



GROUNDWATER RESOURCES ASSOCIATION
O F C A L I F O R N I A

The 21st Symposium in GRA's *Series on Groundwater Contaminants*

“Emerging Contaminants 2008”

November 19-20, 2008 – Holiday Inn, San Jose, California

PROGRAM AGENDA

(as of 11/17/08)

Wednesday, November 19, 2008

12:00 – 2:00 Registration

1:00 – 1:10 pm ***Welcome and Program Overview***
Jim Strandberg, President, GRA
Tom Mohr, Santa Clara Valley Water District, Symposium Co-Chair

Session 1: State Framework

Moderator: Brian Lewis, DTSC

1:10 – 1:35 pm *Public Health Impacts of Emerging Contaminants in Drinking Water*
Leah Godsey Walker, California Department of Public Health

1:35 – 2:00 pm *Nanotechnology - Promise and Peril*
Jeffrey Wong, DTSC Cal/EPA

Session 2: Groundwater Recharge and Emerging Contaminants

Moderator: Tom Mohr, Santa Clara Valley Water District

2:00 – 2:25 pm *An Assessment of Chemical Hazards to Health that Could Arise with Injection of Treated Municipal Wastewater into Groundwater*
Richard Bull, MoBull Consulting

2:25 – 2:50 pm *Occurrence of 1,4-Dioxane in Recycled Water in Year 2002 - Lessons Learned*
Greg Woodside, Orange County Water District

2:50 – 3:10 pm Break in Exhibit Area

3:10 – 3:35 pm *Estrogenic Endocrine Disrupting Compounds in Wastewater Treatment and Non-Potable Water Recharge*
Chris Campbell, Geosyntec Consultants

3:35 – 4:00 pm *Natural Photolysis and Biodegradation of NDMA at Groundwater Recharge Facilities that use Recycled Water, Los Angeles County, California*
Monica Gasca, Los Angeles County Sanitation Districts

Session 3: Pharmaceuticals and Personal Care Products

Moderator: Jennifer Nyman, Malcolm Pirnie

4:00 – 4:25 pm *The Occurrence and Environmental Fate of Pharmaceuticals and Personal Care Products (PPCPs) from Treated Wastewater Percolation Ponds, City of Ukiah, California*
Bonnie de Berry, Balance Hydrologics, Inc.

4:25 – 4:50 pm *Occurrence of Antibiotics and Emerging Contaminants in Dairy Farming*
Naoko Watanabe, University of California, Davis

4:50 – 5:25 pm *Alkylphenol Polyethoxylate Degradation Under Oxic and Microxic Conditions*
John Montgomery-Brown, Erler & Kalinowski

5:30 – 6:30 pm Reception and Poster Presentations – Exhibit Hall

6:30 – 9:00 pm Dinner and Keynote Presentation in conjunction with GRA's San Francisco Branch Meeting
Mobility of Engineered Nanoparticles in Natural Porous Media
Denis O'Carroll, The University of Western Ontario

Thursday, November 20, 2008

7:30 – 11:00 am Registration/Continental Breakfast

Session 4: 1,2,3-Trichloropropane

Moderator: Andrew Eaton, MWH Laboratories

8:15 – 8:40 am *Factors Affecting the Distribution of 1,2,3-Trichloropropane in Ground Water in the San Joaquin Valley*
Matthew Landon, U.S. Geological Survey

8:40 – 9:05 am *Prospects for Remediation of 1,2,3-Trichloropropane*
Paul Tratnyek, Oregon Health & Science University

Session 5: Risk and Regulation

Moderator: Rula Deeb, Malcolm Pirnie

9:05 – 9:30 am *Regulating Emerging Contaminants*
Bruce Macler, USEPA Region 9

9:30 – 9:55 am *Emerging Contaminants - The New Frontier*
Shannon Cunniff, Office of the Deputy Under Secretary of Defense for
Installations & Environment

9:55 - 10:25 am Break – Exhibit Hall

Session 6: Analytical Methods

Moderator: Greg Woodside, Orange County Water District

10:25 – 10:50 am *The Environmental Professional's Guide to Emerging Contaminants
Laboratory Data Assessment and Usability*
Nanny Bosch, Laboratory Data Consultants, Inc.

10:50 – 11:15 am *Pharmaceutical Testing in Water - The Good, the Bad, and the Ugly*
Andrew Eaton, MWH Laboratories

11:15 – 11:40 am *Use of Formation Tests for N-Nitrosodimethylamine in Integrated
Sources of Drinking Water*
Tiffany Lee, Metropolitan Water District of Southern California

11:40 – 1:00 pm Lunch

Session 7: Treatment of Emerging Contaminants

Moderator: Alison Jones, ARCADIS U.S.

1:00 – 1:25 pm *Treatment of NDMA Using a High Performance Bioreactor*
William Guarini, Shaw Environmental

1:25 – 1:50 pm *Pilot Testing MF-Ozone-BAC Process Train for Removal of EDCs,
PCPs, and Other Emerging Contaminants of Concern*
Vijay Sundaram, ECO:LOGIC Engineering

1:50 – 2:15 pm *Fate and Transport Characteristics and Challenges in Treating Soil and
Groundwater Impacted by Freons or Chlorofluorocarbons*
Terry Feng, CH2M Hill

2:15 – 2:40 pm *1,4-Dioxane Treatment Using Advanced Oxidation*
William DiGuseppi, EarthTech/AECOM

2:40 – 3:10 pm Break – Exhibit Hall

Session 8: Other Emerging Contaminants

Moderator: Peter Bennett, AMEC Geomatrix

3:10 – 3:35 pm *EDB and 1,2-DCA from Leaded Gasoline may Dominate Health Risk at
Underground Storage Tank Sites*
Ron Falta, Clemson University

3:35 – 4:10 pm *Pathogens in Dairy Farming: Source Characterization and Groundwater
Impacts*
Thomas Harter, University of California, Davis

Session 9: Nanotechnology

Moderator: Bill Motzer, Todd Engineers

4:10 – 4:35 pm *What's the Big Deal About Nanotechnology?*
Kelly Houston, ARCADIS U.S.

4:35 – 4:50 pm *Nanomaterials as Emerging Contaminants: Ecological Impacts*
Shaily Mahendra, Rice University

4:50 – 5:00 Closing Remarks
Jennifer Nyman, Malcolm Pirnie, Symposium Co-Chair

Poster Presentations

Non-Thermal Plasma – A Novel and Cost Effective Advanced Oxidation System
Nitin Goel, Carollo Engineers

Treatment of Chlorofluorocarbons (CFCs) in Soil Vapor Using an Innovative C3 Technology
Lowell Kessel, Good Earthkeeping Organization, Inc.

Remediation Technologies for Perchlorate Contamination in Water and Soil March 2008
Alexander MacDonald, Regional Water Quality Control Board, Central Valley Region

Levels of PFOA/S Detected in Food Packaging Materials
Patrick Rainey, TestAmerica, Inc.

In Situ Oxidation of 1,4-Dioxane with Ozone and Hydrogen Peroxide
Venus Sadeghi, URS Corporation

Evaluation of Bioremediation to Reduce Dinitrotoluene Remediation Costs at Badger Army Ammunition Plant (BAAAP)

Michael Saul, CL Solutions, LLC

Rejection of Trace Organic Contaminants by Nanofiltration Membranes: Effects of Sorption

Eva Steinle-Darling, Eler & Kalinowski, Inc.