Workshop Speakers:

Dr. Davis Ford
Dr. Ford is a practicing environmental engineer with over 45 years of experience. In addition, he serves on the faculty at The University of Texas at Austin as an adjunct professor. He received a B.S. in civil engineering at Texas A&M University and a M.S. and a PhD in environmental engineering at The University of Texas at Austin. He is a Distinguished Engineering Graduate of both Texas A&M University and The University of Texas at Austin as well as a Distinguished Alumnus of Texas A&M. For his contributions to the unique and advanced design in industrial wastewater treatment, Dr. Ford was elected to the National Academy of Engineering in 1997.

Dr. David Jenkins
David Jenkins is Professor Emeritus of Civil and Environmental Engineering at the University of California at Berkeley. He holds a B.S. in Applied Biochemistry from Birmingham University and a PhD in Public Health Engineering from the University of Durham, King's College. He taught environmental engineering at Berkeley from 1960 until 1999. His major research areas are biological wastewater and sludge treatment processes, water and wastewater chemistry and microbiology. In his consulting work, Dr. Jenkins specializes in the upgrading and troubleshooting of wastewater treatment plants and in environmental and process problems involving his expertise in chemistry and microbiology. For his contributions to the understanding of the biological wastewater treatment processes, Dr. Jenkins was elected to the National Academy of Engineering in 2001.

Dr. Michael Kavanaugh
Dr. Kavanaugh is Vice President and Global Science and Technology Leader for Malcolm Pirnie, Inc. He has a PhD in civil/environmental engineering from the University of California at Berkeley, and BS and MS degrees in chemical engineering from Stanford and UC Berkeley, respectively. He is a registered chemical engineer in California and Michigan and a Board Certified Environmental Engineer with over 37 years of consulting experience. His areas of expertise include hazardous waste management, site remediation, fate and transport of contaminants, water quality treatment and reuse, wastewater treatment and strategic environmental and technology management. He is a consulting professor of Environmental Engineering at Stanford University. For his contributions to water quality and hazardous waste management, Dr. Kavanaugh was elected to the National Academy of Engineering in 1998.

Mr. Jason C. Rushing
Jason Rushing is a Senior Environmental Engineer with Malcolm Pirnie, Inc. with a decade of experience in the wastewater treatment field. He specializes in process evaluation, development, and design for industrial clients. His work spans a variety of sectors, including the pharmaceutical, biopharmaceutical, chemical, food and beverage, and pulp and paper industries. He has B.S. and M.S. degrees in Civil and Environmental Engineering from Virginia Polytechnic University and is the recipient of the Malcolm Pirnie 2009 Paul L. Busch Prize, which is awarded annually to one staff member demonstrating exceptional technical excellence and leadership ability. Mr. Rushing is a registered professional engineer in Virginia.

- Learn theory and how to put it into practice
- Receive a copy of the new Industrial Water Quality textbook (a $160 value!)
- Examine case studies from local area presenters

Monday, March 22, 2010
Playa Del Rey, CA
Tuesday, March 23, 2010
San Ramon, CA
Brought to you by CWEA its Los Angeles and San Francisco Bay Sections
CWEA is proud to bring you the Industrial Wastewater Quality workshop presented by four industry recognized experts in the field. They will take you from theory to practice, and offer an overview of the sources and characteristics of industrial wastewater as well as key insights into numerous treatment processes and reuse opportunities. They will discuss detailed case studies and give an inside look of how specific processes apply to controlling industrial wastewaters from chemical plants, petroleum refineries, industrial manufacturing, pharmaceuticals and other industrial categories.

The textbook covers topics such as:
- Biological wastewater treatment process
- Current EPA regulations and treatment processes in petroleum refineries, chemical plants, oil and gas exploration sites and other industrial facilities
- Reverse osmosis and membrane biological processes
- The latest advances in water reuse
- New on-site residuals disposal developments
- The latest advances in water reuse and recycled water minimization

Who Should Attend:
Technicians, Operators, Managers and Pretreatment Inspectors wanting a unique opportunity to receive training from the foremost authorities in the Wastewater Industry!

Workshop Locations:

**Southern California:**

**Monday, March 22, 2010**
Hyperion Treatment Plant
Pregerson TSF Building #16
12000 Vista Del Mar
Playa Del Rey, CA 90293

**Northern California:**

**Tuesday, March 23, 2010**
Wedgewood Wedding & Banquet Center
9430 Fircrest Lane
San Ramon, CA 94583

**Workshop Schedule:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>8:00-8:30 am</td>
<td>Registration</td>
</tr>
<tr>
<td>8:30-8:40 am</td>
<td>Welcome &lt;br&gt;David Greenwood (Playa Del Rey) &lt;br&gt;Cassie Prudhel (San Ramon)</td>
</tr>
<tr>
<td>8:40-8:45 am</td>
<td>Introduction &lt;br&gt;David Jenkins</td>
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<tr>
<td>8:45-9:45 am</td>
<td>Industrial Wastewaters - How does their Treatment Differ from Municipal Wastewaters? &lt;br&gt;David Jenkins</td>
</tr>
<tr>
<td>9:45 - 10:45 am</td>
<td>Waste Minimization and Recycle &lt;br&gt;Davis Ford</td>
</tr>
<tr>
<td>10:45 – 11:15 am</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>11:15am - 12:15pm</td>
<td>Industrial Wastewater Pretreatment &lt;br&gt;Processes for Discharge to Municipal Systems &lt;br&gt;Jason Rushing</td>
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<tr>
<td>12:15-1:30pm</td>
<td>Lunch Provided</td>
</tr>
<tr>
<td>1:30 - 2:30pm</td>
<td>Treatment Options for Contaminated Groundwater &lt;br&gt;Michael Kavanagh</td>
</tr>
<tr>
<td>2:30-3:30pm</td>
<td>Environmental Economics &lt;br&gt;Davis Ford</td>
</tr>
<tr>
<td>3:30-4:30pm</td>
<td>Case Histories &lt;br&gt;Local speakers will present case studies that illustrate the principles and practice of industrial waste treatment</td>
</tr>
<tr>
<td>4:30pm</td>
<td>Closing Remarks followed by Book Signing</td>
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Earn up to 7.2 contact hours in the following vocations:
- Environmental Compliance Inspector - ECI
- Industrial Wastewater Treatment Plant Operator - OP
- Laboratory Analyst - LAB

Written cancellation notice is required, and must be received at least 15 days prior to the conference date. A 25% service fee shall be retained on all cancellations. No refunds shall be given for cancellations made less than 15 days prior to any conference.

All fees for conference registration shall be paid in full at the time of pre-registration or on-site registration. Full payment may be made by credit card, personal check or company/agency check. Purchase orders are acceptable and must be attached to the registration form. Registrations received by CWEA without full payment or purchase order will not be processed. The Early Bird deadline is 15 days prior to the event.

CREDIT CARD PAYMENTS MAY BE MAILED TO THE CWEA OFFICE OR FAXED TO (510) 382-7810

Questions? Call 510-382-7800 ext. 115
Register online at www.cwea.org/conferences

**Register for:**

<table>
<thead>
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<tbody>
<tr>
<td><strong>Plaza Del Rey</strong></td>
<td><strong>San Ramon</strong></td>
</tr>
<tr>
<td>Early Bird Member Rate</td>
<td>$275 &lt;br&gt;(Before 3/8/10)</td>
</tr>
<tr>
<td>Early Bird Regular Rate</td>
<td>$341 &lt;br&gt;(Before 3/8/10)</td>
</tr>
<tr>
<td>Member Rate</td>
<td>$295 &lt;br&gt;(After 3/8/10)</td>
</tr>
<tr>
<td>Regular Rate</td>
<td>$361 &lt;br&gt;(After 3/8/10)</td>
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**Method of Payment**

- [ ] PO Must Be Attached  [ ] Check – Pay to CWEA Specialty 2010
- [ ] Discover  [ ] American Express  [ ] MasterCard  [ ] Visa

**Credit Card #**

**Exp. date**

**Name on Card**

**Signature**

**If more than one person from your agency will attend, please photocopy and submit one form for each person.**
Industrial water and wastewater is a by-product of industrial or commercial activities. Whether it's the food we eat or the products we consume, water is required for nearly every step of production across a multitude of different industries. Depending on the product being manufactured and the raw water quality in the region, different levels of treatment technologies will be needed. For example, for medical, electronics manufacturing and food processing, deionized water is an essential ingredient.