



Southeast Desalting Association

# Tuesday, Jan. 24, 2012

7:30 a.m. - 4:15 p.m.

.80 CEUs FL Water & Wastewater  
(Approved)

## Tampa Bay Desal II Water Treatment Plant \*Space is limited to 20 attendees

13041 Wyandotte Rd., Gibsonton, FL 33534

### Hotels in the area:

**Hilton Garden Inn Tampa Southeast**  
4328 Garden Vista Dr.  
Riverview, FL  
Ph: 813-626-6610  
Approximately 12 miles away

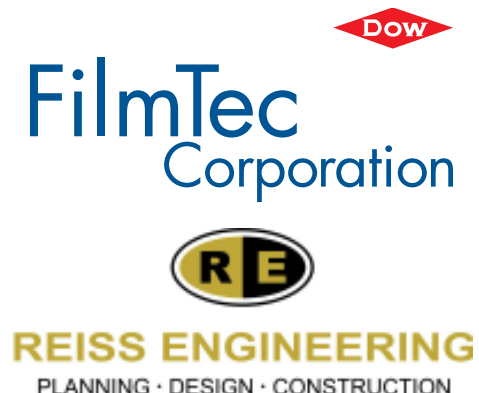
Take I-75 to Exit 246 - CR-672 toward Apollo Beach. Keep Left toward US-41/Apollo Beach. Merge onto Big Bend Rd. Turn Right onto Wyandotte Rd. The WTP is on the Left.

## Brackish and Seawater RO Operational Variances Workshop

- 7:30 - 8:00** Registration/Check-In
- 8:00 - 8:15** Introductions & Welcome
- Moderators:** Lance Littrell, P.E., SEDA Technology Transfer Co-Chair  
Greg Turman, SEDA Technology Transfer Co-Chair
- Speaker:** Harold Fravel, Jr., Dow Water & Process Solutions
- 8:15 - 10:00** **Background on Membrane Technology and Pretreatment:**  
The principles of reverse osmosis technology and how reverse osmosis membrane elements work and what kind of pretreatment is needed to assure smooth operation will be discussed.
- Basic Brackish and Seawater Membrane Element Construction:**  
How the individual parts of reverse osmosis membrane elements are produced and then fabricated into brackish water or seawater membrane elements and the differences between them will be reviewed. Several models will be shown to demonstrate the product construction.
- 10:00 - 10:15** Break
- 10:45 - 12:00** **Brackish and Seawater Operational Differences:**  
Operations of brackish water and seawater systems will be presented with an emphasis on the significant differences for each.
- Brief Review of Tampa Bay Desal II Plant Operations:**  
The Tampa Bay Desal II plant utilizes several unit operations for the efficient production of fresh water from seawater. Included in the tour will be the pretreatment section, the SW and BW system operations and the post treatment effort for a potable water to be distributed into the Tampa Bay Water system.
- 12:00 - 1:00** Lunch (included)
- 1:00 - 2:30** **Tour of Plant**  
There will be a plant tour of the Tampa Bay Desal II facility highlighting pretreatment, SW operations, BW operations and post treatment systems.
- 2:30 - 2:45** Break
- 2:45 - 4:00** **System Differences Between Seawater, Brackish Water and Nanofiltration Processes Including System Layout and Items Particular to the Water Being Treated:**  
How systems are designed to handle the various demands of treating water in a seawater, a brackish water and a nanofiltration plant will be discussed. System arrays, process controls, post treatment differences and some discussion on materials of construction will be made.
- 4:00 - 4:15** Wrap Up and Discussion



### Special Thanks to Our Sponsors





TO REGISTER - CALL SEDA, FAX  
OR VISIT OUR WEBSITE AT  
WWW.SOUTHEASTDESALTING.COM  
Ph: 772-781-7698 Fax: 772-463-0860

2409 SE Dixie Hwy.  
Stuart, FL 34996

**JAN. 24, 2012**

# BRACKISH & SEAWATER REVERSE OSMOSIS OPERATIONAL VARIANCES WORKSHOP REGISTRATION FORM

**Southeast Desalting Association (SEDA) ♦ 2409 SE Dixie Hwy. ♦ Stuart, FL 34996**

**PH: 772-781-7698 ♦ FAX: 772-463-0860 ♦ admin@southeastdesalting.com ♦ www.southeastdesalting.com**

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Company: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail: \_\_\_\_\_ Website: \_\_\_\_\_

<b>Special Needs:</b> <input type="checkbox"/> Wheelchair Access <input type="checkbox"/> Visually Impaired <input type="checkbox"/> Hearing Impaired <input type="checkbox"/> Vegetarian Meals <input type="checkbox"/> Other: _____
--

Member of (*check all that apply*):  SEDA  AMTA  
License Type: \_\_\_\_\_ Level (i.e., A, B, or C): \_\_\_\_\_ Lic.#: \_\_\_\_\_

**SEDA - Brackish & Seawater RO Operational Variances Workshop: Amount**

**\*Registration and Payment must be received by event date - space limited to 20 attendees:**

Members/Affiliates ( <i>must be from the list above</i> )	\$100	_____
Non-Members - Certified Ops ( <i>includes 1 year Div.1B SEDA membership</i> )	\$125	_____
Non-Members - Non Certified Ops ( <i>includes 1 year Div. 3B SEDA membership</i> )	\$150	_____
<b>Need .80 FL CEU Certification:</b>	\$ 25	_____

Total Registration Fee \$ \_\_\_\_\_

**METHOD OF PAYMENT: Payable to: Southeast Desalting Association, 2409 Dixie Hwy., Stuart, FL 34996**

Check Enclosed for \$ \_\_\_\_\_  Please Invoice PO# \_\_\_\_\_  
 Visa  M/C  Amex Card # \_\_\_\_\_ + \_\_\_\_\_  
 (*16 #'s + 3 #'s listed in the signature area on back of Visa/MC or + 4 #'s on front of AX*)  
 Name on CC: \_\_\_\_\_ Expiration Date: \_\_\_\_\_  
 CC Mailing Address: \_\_\_\_\_ CC Mailing Zip: \_\_\_\_\_

**Cancellations/Refunds...**

Written cancellation requests received by the Southeast Desalting Association (SEDA) at least 5 days before a scheduled event will receive a refund, less a \$50 administrative processing fee. Full payment is required if the request is received less than 5 days of the scheduled event and no refund will be available. A credit may be issued less a \$25 recordkeeping fee towards a future event provided that it is redeemed within 12 months of the credited scheduled event. The credit will be forfeited if not used within the 12 months timeframe. A substitution of the registrant may be made any time without cost up to the date of the event. The requested amount of a refund or credit must exceed their respective administrative processing fees as described above in order to be considered. SEDA reserves the right to make changes to the scheduled event including but not limited to changing the event location, scheduled date(s), program and speakers, or to cancel the event in its entirety when conditions beyond its control prevail. If the event is cancelled, SEDA's liability is limited to providing a full refund of the fees paid toward the scheduled event.