

<b>Water Utility Board Procedural Guideline</b>	
Title:	<b>GUIDE 8 – Executive Summary of <a href="#">Water Quality Treatment Policies</a></b>
Policy Number:	<b>Relates to <a href="#">O-2B</a></b> Adopted: Mar 24, 2015
Category:	Procedural Guideline Revision #/Date:

*Note: A complete copy of the Water Quality Treatment Policies adopted by the board on January 27, 2015 is [available online](#).*

**1. Volatile and Synthetic Organic Compounds with a primary Maximum Contaminant Level (MCL) or an Enforcement Standard:**

As required by NR 809, quarterly monitoring shall occur if any regulated VOC is detected at a level that exceeds 0.0005 mg/L. When four consecutive quarterly samples exceed a concentration equivalent to 50% of the MCL or ES, utility staff shall begin an investigation into feasibility of wellhead treatment, best available technologies [BATs] for VOC reduction, and the source and extent of contamination if not known or previously investigated. At the 80% threshold, staff shall begin a planning process to design and construct a treatment plant to reduce the contaminant level or begin the process to identify a new supply point, free of contamination.

**2. Inorganic compounds with a primary MCL or an Enforcement Standard:**

Quarterly monitoring shall occur following detections above one half the MCL or ES. When four consecutive quarterly samples exceed this benchmark, an investigation into the contaminant source, causes of the elevated concentration, and alternative strategies for contaminant reductions shall begin. Triggers for an investigation will be based on concentrations at the well rather than in the distribution system. Action shall be taken to reduce the contaminant level if it consistently exceeds 80% of the MCL or ES.

**3. Radionuclides with a primary MCL:**

Monitor gross alpha, radium, and uranium according to the requirements established by Wisconsin DNR. Detections of any radionuclide above 50 % of the MCL shall trigger quarterly monitoring. If four consecutive quarterly samples exceed this benchmark, staff shall investigate alternatives for contaminant reductions including wellhead treatment, well modifications, and changes to well operations. Source reduction shall be considered if contaminant levels consistently exceed 80% of the MCL.

**4. Inorganic compounds with a secondary MCL:**

Confirmed detections of an inorganic contaminant above one half the SMCL shall trigger an investigation into the contamination source, causes of the elevated concentration, and alternative strategies for reductions. Triggers for an investigation shall be based on concentrations at the well rather than in the distribution system. If the contaminant consistently exceeds 80% of the SMCL, action shall be taken to reduce the contaminant level through wellhead treatment, operations, or source abandonment/new supply.

**5. Unregulated contaminants of concern: sodium**

Detection of sodium above 30 mg/L at any source shall result in additional monitoring – monthly testing for a period of one year. If the average monthly sodium level is above 30 mg/L, it shall trigger an investigation into the sources and alternative strategies that can reduce the sodium level. If the level exceeds 48 mg/L, staff shall begin the planning process to design and construct a treatment plant, modify the well to seal off the upper aquifer, or identify a new supply point.

**6. Unregulated contaminants of concern: hexavalent chromium**

Continue monitoring hexavalent chromium at all wells twice per year through 2015. Then, reduce to annual monitoring at wells where hexavalent chromium exceeds 1 µg/L – a level that corresponds to one tenth the recently adopted California MCL. All wells shall be tested at least once every three years for hexavalent chromium. Any detection above 5 µg/L shall trigger an investigation into the causes of the elevated concentration and alternative strategies for reductions including operational changes and wellhead treatment. Action may be taken to reduce the contaminant level if it exceeds 8 µg/L.

**7. Other unregulated or emerging contaminants**

The utility shall maintain a budget to accommodate the unexpected need to test for new or emerging contaminants. The Water Quality Manager shall consult with the Water Quality Technical Advisory Committee to discuss potential contaminants and the frequency of testing.