

Course Title: Iron and Manganese Control Strategies

Contact Hours: 7

CEU Value: 0.7

Course Description:

This course is designed to teach operators various types of iron and manganese removal/control strategies for drinking water. Participants will learn iron and manganese removal technologies and their limitations. The course will specifically focus on iron and manganese sequestration and their advantages and disadvantages. The course will also include a video presentation on some of the iron and manganese removal/control strategies currently in use in some of the water treatment facilities in Ontario. Participants will also get a “hands-on” experience analyzing iron and manganese.

Areas of study include:

- Iron and Manganese in drinking water (occurrence, aesthetic implications, chemistry, impact of water quality and microbial activity)
- Iron & Manganese removal technologies
 - Oxidation processes
 - Filtration processes
 - Chemically enhanced filtration
 - Membrane filtration
 - Softening
 - Dissolved air floatation
 - Biological treatment
- Iron & Manganese sequestration, its advantages and disadvantages
- In-situ treatment, its advantages and disadvantages
- “Hands-on” testing for Iron & Manganese
- Oxidant requirement calculation exercise

Target Audience: This one-day course is designed to target an audience of water treatment operators, water distribution operators & supervisors.