



**SOUTH CENTRAL
MEMBRANE
ASSOCIATION**

RO Operations & Maintenance Workshop

Thursday, September 19, 2019

7:30 am - 5:15 pm (Space Limited to 25 Attendees)
8 Contact Hours - TCEQ Course #1342 Approved

NAWSC Training Center

375 S. Doolittle Rd., Edinburg, TX 78542

- 7:30 - 8:00 Registration & Continental Breakfast**
- Moderator** Justin Sutherland, Ph.D., P.E., Carollo Engineers, Inc.
- 8:00 - 9:00 Session 1: RO Operations & Maintenance - Part 1**
Introduction to Membrane Systems
Justin Sutherland, Ph.D., P.E., Carollo Engineers, Inc.
- 9:00 - 10:00 Session 2: RO Operations & Maintenance - Part 2**
Water Quality, RO/NF Pretreatment, Monitoring
Justin Sutherland, Ph.D., P.E., Carollo Engineers, Inc.
- 10:00 - 10:30 Refreshment Break**
- 10:30 - 11:30 Session 3: RO Operations & Maintenance - Part 3**
Turbidity, Control Systems, and Post Treatment
Justin Sutherland, Ph.D., P.E., Carollo Engineers, Inc.
- 11:30 - 12:30 Session 4: Data Interpretation**
Normalization and Formulas
Buddy Boysen, P.E., Water Standard
- 12:30 - 1:00 Lunch (included)**
- 1:00 - 2:00 Session 6: RO Chemical Cleaning - Part 1**
Clean-In-Place, Fouling and Scaling
Tim Kirk, P.E., Avista Technologies, Inc.
- 2:00 - 3:00 Session 7: RO Chemical Cleaning - Part 2**
Chemical Selection and Cleaning Procedure
Tim Kirk, P.E., Avista Technologies, Inc.
- 3:00 - 3:15 Refreshment Break**
- 3:15 - 5:15 Session 5: RO Troubleshooting**
Understanding & Solutions to Operational Issues"
Buddy Boysen, P.E., Water Standard

SCMA is proud to offer this TCEQ Approved 8 hour course, Reverse Osmosis Operations & Maintenance Workshop. Completion of this course complies with the requirement in Title 30, Texas Administrative Code (TAC) §290.46(e)(2)(D) for training of RO/NF Plant Operators.

Thanks to the Sponsors:

Major



a Kurita company

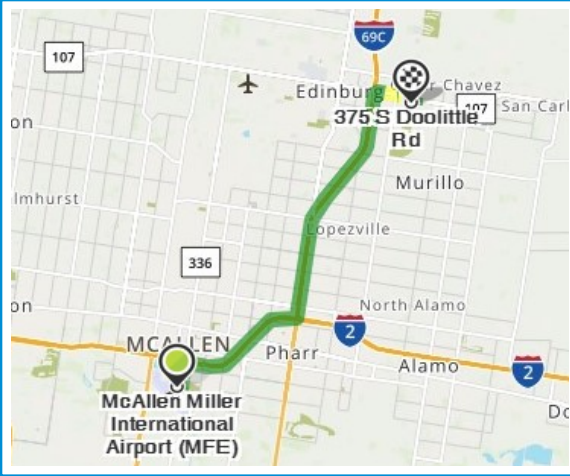
Creative Chemistry. Smart Solutions.

Lunch



Special Thanks to Host Facility





NAWSC Training Center

375 S. Doolittle Rd., Edinburg, TX 78542

If Lost - Ph: 956-383-1618

Directions from McAllen Miller International Airport: 12.7 miles

Start out going north on S 10th St/Texas Tropical Trail/TX-336 toward S Old 10th St. Turn right onto W Expressway 83. Turn slight left to take the US-83 E ramp. Merge onto 1-2 E/US-83 S. Merge onto I-69C N toward Edinburg/US-281. Take the TX-107/University Dr exit. Merge onto S 25th Ave. S 25th Ave becomes S Expressway 281. Turn right onto E University Dr/TX-107. Turn right onto S Doolittle Rd. 375 S Doolittle Rd, Hidalgo, TX, 78542-9701, 375 S Doolittle Rd is on the right.

REGISTRATION FORM

South Central Membrane Association (SCMA)

PHONE: 512-617-6529 ♦ MAIL: support@scmembrane.org ♦ WEB: www.scmembrane.org
14900 Avery Ranch Blvd., Ste. C200 #300, Austin, TX 78717

Name: _____ Title: _____
 Company: _____
 Mailing Address: _____
 City: _____ State: _____ Zip: _____
 Phone: _____ Cell: _____
 E-mail: _____ Website: _____
 Billing Contact Name: _____ Email: _____ Phone: _____

Special Needs:

Food Allergies
(provide specifics below) _____

Gluten Free
 Halal Meals
 Paleo Meals
 Vegan Meals
 Vegetarian Meals
 Wheelchair Access
 Other: _____

Please refer to [SCMA's Privacy Policy](#) if you have any questions regarding your preferences.

(Attendee materials will be sent approx. 2 weeks post event; must provide an email address compatible to receiving and/or accessing Hightail messages. If other than listed above, provide email here: _____)

Need Contact Hours: State: _____ License Type: _____ Grade (i.e., 1, 2, etc.): _____ Lic.#: _____

SCMA - RO Operations & Maintenance Workshops (includes CEUs/PDHs):

*Registration and Payment must be received by date:	Sept 5th	On/After Sept 6th	Amount
SCMA Members	\$175	\$225	_____
Non-Members - Certified Ops (includes 1 year Div.1B* SCMA membership)	\$225	\$275	_____
Non-Members - Non-Ops-Individual (incl. 1 year Div.3A SCMA membership)	\$275	\$325	_____

(Please contact SCMA for membership application)

Total Registration Fee \$ _____

* Div.1B* SCMA membership contingent on existing Primary Member

Cancellations/Refunds:

Written cancellation requests received on or before **Sept. 5, 2019** will receive a refund, less a \$50 processing fee. Full payment is required if cancellation is received on or after **Sept. 6, 2019** - no refunds and no credits for future events will be granted. However, substitutions may be made at any time. SCMA reserves the right to make changes in programs and speakers, or to cancel programs when conditions beyond its control prevail. Every effort will be made to contact each enrollee if a program is cancelled. If a program is not held, SCMA's liability is limited to the refund of the program fee only.

PAYMENT METHOD:

Payable to: South Central Membrane Association
Mail to: 14900 Avery Ranch Blvd., Ste. C200 #300, Austin, TX 78717

Check Enclosed for \$ _____ Please Invoice

For Security Purposes, SCMA encourages you to use the Easy Online Registration. Secure Credit Card and eCheck Payment Processing is Now Available at: WWW.SCMEMBRANE.ORG