

N.H. WATER WORKS ASSOCIATION
OPERATORS' TRAINING SESSION
Wednesday, April 14, 2010
"Iron and Manganese Issues"
City of Dover Public Works Facility



"Iron and Manganese Issues" is a one day class designed to cover the chemistry of iron and manganese, problems caused by iron and manganese, and various treatment methods. The class will be most beneficial to operators of community water systems where high concentrations of iron and manganese often pose considerable challenges.

Course Description: The class will include: review of iron and manganese standards, origins and types of iron and manganese, molecular structure, the role of pH, hardness, alkalinity in various treatment processes, chemical feed pumps; design, installation, repair and maintenance, sequestering iron and manganese, various treatment possibilities and treatment systems. The class will also include visits to two of the town of Dover's stations - one which employs manganese green sand for iron and manganese treatment and a second which uses a "Pureflow" process.

Where and When: The class will be held at the Dover Public Works Facility on Wednesday April 14, 2010. (See directions on reverse.) Registration begins at 8:30 a.m. The class will run from 9:00 a.m. to 3:00 p.m. with a morning break and a lunch break. Lunch is on your own. There are several restaurants in Dover and a list of restaurants and locations will be provided.

Instructors: Steve Guercia, Manager, Engineered Systems, Secondwind Environmental, Manchester, NH; John Lukin, NHWWA Trainer; and system tours by Rich Fowler, Dover Community Services Department, Dover NH. All three presenters have extensive backgrounds in iron and manganese issues and treatment.

Credit: 5 TCH will be awarded to those who complete the full day.

Cost: The cost of this class is \$60.00 per person. **Reservations and check must be received at NHWWA, 18 North Main Street, Suite 308, Concord NH 03301 no later than Friday April 9, 2010.** Please use the reservation form below. A \$5.00 surcharge will be applied to those registering after the deadline. Inquiries call Jennifer Lombardo at (603) 415-3959. **THIS CLASS WILL BE LIMITED TO 30 ATTENDEES.**

To register, please complete the form below:

To be received NO LATER THAN FRIDAY, April 9, 2010 at:

NHWWA, 18 North Main Street, Suite 308, Concord NH 03301.

NHWWA OPERATOR TRAINING, Wednesday, April 14, 2010 Dover Public Works Facility
"IRON AND MANGANESE ISSUES"

Water System, Firm, Etc.: _____

Mailing Address: _____

City, State, Zip: _____

Daytime Tel. # _____ Evening Tel.# _____

Reserve # _____ @ \$60.00 per person (member) \$80.00 per person non-NHWWA member.

List Attendees Below:

1). _____

2). _____

3). _____