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LAGOON SYSTEMS & MICROBIOLOGY WORKSHOP

July 12, 2010

Iowa Rural Water
Association
4221 S. 22nd Ave East
Newton, IA 50208
800-747-7782

Course Sponsored by:



About the Instructor

Auralene Toni Glymph, Microbiologist III
Metropolitan Water Reclamation
District of Greater Chicago

“Toni” Glymph is a certified wastewater treatment plant operator with more than 12 years of actual hands on wastewater treatment system experience and has spent more than 22 years conducting microscopic evaluations and troubleshooting wastewater treatment system upsets. She has conducted over 200 Wastewater Microbiology workshops including, Activated Sludge Process Control and Operations, Wastewater Microbiology and Process Control, Filamentous Bacteria Identification and Control, Lagoon Treatment System Microbiology, Algae Identification in Wastewater Treatment Lagoons, Slime Bulking & Foaming and The Use of Staining in Wastewater Microbiology Process Control. She continues to conduct an average of 15 workshops each year.

Toni has gained national recognition as an expert in wastewater microbiology. She is the recipient of the State of Wisconsin John C. Brogan Award for Outstanding Environmental Achievement for her work in assisting operators to achieve and maintain compliance of treatment system requirements. She has also received national praise for her work with wastewater treatment plant operators in training sessions and through one-on-one technical assistance. She is widely regarded as a top expert in her field and an excellent teacher, and has the ability to forge connections with her audiences.

AGENDA

8:00 - 8:45 am Registration / Introduction

8:45 - 12:00 pm

Different Types of Lagoon Systems

- Anaerobic Lagoons
- Facultative Lagoons
- Stabilization Ponds
- Aerated Lagoons

Lagoon System Microbiology

- Bacteria
 - Aerobic
 - Anaerobic
 - Photosynthetic

Break

- Protozoa & Metazoa
- Algae
 - Diatoms
 - Green Algae
 - Blue-green Algae

12:00 - 1:00 pm ... Lunch (provided)

1:00 - 3:00 pm

Understanding Algae

- Nutrient Requirements
 - pH
 - Alkalinity
 - Temperature
- Blue-green Algae Control
- Lagoon Turnover (Spring/Fall)
- Other Small Treatment Systems

3:00 - 3:45 pm Evaluations and CEUs

This class offers 5 hours for Wastewater Credit

This class will be limited to 60 participants.

REGISTRATION

Name: _____

City/System: _____

Address: _____

Phone: _____

Fax: _____

E-mail: _____

Cost: \$60.00

PLEASE MAKE PAYMENT TO:

Iowa Rural Water Association
4221 S. 22nd Ave East
Newton, IA 50208

Register on-line @
www.iowaruralwater.org

QUESTIONS?
Call IRWA at 1-800-747-7782

COURSE OBJECTIVE: The objective of this class is to teach the operators about the different types of lagoon systems and the role of bacteria, protozoa and algae in the treatment process. The class will include a thorough discussion on the different types of algae and the possible causes and cures for algae blooms. Other small treatment systems i.e. package plants will be discussed.

