

# **North Carolina Ground Water Association**

## **Continuing Education Classes**

Clam Digger Inn, 511 Salter Path Rd., Atlantic Beach, NC 28512

Saturday, October 17, 2009 9:00 am - 5:00 pm

8 hours of continuing education

**8:00 am - 9:00 am**

**Marketing and How to Survive in a Down Economy - John Boyette, Jr.**

**9:00 am - 10:50 am**

**Basic Chemistry of the Well - Lawrence Zinser, Master Water Conditioning**

This course is designed to describe the most important qualities of well water. The instruction begins with a description of the water molecule, and follows a logical progression to define water quality and contaminants. Basic water quality standards and basic treatment technologies will be surveyed. Included are descriptions of osmosis, diffusion, conductivity, oxidation and ultraviolet light in water. At the end of the course the attendee will be able to describe the effects of the primary contaminants in water, together with the basic technology for quality improvement.

**11:00 am - 12:00 Noon**

**Current Technologies for Water Treatment - Lawrence Zinser, Master Well Conditioning**

This session is designed to explain the most recent developments in the treatment of water for home and industry. The course will present, discuss, and compare the current variables in efficiency and will then address the latest concepts in technology that minimize the quality and quantity of treatment discharge. Included will be a discussion of microprocessors, Vortech distributors, brine reuse and various applications of membrane filtration.

**Biographic Sketch: Lawrence R. Zinser**

Following an education in chemistry at Georgetown University, graduate work at Wayne State University and a 20+ year career with the US Marine Corps, has served for over twelve years in designing, manufacturing, teaching, and troubleshooting water treatment systems. Has a background in industrial, commercial and residential applications involving a wide range of technologies. Has provided numerous technical courses throughout the country and internationally, which have been accredited by the Water Quality Association, the American Nephrology Nurses Association, and the Lehigh-Carbon County Community College. Is currently on the Board of Directors for the Eastern Water Quality Association.

**1:00 pm - 3:00 pm**

**Grout: What, Why, and How - Mark Whittle, Baroid Industrial Drilling Products**

Different types of grout. What grouts are, what grouts are not. Why we need the grout.

**3:10 pm - 5:00 pm**

**Grout: What, Why, and How - Mark Whittle, Baroid Industrial Drilling Products**

Methods of grouting.

**Biographic Sketch: Mark G. Whittle**

- ◆ BS in Geology from the University of South Carolina
- ◆ 6 years Consulting Geologist with 40,000+ feet of drilling, coring, well construction
- ◆ South Carolina Certified Well Driller #A1246
- ◆ 9 years Regulatory with South Carolina Department of Health and Environmental Control in CERCLA, District Hydrogeologist, and Well Inspector
- ◆ Instructor for Central Carolina Technical College for Basic Well Drilling, Advanced Well Drilling, and Regulations Review
- ◆ Baroid Industrial Drilling Products SE Account Representative/Business Development for the SE (North and South Carolina, Georgia, and Tennessee)
- ◆ Tennessee PG 3653