Water Utility Board Policy			
Title:	Water Quality		
Policy Number:	O-2B	Adopted:	May 24, 2011
Category:	Outcomes	Revision #/Date:	2/ July 22, 2014

Madison Water Utility consumers will receive high quality water that meets or is better than all primary and secondary drinking water standards, including their public notification requirements, and complies with board-adopted water quality goals, incorporated by attachment.

The Madison Water Utility recognizes that drinking water standards are subject to revision and that new compounds of concern will be determined. This dynamic is a result of health studies being conducted by health organizations and government agencies on the state, national and international level. The technology to quantify compounds at increasingly minute levels is constantly improving.

The Madison Water Utility shall maintain and promulgate a Watch List of compounds of concern by unit well of compounds that are increasing and may approach the primary and secondary drinking water standards. The Watch List shall identify which wells require action.

Please refer to the following Procedural Guidelines:

- GUIDE 2: Policy on Testing for Pharmaceuticals and Endocrine Disrupting Compounds
- GUIDE 3: Resolution to Establish Water Quality and Treatment Policies for Iron and Manganese
- GUIDE 4: Board of Health for Madison and Dane County Fluoridation Policy
- GUIDE 7: Sodium Chloride Policy
- GUIDE 8: Water Quality Treatment Policies

## Rescind & Replace with GUIDE 8 (Water Quality Treatment Policies)

Water Utility Board Procedural Guideline			
Title:	GUIDE 2 - Policy on Testing for Pharmaceuticals and Endocrine Disrupting Compounds (Legistar Number 15150)		
Policy Number:	Relates to <u>O-2B</u>	Adopted:	Jun 23, 2009
Category:	Procedural Guideline	Revision #/Date:	1/July 22, 2014

If any of the following conditions were to occur, it might trigger the Water Utility to initiate testing for pharmaceuticals and endocrine disrupting compounds. They include:

- 1. Studies on deep, groundwater wells that document the detection of pharmaceuticals and/or endocrine disruptors at significant levels,
- 2. Evidence suggesting significant contamination of Madison deep wells from leaking sewers or faulty well construction,
- 3. New information shows potential human health effects at ultra-trace levels, or concentrations below one part per trillion, or
- 4. The establishment of a new federal or state health-based standard.

The decision whether or not to test for these substances will be reviewed annually.

## Rescind & Replace with GUIDE 8 (Water Quality Treatment Policies)

Water Utility Board Procedural Guideline			
Title:	GUIDE 3 – Resolution to Establish Water Quality and Treatment Policies for Iron and Manganese (Legistar Number 15129)		
Policy Number:	Relates to O-2B	Adopted:	Aug 25, 2009
Category:	Procedural Guideline	Revision #/Date:	

WHEREAS, the Madison Water Utility Board is authorized under Section 13.01(3) of the Madison General Ordinances (MGO) to make rules and regulations for the Water Utility; and

**WHEREAS**, the Madison Water Utility Board desires to provide the customers of the Water Utility with the highest quality drinking water; and

**WHEREAS**, the U.S. EPA has established National Secondary Drinking Water Regulations to "assist public water systems in managing their drinking water for aesthetic considerations"; and

WHEREAS, the U.S. EPA encourages the general public to "support rate increases for your local water supplier, where necessary, to upgrade your supplier's treatment facilities to meet drinking water standards", including secondary standards; and

WHEREAS, the elements iron (Fe) and manganese (Mn) are present to varying degrees in the utility's source water, and contribute to discolored water events, laundry staining, and dissatisfaction with water quality for some customers,

**NOW THEREFORE BE IT RESOLVED** that the Madison Water Utility Board adopts the following water quality and treatment policies:

- The Madison Water Utility, under normal operating conditions, shall provide water that contains less than the National Secondary Drinking Water Standard for Fe (currently 0.3 mg/L) and Mn (currently 0.05 mg/L) at the customer's tap.
- 2. When annual flushing of water mains is not sufficient to achieve water quality policy no. 1, treatment or other management of the source water shall be provided.
- 3. For new wells, treatment shall be provided when production well test data indicate levels of Fe greater than 0.1 mg/L or levels of Mn greater than 0.02 mg/L, as recommended by the American Water Works Association and the American Society of Civil Engineers.
- 4. The Water Utility Board shall recommend and support a capital improvement program and the water rate increases necessary to meet these objectives.

Water Utility Board Procedural Guideline			
Title:	GUIDE 4 – Board of Health for Madison and Dane County Fluoridation Policy (Resolution # 2009-22)		
Policy Number:	Relates to <u>EL - 2A</u>	Adopted:	Dec 17, 2009
Category:	Procedural Guideline	Revision #/Date	:

The Board of Health Madison and Dane County, based on the review of the body of accepted scientific research and conclusions by national and international bodies charged with ensuring and advancing public health and safety, and staff analysis of the safety and effectiveness of fluoridating the public water supply to promote dental health, adopts the policy developed by Public Health Madison and Dane County (dated). The Board further directs a review and report to the Board every five years to make necessary changes or re-affirm the policy.

The Board further directs the Madison Water Utility to add, control and monitor fluoride in the public water supply within the US Environmental Protection Association recommended range of 0.7 – 1.2 parts per million to maintain optimum levels for dental health.

The Board does not recommend by the Madison Water Utility or Public Health Madison and Dane County the issuance of health warnings to the general or special populations when fluoride levels are maintained at the recommended levels. The Board supports the Madison Water Utility's public notification guidelines detailed in its standard operating procedures for fluoridation. These guidelines currently require notification whenever fluoride is detected in the distribution system at a level above 4 parts per million or if the running annual average at any entry point exceeds 2 parts per million.

## Rescind & Replace with GUIDE 8 (Water Quality Treatment Policies)

Water Utility Board Policy		
Title:	GUIDE 7- Sodium Chloride Policy	
Policy Number:	Relates to O-2B	Adopted: July 22, 2014
Category:	Procedural Guidelines	Revision #/Date:

The Water Utility shall do the following:

- 1. Monitor the current magnitude and projected trend of sodium chloride concentrations in the water supply system. Using the normal testing regime the utility undertakes for water quality monitoring, obtain regular data on sodium and chloride concentrations versus relevant EPA or FDA standards and recommendations, and summarize this data in a dedicated section of the quarterly water quality report. Where information is available, comment on the sources of sodium chloride in the system.
- 2. Develop and implement sodium chloride mitigation plan(s) for wells where the annual average concentration of chloride exceeds 50% of the secondary Maximum Contaminant Level (sMCL). These plan(s) may include operational changes, coordinated activities with other entities, and infrastructure improvements, as well as other measures. Provide regular updates to the Board during routine water quality monitoring discussions, and incorporate capital needs from the plan(s) in the Capital Improvement Plan.