



**33rd ANNUAL WATER ENVIRONMENT SCHOOL (2009)**

**TUESDAY, MARCH 24, 2009 Water Environment School 2009**

| **SESSION** | **1****OPERATIONS***Joel Borchers**Kay Hust**David Jones**Steve Yoder***McLoughlin Auditorium** | **2****SOURCE CONTROL***Diana Lindoff**Rick Williams***Pauling 101** | **3****COLLECTION****SYSTEMS***Tom Binder**Jim Lowe***Gregory Forum A** | **4****MAINTENANCE***Chuck Merritt**Mark Walter**Dennis Wolfe***Pauling 132** | **5****MANAGEMENT****SUPERVISION***Noah Harvey**Mark Poling**Tom Stow***Comm. Center 127** | **6****WASTEWATER BASICS***Monica Anderson**Steve Desmond***Pauling 131** | **7****BIOSOLIDS****MANAGEMENT***Mark Johnston**Anya Revelle**Robert Watson***Pauling 102** | **8****STORMWATER***Luke Bushman**John Nagy**Shaun Rohret***Gregory Forum****B & C** | **9****SAFETY & HEALTH***Faye Lindroos**Karen Menard***DeJardin 191** | **10****LABORATORY****PRACTICES***Victoria Boettcher**Charles Lytle***Pauling 103** | **11****TECHNOLOGY***Erin Duffy**Steve Hanson***Pauling 164** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **7:00 a.m. – 8:00 a.m. REGISTRATION, COMMUNITY CENTER**  |
| **1****8:00** |  **OPENING CEREMONY – Neimeyer Center – Osterman Theater** |
| **2****8:30** | **GENERAL SESSION: Neimeyer Center -- Osterman Theater*****Jennifer Wigal, Department of Environmental Quality Water Quality Division******Henryk Melcer, Senior Process Engineer, Brown & Caldwell******Karen DeBaker, Clean Water Services, Public Affairs*** |
| **MORNING BREAK - 9:45 - 10:00 – COFFEE, TEA, ETC. DONUTS/BAGELS/FRUIT – Community Center** |
| **3****10:10** | **Dewatering Options & Selection***Jenny Coker**Kennedy Jenks* | **The Changing Paradigm of the Wastewater Industry***Dr. Kenneth Williams**OSU* | **Hydronix (Smart Covers)***David Drake* | **Stabilizing the Pump Shaft***Al Jones* | **Connecting with Schools & Teachers** *Karen DeBaker**Clean Water Services* | **Preliminary & Primary Treatment***John Harrison* | **2009 Biosolids Jeopardy***Mark Johnston**Anya Revelle**Bab Watson* | **Rain Gardens***Candace Stoughton**E. Multno**Soil & Water Conservation District* | **Below the Hook****Lifting Device Safety***Art Stanley**West Coast Wire Rope and Rigging, inc.* | **PNCWA Oregon Water Quality Lab Analyst Section (WQLAS)** | **SCADA and Data Historian***Kevin Bare**Wonderware PacWest* |
| **4****11:10** | MBRS: Operations, Process Control Real-Life Results*Henryk Melcer**Brown & Caldwell* | **FOG & Green Waste Programs***Alan Zelenka**Kennedy Jenks* | **Vaporooter***Bill Fuller and/or**T.J. Suiter* | **Seals***Ward Forest* | **Energy Conservation Measures and Financing***Walt Minski**Oregon Energy Trust* | **Activated Sludge***John Harrison* | Biosolids ManagementState & Federal Compliance*Ron Doughten**DEQ NW Region**Natural Resource Specialist* | **Creating a Watershed Heath Index***Jim Harper & Jennifer Belknap-Williamson**Brown & Caldwell* | **Ethics In the Municipal WW Laboratory***Dennis Wells**ESC Lab Sciences* | **Cyber Security Protection/Change Management***Larry Claussen**WinTip, LLC* |
| **LUNCH for Attendees - 12:00 – 1:00 – CAFETERIA** |
| **5****1:00** | Headworks Design – Screening*Dale Richwine**MWH Americas* | **Brown Grease Symposium Update***Debra Taevs**PPRC* | **Hydro-Excavating/Grounding Mats Certification***Kri-Tech* | **Rigging***Art Stanley* | Achieving Energy Independence*Alan Zelenka**Kennedy Jenks* | **Basic Chemistry***Doug Kelley**Inland Environmental Resources* | Biosolids Management Plans*Paul Kennedy**DEQ Wester Region**Natural Resource Specialist* | **Tualatin Toxic Blue Green Algae***Stewart Rounds**USGS* | **Preventing Dogbites** *Kurt Von Steiger**City of Salem* | **OTAC****Your Link to the Oregon NELAC Program***Shane Sinclair**City of Corvallis* | **Benchmarking WWTPs in the Energy Star Program***Clarence Ortman* |
| **6****2:00** | **Five Laws of Wastewater Treatment***Dale Richwine**MWH Americas* | **Flushables – Who Said So?***Ely Teragli**Clean Water Services* | **Turbo Blowers –** **Just Hot Air?***Jeff McCormick**Carrollo Engineers* | **Math Basics***Doug Kelley**Inland Environmental Resources* | **Biosolids Spill Plans***Paul Kennedy**Natural Resource Specialist**DEQ* | **Interactive WR. Temp Trading Tool***Stewart Rounds**USGS* | **Watch Out!****Pedestrian & Bicycle Safety***Stephanie Noll* | **The Oregon NELAC Program***Dan Hickman**Oregon DEQ* | **No Session** |
| **AFTERNOON BREAK - 2:50 – 3:10 – Cafeteria** |
| **7****3:10** | **Advanced BNR***John Harrison* | **Drug Take Back – What’s Happening in the Legislature?***Janet Gillaspie**OR ACWA* | **Hydro-Excavating/Grounding Mats Certification***Continued* | **Asset Management***Combined with Technology in Pauling Center P164* | **No Session** | **If It Stinks It Corrodes***Doug Kelley**Inland Environmental Resources* | **Biosolids Sampling & Testing***Dan Strong**Kristina Franklin**Ron Myers**Clackamas Co. WES* | **Wilsonville Natural Areas***Lisa Nead**City of Wilsonville* | **Confined Space***Brandi Davis**Oregon OSHA* | **No Session** | **No Session** |
| **8****4:10** | **Personal Care Products – What Should We Expect?***Elena Nilson**USGS* | **No Session** | **A Green Alternative to Caustic***Doug Kelley**Inland Environmental Resources* | **Daily Wrap-up***Mark Johnson**Anya Revelle**Bob Watson* | No Session | **No Session** | **No Session** |

**WEDNESDAY, MARCH 25, 2009 Water Environment School 2009**

|  | **OPERATIONS****McLoughlin Auditorium** | **SOURCE CONTROL****Pauling 101** | **COLLECTIONS****Gregory Forum A** | **MAINTENANCE****Pauling 132** | **MGMT & SUPER.****Comm Ctr. 127** | **BASICS****Pauling 131** | **BIOSOLIDS****Pauling 102** | **STORMWATER****Gregory Forum A & B** | **SAFETY & HEALTH****DeJardin 191** | **LABORATORY PRACTICES****Pauling 103** | **TECHNOLOGY**Pauling 164 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **9****8:00** | **Math for Wastewater Operators***Terry Dokken**CH2MHill - OMI* | **Preferred Pumper Program: The Reality of the Program***Ed Gilmore**Clackamas County Water Environment Services* | **OUCC***Russ Thomas**City of Newberg* | **Flair – Infrared Technology***TBA* | No Session | **Disinfection***TBA* | **Huber Press Presentation***T.R. Gregg**Huber Technology* | **DEQ’s Toxic Pollutants Program***Kevin Masterson**DEQ* | **Lock Out/Tag Out***Training Staff**Oregon OSHA* | **Using LDO Technology for Dissolved Oxygen***Mark McElroy**Thermo-Orion* | **Advances in SCADA Telemetry***Mike Hogan &**Jon Scott**Portland Engineering* |
| **10****9:00** | **Manufacturer Representative’s Display*****Randall Gym*** | **Lubrication***TBA* | **Worker’s Compensation Claims 101***Scott Neufeld**SDAO Loss Control Manager**Chip Bartel* | **Manufacturer Representative’s Display*****Randall Gym*** | **Manufacturer Representative’s Display*****Randall Gym*** | Water Quality Considerations in the Marmot Dam Removal*John Esler**PGE* | **The Astoria-Pacific Discrete Analyzer for WW Analyses***Steve Stadimann**Brady Miller**Astoria Pacific* | Life Station Controls*Mike Hogan &**Jon Scott**Portland Engerring* |
| **MORNING BREAK - 9:50 - 10:10 – COFFEE, TEA, ETC. DONUTS/BAGELS/FRUIT – Randall Gym** |
| **11****10:10** | Odor Control*Mark Smith**HDR* | **A Virtual Inspection***Cathy Caldwell**Clean Water Services* | **Confined Space Entry***Greg McDonald**Public Works Supply* | **Loctite***Kirk Floyd* | Blower Energy Efficiencies*Jan Rosholt**Parametrix* | **Basic Pump Station Operations***Brian Casey**Corollo Engineering* | **Brookings, Oregon: Lime Stabilization Process Approval Issues***Mark Cullington**Consultant**Kennedy Jenks Inc.* | **Manufacturer Representative’s Display*****Randall Gym*** | **Lock Out/Tag Out***Continued* | **Hach Process Instrumentation***Garrett Lawson**Hach Company* | **Manufacturer Representative’s Display*****Randall Gym*** |
| **12****11:10** | **Manufacturer Representative’s Display*****Randall Gym*** | **Almalgam Separators – Maintenance and Cleaning Issues***City of Salem* | Extech*TBA* | **Manufacturer Representative’s Display*****Randall Gym*** | **Basic Math Fundamentals***Brian Casey**Corollo Engineering* | **Biosolids Reduction Technology***Dale Richwine**MWH Americas Inc.* | **Portland’s 2008 Stormwater Management Manual***BES* | **When Do You Need a LIMS?***John Dorner**OPS Systems* | **Aeration Basic Retrofit at Tri-Cities Wastewater Treatment Plant***Brook Weeks**MWH* |
| **Lunch for Attendees - 12:00 – 1:00 – Cafeteria** |
| **13****1:00** | **Pharmaceutical Removal in WWTPs***Dale Richwine**MWH Americas* | **Home Biodiesel Kits – Concern About Spills and Disposal?***Bret Arvidson**Oak Lodge Sanitary District* | GASB 34*Al Rossmeisel**Wincan America* | **Manufacturer Representative’s Display*****Randall Gym*** | **Coaching in Organizations – Creating a High Performance Culture***Dan Cox**Executive Coach**TransAlliance* | **Open Channel Flow Metering***Greg Brown**Pacific Services & Supply Co.* | **Biosolids Nutrient and Agronomic Loading Rate Calculations***Craig Cogger**Extension Soils Scientist**Washington State University**Puyallup* | **Graham Oaks and Lovejoy Projects***Elaine Stewart, METRO* | **What to Expect from an OR-OSHA Inspection From Someone Who Has Been on Both Sides***Kathryn Jernstedt**CSP**Safety & Loss Control Analyst**Clackamas County* | **Manufacturer Representative’s Display*****Randall Gym*** | **Sustainability and Assessment of SCADA & Enterprise Systems***Gilbert Kwan**Harris Group* |
| **14****2:00** | **Update on Tri-city WPCP***Dale Richwine**MWH Americas* | **Illicit Discharges: Where Did It Come From?***Chris Collins**City of Salem* | **Manufacturer Representative’s Display*****Randall Gym*** | **No Session** | **Overcoming Team Dysfunction in Organizations – A Five Step Process***Dan Cox, Executive Coach**TransAlliance* | **Chemical Feed System Operations***Greg Brown**Pacific Services & Supply Co.* | **Land Application Programs: Oregon Experiences***Bill Fasth**Brown & Caldwell* | **Connect the Drops***Brian Wegener**Tualatin River Keepers* | **Manufacturer Representative’s Display*****Randall Gym*** | **Arsenic Speciation for NPDES Permits***Amy Dahl**Frontier Geosciences* | **Migration Path From an Aging Network to Ethernet Controls***Gabe Shone**Harris Group* |
| **AFTERNOON BREAK - 2:50 - 3:10 – Cafeteria** |
| **15****3:10** | **McMinnville’s ATAD System***Dave Gehring* | **Industry: Solar World***Bryan Trotter**Solar World* | **T-Liner Laterals***Bill Fellows**Wades Pipeline Service* | **Air Diaphragm Pumps***George Polopolus* | **No Session** | **Sewer Overflows***Debra Gorman**Clean Water Services* | **Site Authorization Requests***Bob Watson**Water Environmental Services* | **Portland’s Grey to Green Program***Jennifer Karps**BES* | **Recognition: Find Them Before They Find You***Kathryn Jernstedt**CSP**Safety & Loss Control Analyst**Clackamas County* | **No Session** | No Session |
| **16****4:10** | **Computer Applications to Enhance Communications***Joel Borchers, Clean Water Services* | **Industry: Centralized Truck Washington***James Ratkitsky**Quala Wash* | **Rhino Manhole Lining***Bill Fellows**Wades Pipeline Service* | No Session | **Permit and Compliance***Beth Moore**Oregon DEQ* | **Daily Wrap-up***Mark Johnson**Anya Revelle**Bob Watson* | No Session | **No Session** | No Session |

**THURSDAY, MARCH 26, 2009 Water Environment School 2009**

|  | **OPERATIONS****McLoughlin Auditorium** | **SOURCE CONTROL****Pauling 101** | **COLLECTIONS****Gregory Forum A** | **MAINTENANCE****Pauling 132** | **MGT/SUPER****Comm. Center 127** | **BASICS****Pauling 131** | **BIOSOLIDS****Pauling 102** | **STORMWATER****Gregory Forum A & B** | **SAFETY & HEALTH****DeJardin 191** | **LABORATORY PRACTICES****Pauling 103** | **TECHNOLOGY****DeJardin 233** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **17****8:00** | **SCADA System Fundamentals***Rick Inglin**Informative Controls* | **Liquid Assets***Documentary Film* | **Flagging***T2* | **Documentary Film: Liquid Assets Part 1***Combined with Biosolids in Pauling Center, P102* | **No Session** | **Operating a Wastewater Treatment “The Primer”***Paul Proctor &* *Monica Anderson**Veolia Water Gresham* | **Documentary Film:** **Liquid Assets Part 1** | **Trenchless Technology***Daryn Thorp, CCDTD* | **Back to Basics – HAZMAT***Grant Coffee**City of Portland Fire Bureau* | **We Got Approved for BOD Using LDO Technology***Keith Chapman**City of Salem* | No Session |
| **18****9:00** | **How to Read Pump Curves***Ken Black**Beaver Equipment* | Seals -- Packing*Jim Pronovost* | **Electronic Facility Planning Tools***Ann Conklin**Carrolo Engineers* | **Dealing With the Media***Joe Krumm**Directory**Community & Government Relations NCS* | **Rock Creek Sustainability Initiative** *Carol Murdock**WES* | **The Basics of pH***Mark McElroy**Thermo-Orion* | **Incorproating Sustainable Features Into the Tri-City WPCP Phase I Expansion***Dale Richwine* |
| **MORNING BREAK - 9:50 - 10:10 – COFFEE, TEA, ETC. DONUTS/BAGELS/FRUIT – Cafeteria** |
| **19****10:10** | **Struvite Recovery***Ahren Britton**Ostara Nutrient Recovery Technologies Inc.* | **Slug Plan – What’s Really Needed?***Denise Healy**Oregon Department of Environmental Quality* | **Flagging***Continued* | Bearing Isolators*Jim Pronovost* | **Sustainable Future for Wastewater***Michelle Burkhart**CH2M Hill* | **Tour of Tri-Cities WWTP****(Sign up open in class Tuesday)** | **Building Trust With Neighbors for Biosolids***Ken Vanderford**City of Eugene* | **Rogue River Sewer Services’ NPDES Phase II Program***Maynard Flohaug, PE**Rogue Valley Sewer Services* | **Dig Safely***Anita Floyd**Construction Supervisor**Qwest Communications* | **Are Detection Limits Driving You Crazy??***Chuck Lytle**City of Portland* | **Fast Track Construction***Michael Trent**Water Environment Services**Jude Grounds**MWH* |
| **20****11:10** | **Corvallis Influent Pump Station***Preston Van Meter**Kennedy Jenks Consultants* | **Industry Fact Sheets:****What Is Required?***Mark Humphrey**City of Albany* | **Positive Displacement Pump***Brett Wittman* | **No Session** | **Managing Local and Eastern Oregon Biosolids Program***Davae Arguello**Harry Bloodworth**Clean Water Services* | **Agricultural Stormwater***Jeremy Baker**Clackamas Soil & Water Conservation District* | **Aeration Basin Control for Cost Optimization***Garret Lawson**Hach Company* | **Something Really Great from Dale Richwine***Dale Richwine**MWh* |
| **Lunch for Attendees – 12:00 - 1:00 – Cafeteria** |
| **21****1:00** | **The Missing Link – P & ID’s for Effective Communication Between Engineers and Operators***Jennifer To**Clean Water Services* | **Pretreatment Discharge Classification – What Limits Apply***Denise Healy**Oregon Department of Environmental Quality* | **FOG***Terry Sackett* | **Clarifier Drive Maintenance***Jess Kelly**WesTech* | **No Session** | **Basic Asset Management***Richard Ludlow**Veolia Water Gresham* | **Parker Ag Biosolids Application & Transport Services***Mike Sharp**Parker Ag* | **Ballast Water Discharge***Rian Hooff**DEQ* | **Sleep Deprivation***Bill Kolzow**Oregon Technology* *Transfer Center**(ODOT)* | **No Session** | PLC Discussions*Shawn Davison**WESCO* |
| **22****2:00** | **Reading P & IDs***Catherine Dummer**Brown & Caldwell* | **Plant Closure & Permit Transfers***Pete Gayeska**Clean Water Services* | **Sewer Line Locating***Dale Berryman* | Sodium Hydrochlorite Generation*Thomas Trackman* | **No Session** | **The Basics of an Effective Safety Program***Matt Beltran**Veolia Water Vancouver* | **Local Liquid Land Applications Projects and Transportation***Brian May & Andy Duncan**Agri-Tech Inc. of Oregon* | **ODOT Management of Storm Damage***Steve Hay**ODOT* | **Health and Wellness Programs Work!***Debra Metz**Clackamas County* | **No Session** | **PLC/HMI Discussions***Shawn Davison**WESCO* |
| **AFTERNOON BREAK - 2:50 – 3:10 – Cafeteria** |
| **23****3:10** | **Trauma Nurses Talk Tough*****Combined with Health & Safety in*** ***McLoughlin Theater*** | **Enforcement Issues – Case Study***Eric Martenson**EPA**Criminal Investigation Division* | **Manhole Inspection***Mike Malone**City of Newberg* | Sodium Hydrochlorite Generation*Continued* | **No Session** | **Anaerobic Digestion***Mark Kennedy* | **Portland Biosolids – 15 Years with Madison Ranch***John McQueen**Horticulture Research**OSU* | The River They Saw*OPB Video* | Trauma Nurses Talk Tough*Combined with Operations* *In**McLoughlin Auditorium* | **No Session** | **Solar Arrays and Mcro Hydro Generation Facilities***Chris Wanner**Portland Water Bureau* |
| **24****4:10** | **Enforcement Issues***Continued* | **Smoke Testing***Mike Malone**City of Newberg* | Documentary Film: Liquid Assets Part 2*Combined with Biosolids in Pauling Center, P102* | No Session | **Operator Certification***Steve Desmond**Oregon DEQ* | **Documentary File:****Liquid Assets Part 2** | No Session | **No Session** | No Session |