



ASTSWMO, Providing Pathways to Our  
Nation's Environmental Stewardship Since 1974

# **ASTSWMO LUST and State Fund-Financial Responsibility Workshop**

## **FINAL AGENDA**

**April 27-29, 2016  
Omni William Penn Hotel  
Pittsburgh, PA**

**Presented by the ASTSWMO LUST and State Fund-Financial Responsibility Task Forces**

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**Wednesday, April 27, 2016**

## **ASTSWMO Mid-Year Meeting Plenary Sessions**

### **Welcome and Opening Remarks**

Bonnie Buthker (OH), ASTSWMO President, Mathy Stanislaus, Assistant Administrator, EPA OLEM, and Mike Forbeck (PA), ASTSWMO Past-President

### **Ellis School: Future City Competition Presentation**

Introduced by: Mike Forbeck (PA), ASTSWMO Past-President

Future City starts with a question: how can we make the world a better place? To answer it, 6th, 7th, and 8th grade students imagine, research, design, and build cities of the future that showcase their solution to a citywide sustainability issue. Past topics include stormwater management, urban agriculture, and green energy. This year's topic was waste management.

Ellis School Team:

- Maggie Ginter-Frankovitch, 8th Grade
- Lela Krackow, 8th Grade
- Mishon Levine, 8th Grade

### **Keynote Speaker: Maria Rose Belding, Executive Director and Co-Founder of MEANSDatabase**

**Presentation PDF:** [bit.ly/1TkBja5](http://bit.ly/1TkBja5)

Introduced by: Dania Rodriguez, ASTSWMO Executive Director

As we look to the future of the next generation of leaders in the non-profit, environmental and volunteering worlds, we only have to look to Maria Rose Belding and know that the future looks bright! Maria Rose will discuss how she and co-founder Grant Nelson created the Matching Excess and Needs (Means) Database, which helps connect food banks and pantries with donors. They are working to make donating food easy and as their website states: waste less – feed more!

### **Plenary Session**

Moderator: Mark de Bie (CA), ASTSWMO Vice-President

This session will discuss succession and long-term planning approaches currently being implemented by States as they face another wave of challenges associated with retaining or replacing personnel.

Speakers:

- Jeffery Steers, Director of Central Operations, VA DEQ  
**Presentation PDF:** <http://bit.ly/1W0vUve>
- Cindy Money, Leans Coordinator and Training Manager, OH EPA  
**Presentation PDF:** <http://bit.ly/1R6A1hc>

## PRESENTATION LINKS

### Videos:

Opening Remarks:

<http://bit.ly/1OBlAHC>

Ellis School:

<http://bit.ly/1smBTxL>

Maria Rose Belding  
(MEANSDatabase):

<http://bit.ly/1XiQVjE>

Jeff Steers and Cindy Money:

<https://vimeo.com/165874005>

Michelle McClendon and Maureen  
Sullivan:

<https://vimeo.com/165874241>

Alex Dunn:

<https://vimeo.com/165874444>

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## Plenary Session

Moderator: Bonnie Buthker (OH), ASTSWMO President

This session is a continuation of the theme, but will focus on the federal government approaches to succession and long-term planning.

Speakers:

- Barry Breen, Deputy Assistant Administrator, EPA OLEM, and Michelle McClendon, EPA OHR  
**Presentation PDF:** <http://bit.ly/1ThHHEM>
- Maureen Sullivan, Deputy Assistant Secretary of Defense, ESOH

**Keynote Speaker: Alexandra Dunn, ECOS Executive Director and General Counsel**

Topic: Common Goals in Uncommon Times

Introduced by: Bonnie Buthker (OH), ASTSWMO President

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## LUST and State Fund-Financial Responsibility Workshop

**LUST Breakout: Natural Source Zone Depletion**

Moderator: Wayne Pudney, Arizona DEQ

Please join us at this session as Dr. Julio Zimbron, President and founder of E-Flux and an affiliated faculty member at Colorado State University, leads an exciting discussion on natural source zone depletion (NSZD) of petroleum contamination. Dr. Zimbron begins the session by discussing the science behind petroleum biodegradation. He elaborates on biogeochemistry, the sequential process of biodegradation, methanogenesis, and the lines of evidence used as indicators of NSZD. This discussion is followed by an examination and comparison of some techniques used for measuring NSZD rates. The techniques examined are media specific – groundwater and vadose zone based. Limitations of these techniques are also discussed. Dr. Zimbron then details a few case studies with examples of data use. The session closes with recommendations and an exploration of future developments in the fascinating world of NSZD.

Speaker: Julio Zimbron, Ph.D., President and Founder, E-Flux, and Affiliated Faculty at Colorado State University

**Presentation PDF:** <http://bit.ly/20bCzkm>

**State Fund-Financial Responsibility Breakout: Fraud, Waste, and Abuse Roundtable**

Moderator: Karen Stachowski, Tennessee DEC

This roundtable is to discuss the topic of fraud/waste/abuse/misuse in State Fund programs. The Roundtable will begin with two speakers who will give brief presentations on efforts in their respective States. The speakers will then facilitate an open discussion with participants of this session.

Minnesota's presentation will address some deceptive reimbursement request practices discovered by Minnesota and their court efforts to dissuade these practices. Minnesota will also share how these anomalies were discovered and training practices implemented to reduce future abuses to their fund. Indiana's presentation will also focus on its incremental improvements to the claim review process, where in 2010 State personnel took over the review of claims from a contractor. Indiana will share their journey of tackling "low hanging fruit" in the claim review process, the implementation of a non-rule policy document and most recently their efforts to address time reimbursement when only the task description noted in the rule is listed. Any State managing a fund can benefit from the ideas and strategies, even though we all have very different rules and statutes we work with in our respective States.

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Speakers:

- Bobbi Steiff, Indiana DEM  
**Presentation PDF:** <http://bit.ly/1XCHlso>
- Greg Wiese, Minnesota Department of Commerce

**LUST Breakout: PSI: Pittsburgh -- Deciphering the Evidence**

Moderator: Lori Spagnolo, Delaware DNREC

As States face increasing financial pressures, the need to identify Responsible Parties to pay for clean-up likewise increases. In many "Petroleum Site Investigations," however, the current release may not be the only one the facility has experienced. Gas stations, especially, have likely seen multiple owners and operators come and go over the years, and existing contamination may reflect a mix of weathered hydrocarbons, varying fuel types, and commingled plumes. To help us understand the science of forensic geochemistry, we are fortunate to present a 1.5 hour intense overview lead by noted expert in the field, Dr. Michael Wade. Dr. Wade is the principle Scientist of Wade Research Inc., a geochemical consulting firm based in New Jersey.

Speaker: Dr. Michael Wade, Wade Research, Inc.

**State Fund-Financial Responsibility Breakout: Commingled Plumes**

Moderator: David Chambers, Nebraska DEQ

Michigan's newly established reimbursement fund is likely to face many scenarios where plumes from eligible releases are commingled with plumes from ineligible releases. There are many scenarios in which this will occur, not the least of which is the fact that numerous releases that occurred prior to the coverage period of the new program have not been closed to date. Michigan will provide a brief description of Michigan's eligibility requirements along with likely commingling scenarios, Nebraska will discuss a situation involving a petroleum plume in the midst of a Superfund plume, and New Hampshire will present a situation that arose when differentiating the responsibilities of sampling water supply wells impacted with methyl-tert-butyl-ether (MtBE) which emanated from two auto salvage yards. Each will discuss how their respective States handle apportioning costs for commingled plumes. The audience will then be invited to share their experiences on the topic.

Speakers:

- David Chambers, Nebraska DEQ  
**Presentation PDF:** <http://bit.ly/253t6zb>
- Jennifer Marts, New Hampshire DES

**Thursday, April 28, 2016**

**LUST and State Fund-Financial Responsibility Workshop**

**LUST Breakout: Achieving Remediation Success Using Good Science and Effective System Optimization**

Moderator: Wayne Pudney, Arizona DEQ

Chuck Whisman and Chuck Blanchard, both PE's with CH2M and each having over 20 years of experience, discuss remediation system optimization in this session. Please join these two individuals as they discuss answers to such questions as "Why Do Many Remediation Technologies Fail?" and "How is Remediation Success Ensured?" The presentation will look at lessons learned with many remediation systems over the past 20+ years. The presentation will discuss both design and operational lessons learned, and will focus on the key aspects of how to ensure that the proper remediation system is installed and effective system optimization is performed to expedite the

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remediation process (and minimize the cost and duration of remediation). The speakers will present tools and metrics that can be used on any remediation project to design the most appropriate remediation system and optimize system performance. Conventional and chemical oxidation technologies will be discussed, including methods to optimize and enhance the remediation system performance of the applied technology. System uptime and optimization tools and processes will be discussed, including using automated system control systems to optimize the optimization of the remediation system.

Speakers:

- Chuck Whisman, P.E., CH2M & Chuck Blanchard, P.E., CH2M & Lydia Ross

**Presentation PDF:** <http://bit.ly/1Ts7d8L>

**State Fund-Financial Responsibility Breakout: Abandoned Tanks – How States are Removing Barriers**

Moderator: Kevin Horrigan, Massachusetts DOR

Addressing abandoned tanks has been a hotly debated topic at recent meetings. This roundtable session will be kicked off by four States that have come up with approaches to address the issues and have seen hundreds of abandoned tanks removed. They will describe methods their States are using to remove the main barrier encountered: no funding to do the work. Utah uses their State fund and LUST Trust money to remove abandoned tanks or motivate property owners to do it themselves. Kansas reimburses property owners up to \$25,000 to remove abandoned tanks. Arizona uses their State fund and special federal funding to provide grants or perform State-lead removal. Iowa reimburses up to \$15,000 per abandoned tank removed. The audience will be encouraged to share their own experiences or ask questions of other States.

Speakers:

- Randy Carlson, Kansas DHE
- Therron Blatter, Utah DEQ

**Presentation PDF:** <http://bit.ly/1YG975E>

- Tara Rosie, Arizona DEQ
- Elaine Douskey, Iowa DNR

**Presentation PDF:** <http://bit.ly/1sCqnPw>

**LUST Breakout: Lessons Learned and Paths to Success with Activated Carbon Injections**

Room: Oakmont

Moderator: Richard Spiese, Vermont DEC

Colorado and Kentucky have been national leaders in the in-situ use of activated carbon (AC) to target saturated zone soils and groundwater impacted by petroleum hydrocarbons. Representatives from these two States will present background information about AC amendments, proper site characterization requirements, injection methods, dosing estimation, pitfalls, and lessons learned from each State.

In-situ remediation utilizing AC is, at a minimum, a two-step process of sequestration and biodegradation. Sufficient site characterization is imperative in locating the bulk of the contamination mass so that injection efforts can be targeted and customized. The use of continuous soil sampling, MIP/HPT/UVOST or LIF technologies, geophysical studies, inorganic (nutrient) sampling, etc. is imperative. Once the target zones are identified, understanding the mechanisms by which AC acts in a geological setting guides proper AC application in terms of AC type and quantity as well as installation methodology. Post-AC results are examined by proper monitoring and balanced by reasonable expectations. Thus, sufficient characterization, proper installation and monitoring, and reasonable expectations will improve the probability of successful carbon-based injection (CBI) remediation.

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Speakers:

- Tom Fox, Colorado DLE & Ed Winner, Kentucky DEP  
**Presentation PDF:** <http://bit.ly/1RbwSMY>

**State Fund-Financial Responsibility Breakout: Introduction to Bankruptcy**

Room: Three Rivers

Moderator: Jill Hall, Delaware DNREC

This session is a short introduction to the basics of federal bankruptcy proceedings. It will explain the bankruptcy process and the differences among the bankruptcy chapters, and emphasize the role for enforcement staff when calculating the potential bankruptcy claim. The session will also include a discussion on the differences between bankruptcy claims and environmental injunction relief obligation, as well as how ownership of contaminated property may impact the bankruptcy.

The ASTSWMO State Funds-Financial Responsibility Task Force has completed a new publication that serves as a guide to bankruptcy and will be available on the ASTSWMO website after the workshop.

Speaker: Leo J. Mullin, President, Environmental Liability Assessment, LLC

**Presentation PDF:** <http://bit.ly/1suUBDk>

**Presentation Examples PDF:** <http://bit.ly/1VbBs51>

**LUST Breakout: The PVI Screen Model – Overview and Problem Session**

Moderator: Dorothy Malaier, Alabama DEM

EPA has developed a screening model for petroleum vapor intrusion (PVI) that is based on the BioVapor code (DeVaull, 2007). As such, it accounts for multiple petroleum constituents in soil gas, and other building and soil factors that influence PVI. Parameter values describing all the factors are not typically measured in the field, resulting in highly uncertain model results. To begin addressing this problem and to account for these field unknowns, PVI Screen includes an automated uncertainty analysis and its results are given in terms of the probability of various levels of indoor air contamination and indoor air screening levels. The workshop will consist of an overview of the model, presentation of case studies, hands-on model application, and discussion of PVI. Attendees should bring a laptop for the hands-on session.

Speakers:

- Jim Weaver, U.S. EPA ORD
- Tom Walker, U.S. EPA OUST

**State Fund-Financial Responsibility Breakout: Bankruptcy Impacts: A Legal Perspective**

Moderator: Dana Bahar, New Mexico ED

This session will focus on the impacts of bankruptcy on environmental cleanup. Attorneys will discuss environmental agency's role, rights and limits to pursue environmental cleanup or related enforcement actions when a responsible party is proceeding with bankruptcy filings.

Speakers:

- Marvin E. Clements, Jr., Senior Counsel, Tennessee Office of the Attorney General
- Donald Frankel, U.S. Department of Justice

**Presentation PDF:** <http://bit.ly/1suUO9M>

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- Leo J. Mullin, President, Environmental Liability Assessment, LLC

### **LUST Breakout: The PVIScreen Model – Overview and Problem Session**

#### **State Fund-Financial Responsibility Breakout: Institutional Controls**

Moderator: John Menatti, Utah DEQ

Institutional Controls, Environmental Covenants, and Land Use Controls are terms used to describe a method to document the presence (nature and location) of subsurface contamination at sites so that prospective purchasers of property don't buy a "pig in a poke" and so that developers are prepared to deal with the subsurface contamination. Institutional Controls (ICs) are recorded on the property deed and describe the nature and location of subsurface contamination, that may not be adversely affecting property use now, but may adversely affect property use and development in the future. For example, subsurface contamination that may be acceptable at an industrial site may not be acceptable if the property is redeveloped into residential use. This session will provide information on how a private company (Terradex) installs and maintains ICs, and how two State environmental agencies (MT DEQ and MI DEQ) use ICs.

#### Speakers:

- Bob Wenzlau, Terradex
- Terry Wadsworth, Montana DEQ  
**Presentation PDF:** <http://bit.ly/1UapmnB>
- Kevin Schrems, Michigan DEQ  
**Presentation PDF:** <http://bit.ly/20bHl1i>

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### **Friday, April 29, 2016**

#### **LUST and State Fund-Financial Responsibility Workshop (cont.)**

##### **Plenary Session: An Analysis of UST System Infrastructure in Select States**

Moderators: Jill Hall, Delaware DNREC, and Russ Olsen, Washington PLIA

**Presentation PDF:** <http://bit.ly/1THiaoT>

In 2014, ASTSWMO formed the Aging Tanks Workgroup to examine issues related to aging UST systems and the potential impacts to owners, operators, and State UST programs. The Workgroup's objective was to analyze whether aging UST infrastructure poses a higher risk of leaks, thus creating higher risks for State tank funds and private insurers and, ultimately, higher costs for tank owners/operators. The final report includes an analysis of UST system data from eight participating States as well as information on potential risk factors of fuel leaks, State policies and initiatives for mitigating risks of aging tanks, and State fund and financial insurance considerations. <http://astswmo.org/files/policies/Tanks/2015-10-ASTSWMOAgingTanks%20Report-Final.pdf>

This session will include a brief overview of the report followed by an interactive discussion by the attendees of questions raised by the report. Attendees will break into small groups to discuss the report's conclusions and then report back to the larger audience.

##### **Plenary Session: LUST Trust Fund and Cost Recovery Guidelines**

Moderator: Jill Hall, Delaware DNREC

This spring, EPA's Office of Underground Storage Tanks (OUST) plans to issue updates to its 1994 Leaking Underground Storage Tank (LUST) Trust Fund Corrective Action Cooperative Agreement Guidelines, 1994 LUST

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Corrective Action Cost Recovery Policy, and 1989 LUST State Financial Management Handbook. These documents provide guidance and requirements on use of LUST Trust Funds for EPA-state LUST Corrective Action Cooperative Agreements. In this session, EPA will discuss the primary changes forthcoming. (Links to these documents are at <https://www.epa.gov/ust/leaking-underground-storage-tank-lust-trust-fund>).

Speaker: Judy Barrows, U.S. EPA OUST

## **Supplementary Workshop Handouts (PDFs):**

- Capeco: <http://bit.ly/24bhisi>
- Capeco: <http://bit.ly/1U0Bp7c>
- Capeco: <http://bit.ly/1UaqoQn>
- Capeco: <http://bit.ly/1NS6PA3>
- Getty: <http://bit.ly/1UaqyHx>
- Getty: <http://bit.ly/1THlj88>
- Getty: <http://bit.ly/1XWhtrA>
- Getty: <http://bit.ly/1WQxOhY>
- Getty: <http://bit.ly/1U0DBLK>