

Reverse Osmosis Advanced Chemical Cleaning Hands-On



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WHERE & WHEN

For a list of where and when this seminar is being presented, click [here](#).
This seminar can also be presented at your facility.

DAILY SCHEDULE

8:00 a.m. - 11:30 a.m.

Lunch Break

12:30 p.m. - 5:00 p.m.

WHO SHOULD ATTEND

This seminar provides the information required for operators, maintenance personnel, technicians, management, engineering personnel or anyone else needing an advanced knowledge of how to chemically clean complex foulants/scalants.

WHY YOU SHOULD ATTEND

This seminar is designed to help you get the most out of your chemical cleanings. The focus is on chemical cleaning subtleties that can make the difference between obtaining only minimal results to obtaining excellent results. Chemically cleaning reverse osmosis (RO) and nanofiltration (NF) units can be expensive, time-consuming, frustrating and all too frequently ineffective. If you're cleaning more than 2-4 times per year and/or are getting less than 3-5 years of life from your elements, this seminar is for you. You'll learn advanced ways to clean RO/NF units by actually cleaning more complexly scaled and fouled RO units. The information, tips and techniques you'll learn in this seminar are practical and immediately usable to improve the performance of your system(s).

WHAT YOU'LL RECEIVE

8 hours of interesting, easy-to-understand classroom and hands-on RO/NF training

A comprehensive workbook packed with procedures, datasheets and techniques

Personal attention! DHP hands-on seminars are limited to a maximum of 6 attendees

Break refreshments and lunch

INSTRUCTORS



Jason Turner
Plant City, FL



Ed Turner
San Antonio, TX



Robert Decker
Farmington, NM



Bill Dees
Farmington, NM



Alan Lane
Yuma, AZ

Every instructor for the hands-on seminars is/was an instructor at one of DHP's on-campus Associate Degree in Advanced Water Treatment programs. The hands-on seminars are held at DHP's Farmington, NM facility or at one of three college-program location using the same equipment, labs, instruments and training aids as our college students. Each DHP college instructor is a graduate of the four-semester Advanced Water Treatment Program. You won't find anyone more dedicated to students and more excited about water treatment than DHP instructors. DHP instructors have trained over 13,000 water treatment professionals worldwide since 1988.

OVERVIEW OF HANDS-ON TRAINING

- Advanced cleaner determination
- Composite cleaner formulations
- Advanced cleaning techniques
- Colloidal foulant removal
- Complex bio-foulant removal
- Advanced troubleshooting of chemical cleanings



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WHAT YOU'LL LEARN

- Various ways and methods of selecting a cleaner
- The best ways to avoid selecting an incompatible cleaner
- Different, industry proven composite cleaner solutions
- Various methods to enhance cleanings and scalant/foulant removal
- Colloidal foulant removal
- Understand complex foulant removal
- Advanced troubleshooting of chemical cleanings
- How to get the most out of your cleanings

DETAILED AGENDA

Morning:

7:45 Refreshments (Provided)

8:00 Introductions

- Safety in the hands-on areas
- RO Unit advanced chemical cleaning pre-test
- Advanced cleaning introduction
- Advanced cleaner determination
- Composite cleaners

9:15 Break (Refreshments Provided)

9:30 Prepare the units for operation (4" and 8")

- Four- and eight-inch RO unit walk down
- Hand-held conductivity and pH meter calibration
- Pretreatment skid start-up

RO Unit start-up

- Pre-cleaning data collection
- Shut down

10:30 Break (Refreshments Provided)

10:45 Colloidal foulant removal (8" RO unit)

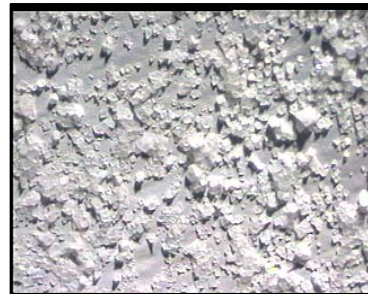
12:00 Lunch (Provided)



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Afternoon:

1:00 Colloidal foulant removal continued (8" RO unit)

2:00 Break (Refreshments Provided)

2:15 Complex bio-foulant removal (4" RO unit)

3:15 Break (Refreshments Provided)

3:30 Complex bio-foulant removal continued (8" RO unit)

4:30 Discussion, questions & answers

- RO Unit advanced chemical cleaning post-test

5:00 End

CERTIFICATE OF COMPLETION

Each attendee will receive a DHP *Certificate of Completion* following the seminar.

WHAT OTHERS SAY ABOUT DHP HANDS-ON SEMINARS

DHP has trained over 13,000 water treatment professionals worldwide since 1988. Trainees include industrial, governmental and drinking water clients. The average rating given by attendees for DHP seminars is over 9 (on a scale of 1-10, with 1 being a terrible rating and 10 being an outstanding rating). The following are typical comments from attendees:

"I enjoyed the class very much and would highly recommend it to anyone in the industry."

Janet Drozda, Operator, Intel

"Outstanding course. Best training program that I have attended in the water treatment industry!"

George James, Reaction Engineering, Inc.

"Instructor was very knowledgeable and thorough. Course will have large impact on our cleaning procedure."

John Paul Robb, Plant Engineer, Trigen Colorado Energy

"Excellent Course! The hands on portion served very well in firming up the concepts and increasing retention. Level of instruction was good balance of theory and practical...well presented."

Finley Jones, Sr. Account Manager, Nalco

"Probably the best hands-on course I've had in my 10 years as a technician."

Andy Gutierrez, Technician, Amgen

"Hands-on experience was a valuable experience."

Melody Martin, Plant Chemist, Oklahoma Gas & Electric

"I thought I knew a good amount about RO systems. After taking this course I realized how little I actually did know."

Chris Corsetti, Facilities Engineering Supervisor, Genzyme Corp.

"Excellent instructors. I should have taken this course ten years ago. I could have saved the company thousands of dollars and weeks of time."

Charles Hagen, Lab supervisor. Ameradahess

"DHP training took me from having no idea what RO is to being a confident and knowledgeable RO decision maker."

Kenneth Gaskill, Maintenance Supervisor, Warner Lambert Co.

"Great course, great teachers, great equipment. I liked the use of multimedia...videos, illustrations, computers, etc."

Evan Francis, Operator, Monterey Bay Aquarium