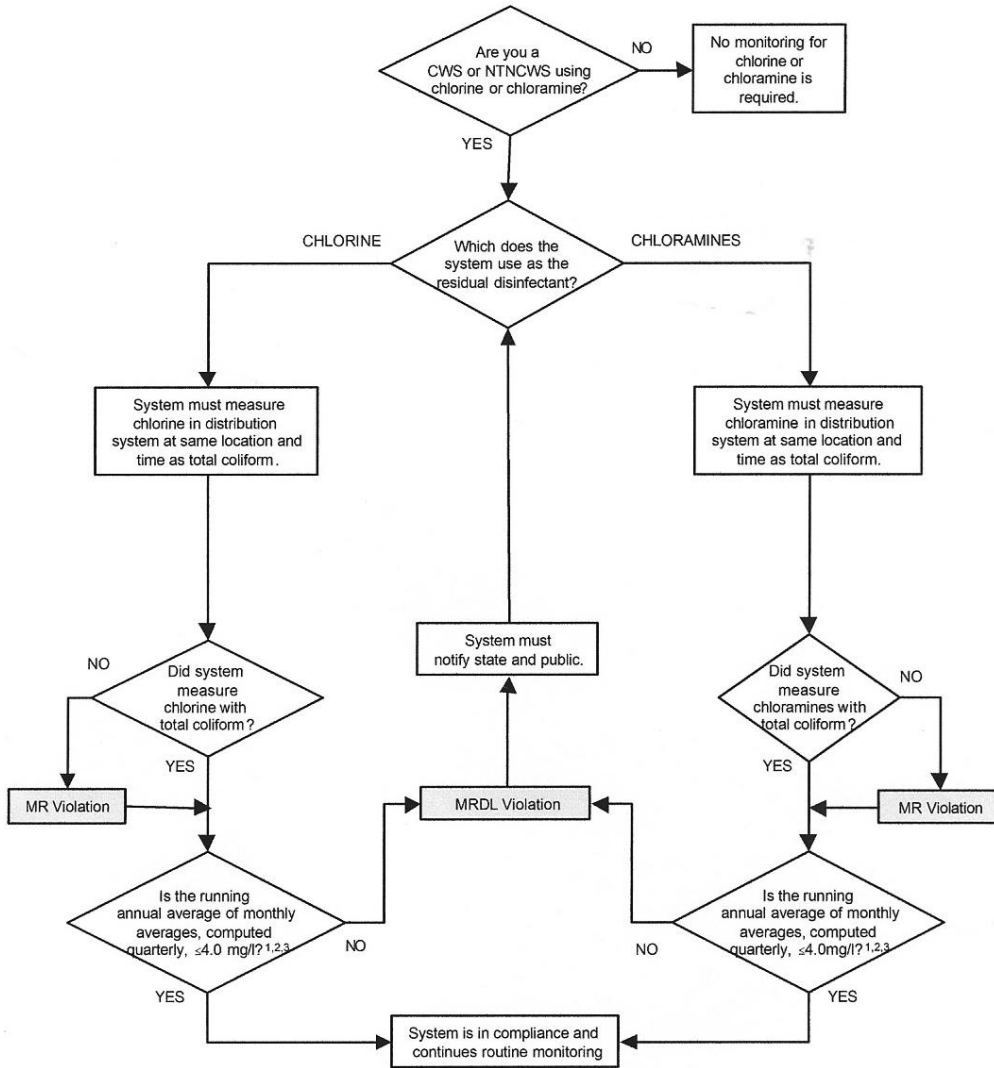
Now I know that the monitoring and reporting requirements of this and other rules can sometimes be confusing. So I've added a few simple charts that may be of some help to you operators of small groundwater systems. If you have any questions, call your local DOH representative or give us a call at NY Rural Water, that's what we are here for. And by the way, Happy Hunting!

TTHM & HAA5 Monitoring for Ground Water Systems Serving < 10,000 Persons



- NOTES**
- 1) If a system elects to sample more frequently than the minimum required, at least 25 percent of all samples collected each quarter (including those taken in excess of the required frequency) must be taken at locations that represent the maximum residence time of the water in the distribution system. The remaining samples must be taken at locations representative of at least average residence time in the distribution system.
 - 2) Samples must be taken during month of warmest water temperature at location representing the maximum residence time.
 - 3) 3 year cycle begins on January 1 following the quarter in which system qualifies for reduced monitoring.
 - 4) If PWS fails to complete 4 consecutive quarters of monitoring, compliance with the MCL for the last 4 quarter period must be based on average of available data.

Monitoring Requirements for Chlorine and Chloramine



NOTES

1. Notwithstanding the MRDLs for chlorine and chloramines, systems may increase residual disinfectant levels of chlorine or chloramines in the distribution system to a level and for a time necessary to protect public health to address specific microbiological contamination problems.
2. If system switches between use of chlorine and chloramines, compliance must be determined by including together all monitoring results of both chlorine and chloramines in calculating compliance.
3. Running annual average is first calculated after first 12 months of monitoring.