



Wastewater Lagoon Basics, Pump & Motor Control Seminar, Variable Frequency Drives (VFD) & Submersible Pumps



Free Classes Sponsored by California Rural Water Association

July 14-16, 2009
Alpine, CA (San Diego County)

Viejas Casino, 5000 Willows Rd, Alpine, CA 91901 (training center is the last building on east side of casino)

July 14: Wastewater Lagoon Basics	7 Wastewater Contact Hours
Schedule: Registration: 8:00am – 8:15am, Class: 8:15am – 4:00pm, Lunch: 12:00pm – 1:00pm (on your own)	
Introduction to lagoon basics, collection system & lagoon structure, wastewater treatment, biology, chemistry and physical factors, operations & maintenance, monitoring and reporting, and troubleshooting.	
July 15: Pump & Motor Control Seminar	6 Water and Wastewater Contact Hours
Schedule: Registration: 8:00am – 8:30am, Class: 8:30am – 3:30pm, Lunch: 12:00pm – 1:00pm (on your own)	
Review of basic pump hydraulics, centrifugal pump sizing, motor design, construction and operation, wire sizing and controls, and system troubleshooting. Variable Frequency Drives (VFD) will be discussed and why they are becoming more popular with utilities. Cavitation and water hammer will also be discussed.	
July 16: Variable Frequency Drives (VFD) & Submersible Pumps	6 Water and Wastewater Contact Hours
Schedule: Registration: 8:00am – 8:30am, Class: 8:30am – 3:30pm, Lunch: 12:00pm – 1:00pm (on your own)	
Morning session will review variable frequency drives (VFD) for large pump systems, basic setup, installation, operations and troubleshooting. Afternoon session will discuss submersible pumps, pump construction, operation, installation and troubleshooting.	

INSTRUCTORS:

Rick Hicklin has close to thirty years experience in the groundwater industry working for major manufacturers of pumps, motors, and controls. His positions have included sales, marketing, and technical training for all products related to the groundwater industry. Rick has worked for Grundfos Pumps, Red Jacket Pumps, Hydromatic Pumps, and Franklin Electric, and is now with Pentair Water.

Doug Davenport has been with CRWA for over 8 years and is currently certified as a Wastewater 2, Distribution 2 and Water Treatment 1. Doug holds a degree in Environmental Science and Planning and has been an instructor for over twenty years. Doug has been in the utility business since 1977 and started in the wastewater field at Tahoe-Truckee Sanitation, as a lab technician.

Please indicate which days you will attend:

<input type="checkbox"/> July 14, 2009	Wastewater Lagoon Basics 101
<input type="checkbox"/> July 15, 2009	Pump & Motor Control Seminar
<input type="checkbox"/> July 16, 2009	Variable Frequency Drives (VFD) & Submersible Pumps

Attendee(s) Name(s): _____

System or Company Name: _____

System or Company Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ FAX: _____ Email: _____

TO REGISTER: FAX this form to (916) 553-4904 or email to jmicklas@calruralwater.org or mail to CRWA, 4125 Northgate Blvd., Sacramento, CA 95834

These are free classes. We will not send a registration confirmation but will contact you if the class is full and put you on a waiting list. If you register and cannot attend, please call 800-833-0322 to cancel – there may be a waiting list. Please let us know if any registrant requires special accommodations for disabilities. For more information on this and other training classes offered by CRWA, please visit our website: www.calruralwater.org. Questions? Call our office! 800-833-0322.

Opt-out: If you wish to be taken off our fax or email distribution list, please call 800-833-0322 or email (whipple@cwo.com). Thank you!