

**Minutes of Ground-Water Forum Business Meeting
May 24-25, 2005
Phoenix, Arizona**

Day 1, May 24

The following presentations were made:

1: Field Screening of *Push and Nylon for Detection of Metals in Sediment and Pore Water* – Mark Zimmerman, U.S. Geological Survey

To view a copy of his presentation for more details, [click here](#).

2: *DNAPL Source Zone Workshop Summary/Research in DNAPL Source Zone Dissolution* – Dr. Mark Brusseau, University of Arizona

3: *DNAPL Source Remediation Research* – Dr. Lynn Wood and Michael Brooks, Ground Water and Ecosystems Research Laboratory, Ada, OK

To view a copy of their presentation for more details, [click here](#).

4: *In-situ Chemical Oxidation Case Study: Lessons Learned* – Ruth Izraeli, Region 2

To view a copy of her presentation for more details, [click here](#).

Day 2, May 25

Rich Steimle (TIFSD): On June 8, 2005, EPA Headquarters, Office of Solid Waste and Emergency Response (OSWER) will award Bernie Zavala of EPA Region 10 with a Bronze Medal for his continuous support to OSWER in providing ground-water expertise.

Kendra Morrison-Huang (R8): Presentation on ethics. Members of the document review work group including Kendra, Steve Mangion (HSTL, R1), Kathy Davies (R3), Bill O'Steen (R4), Luanne Vanderpool (R5), Jennifer Sutter (Oregon DEQ), and Judy Canova (South Carolina DHEC) wanted to discuss conflict of interest and confidentiality issues as they relate to document reviews conducted by the Ground-Water Forum. Kendra introduced David Schachterle, who is the Region 8 ethics attorney.

David Schachterle (R8): David started working at EPA in 1980 and has worked in the fields of general law, contracts, grants, Freedom of Information Act (FOIA), and ethics. He explained that ethics requirements are included in: (1) regulation (ethics code) which is the same government-wide, (2) licensing rules, which include rules associated with the Bar exam and with Professional Engineering (PE) and Professional Geologist (PG) licenses, (3) contracting rules (revolving door rule), (4) financial statutes and (5) Superfund rules. Federal employees can legally accept small gifts (pens, hats, etc) from contractors but the total value of the gift cannot exceed \$20. If an employee owns more than \$25,000 in stock from any one company, that person must submit a financial

disclosure and would not be able to work on a site where that company is a responsible party.

A real conflict of interest would include if a family member were the PRP. A *financial conflict of interest* would include if an employee or family member had investments or other financial interests in the PRP. *And an appearance of a conflict of interest* would involve those actions by an employee which may benefit a neighbor or friend. It is up to management to determine whether a perceived conflict of interest is important.

With respect to *science policy/peer review*, David answered the following question: What rights do you have as a citizen that you don't have as a government employee? A government employee can legally provide comments on a document as a citizen.

However, some agencies may treat your comments as insider knowledge.

Luanne asked about providing comments on an EPA document both as a Ground Water Forum member and as a regional representative—would this be considered “double dipping”? David stated that there is nothing in regulation or policy that says that “double dipping” is unfair. *Whistle blower* status is for someone who reports fraud, waste or abuse. It is not an umbrella protection for doing whatever you want. It is hard to show that there is fraud, waste or abuse with a scientific disagreement, so in this situation, whistle blower status does not apply.

Participants in the Forum include EPA employees, other federal agencies (e.g. USGS, USACE), state agencies and contractors. Other agencies may have more problems protecting the release of information as their FOIA policies may be different. Contractors are not subject to FOIA so they may continue to maintain protection of information.

Luanne asked whether it is OK for a contractor who also does work for a PRP to coauthor a document with a forum member. David stated that it is up to the Ground Water Forum to determine whether the contractor will be ethically compromised and that there is no hard and fast prohibition on this. Rich and Kevin Willis (R2) stated that the Forum's peer review process should eliminate any potential bias and maintain scientific credibility. According to David, it may be a perceived conflict of interest if a contractor that is involved in the Forum also represents a PRP in an enforcement action against an EPA Region. It would be up to the Forum to decide how important perception is to the process. Ethical delineation would be clearer if those involved sold a product and obtained a financial gain, because then one could examine the increase in marketability factors, etc. David also said that members of academia are not necessarily unbiased anymore due to possible links to private industry. He added that it does not matter to the external public whether you represent a region or Headquarters or a laboratory—to them, you represent EPA.

Luanne asked whether an opinion she gives on a product represents her opinion or the region's. David answered that by default you speak for the Region/organization because most likely your boss is not an expert on the issue.

Kathy Davies asked if when data (e.g., from ground-water sampling) is provided to EPA, can we show that data to anyone (e.g., during a presentation)? Dave replied that it seems

that if data are submitted voluntarily, then they may not be made publicly available; however, if they are statutorily submitted, then they are subject to FOIA and therefore publicly available. Howard stated that if the data is submitted voluntarily and is not labeled as “confidential business information” then it is available under FOIA. Jeff Johnson (R7) responded that Region 7 has the same policy. Howard stated that any private information such as a home address should be blocked out before showing the data.

Luanne Vanderpool - Principles of Workgroup Participation: This document was developed by a workgroup headed by Luanne. Comments received at the last business meeting in Sacramento were incorporated into the revised document, which was sent to the entire Forum membership.

The workgroup was formed over a year ago. The scope of the document was presented to the Forum membership at the Miami meeting (May 2004). The scope was approved by the membership. Two white papers were written by the workgroup entitled *Principles of Workgroup Participation* and *Document Review Procedures*. Not many comments were received on these white papers and the white papers were finalized around Christmas 2004. The workgroup has completed its task and is asking the Forum membership for a yes/no vote on whether the principles should be implemented. The Forum membership will vote on this during the July conference call.

The *Document Review Procedures* paper addresses how to resolve issues of differing opinions among workgroup members. The paper also makes the workgroup review procedures transparent. Pro/con: The procedures will speed things up if there are internal issues, but will slow things down if the workgroup is running smoothly.

Document Review Issues:

1. *Expedited Reviews:* Kathy Davies asked about documents that need an expedited time review. We may want to add flexibility in this instance, but asked if this would still constitute a Forum review? Luanne said that a minimum number of reviewers for an expedited review should be 5, not 3. The general consensus of the Forum members present was that we should have an option of performing an expedited review if Forum participation in the review process is considered important either due to the topic or the document’s significance.

2. *Response to Comments:* Luanne asked whether the Forum wants to review a document if a response to comments is not provided. (e.g., ITRC) Jeff’s opinion is that we can request a response to our comments even if it is typically not provided. However, if a response to comments is not provided and if we find out that our comments are not incorporated or considered, we can choose not to review their documents in the future. Andy Crossland (R2) stated that the Forum should not establish a blanket policy that covers all situations. We should decide this on a case-by-case basis. The Forum decided that there should be no hard or fast rule. We will make it clear that we would like a response to comments, but the Forum will decide on a case-by-case basis whether to conduct reviews if responses will not be provided.

Kathy Davies stated that we need a way to take our name off the document if they don't respond to comments before the document goes final (to avoid problems like the ITRC PDBs document). Kathy suggested that we add a disclaimer such as "reviewed by the Ground Water Forum but does not necessarily constitute an endorsement." Gwendolyn Massenburg (R5) said that we could just highlight the fatal flaws (issues in the document that the Ground Water Forum disagrees with).

Workgroup Participation Issues: Jeff asked that the Forum membership be responsive when volunteering to participate in a workgroup. Jeff stated that some workgroup volunteers do not participate, which often leads to only the chairperson of the workgroup doing the review. Jeff wants to identify members who have not been participating on workgroups. Non-participants would then be contacted to see if they're still interested in being active members, which requires workgroup participation. Rich Steimle stated that he has to justify the existence of the Forum and the best way to do that is the production of products by workgroups. Dave Jenkins (R4) asked if we should revitalize existing workgroups when needed. Jeff responded that this may not be practicable during the middle of a review or when the review is near a due date.

Bernie Zavala - Field Parameters Issue Paper: Bernie has not been able to get comments from most of the workgroup members. The Forum agreed to have Bernie send the existing comments out.

The Forum agreed that it is the responsibility for the chairperson of the workgroup to keep the workgroup members up to date on deadlines and whether or not comments have been received.

Curt Black (R10) suggested that the workgroups be listed on the Technical Support Project (TSP) webpage. Marcia Knadle (R10) asked which workgroups needed new members.

Joel Hennessey (R3) – Using Census Data to Determine Ground-Water Use: Joel gave a PowerPoint presentation on how data collected during the 1990 census can be very helpful in determining ground-water usage (This data was not collected during the 2000 census).

To view a copy of his presentation for more details, [click here](#).

Bernie Zavala – Working with the Waste Research Coordination Team: Bernie explained that the Waste Research Coordination Team (WRCT) is part of a multi-year planning process for ORD. As Region 10 is the lead region for RCRA, Bernie participates in the WRCT as the lead region representative along with Bruce Duncan, Region 10. All 10 regions participate on the WRCT through their representatives (either Superfund or RCRA) to determine research needs. Bruce Duncan and Bernie put together a list of 33 topics that was given to WRCT. These topics were narrowed down to the top four which include: (1) ground-water/surface water interaction; (2) DNAPL source zone removal; (3)

DNAPL source zone identification and characterization; and (4) development of standards for “new” contaminants.

Bernie stated that the regions are concerned that communication may be lacking between ORD and the regions and that the regions feel that their needs are not being met. The WRCT would like to introduce Regional Research Advisory Teams that will advise and assist ORD to identify research needs. Bernie stated that 3-4 workgroup members are needed from the Regions to help him advise the WRCT. Bernie will send an email to the Forum to solicit interest.

Dick Willey (R1) mentioned how the Regional and National Science Councils also advise ORD and are not communicating. Dick suggested that all groups who advise ORD should consult with each other so that the regions can speak with one voice. Bernie will also talk to the Engineering Forum to solicit volunteers for the WRCT.

Ken Lovelace (OSRTI)/Glenn Bruck (R9) – Site Closure:

Ken gave the Forum a handout listing several “remedy closure” and “exit strategies” for ground-water remedies. Glenn gave a presentation on some sites in Southern California and West Phoenix which have residual contamination and have gone through various stages of closure:

Western Pacific Railroad, Oroville, CA: This is the only site with a ground-water pump and treat system that has been delisted. The ground water has been impacted by volatile organic contamination. The pump and treat system was installed and shut down after only two years. Institutional controls at this site did not work as there is a well that is used for drinking water. Brian Lewis (CA) asked if the well had been sampled for 1,4-dioxane. Glenn indicated that the wells were not sampled for 1,4-dioxane.

Norton Air Force Base, CA: This site is in an area with much seismic activity and has naturally occurring radiation that had to be dealt with. By 2000, a new plume from Lockheed had moved on site. Ground-water levels dropped 40’-60’ during remediation and the upper plume disappeared, but they do not know where it has gone. The Air Force shut off the pump and treat system, but it was turned back on because of the rebound effect. The Air Force claimed that the reasons that the system was shut down was that pump and treat system was causing pollution via use of electricity and that the average of all the ground water wells was meeting the MCLs. Glenn suggested the use of *statistical tests* for the purposes of determining whether the MCLs were met. EPA requested that time series plots be made for each well. Glenn commented that EPA is not using the statistical experts available at the Agency.

Glenn had some fundamental observations and recommendations: (1) get site data into a spreadsheet/data base and make time series plots for each well; and (2) as the remediation goal gets closer the PRP seems very reluctant to modify the ground-water remediation system.

The Air Force is interested in transferring the property and has done several FOSTs (Finding of Suitability of Transfer). The Air Force has provided several granular activated charcoal (GAC) units to the city of Riverside, who is pumping the aquifer. Marcia Knadle asked about 5-year reviews for such sites. Glenn responded that they are not through yet and are trying to get the Air Force to modify the remedy to monitored natural attenuation (MNA).

Rich Steimle (OSRTI) – Capture Zone Training Update

Rich stated that funding for capture zone training in regions other than 7 and 10 has not been secured; thus, training in these regions may not occur in the near future.

Ken Lovelace (OSRTI) – Superfund Managers Meeting Briefing

Ken attended the Superfund Managers meeting, which was focused around Superfund policy issues. There are more sites with records of decision (RODs) signed that are awaiting construction of remedies than there are dollars to fund. Funding will be made available on a priority or “tiered” system. *Tier 1* are those sites that pose a significant human health risk. *Tier 2* are those sites with redevelopment issues, and those sites those sites that may be less difficult to clean up (i.e., are “small potatoes”). *Tier 3* are those sites which pose only an ecological risk.

Ken stated that the policy for long-term monitoring at mining sites will be out for review. This policy recommends addressing source areas only and may have impacts on other types of sites such as DNAPL sites. Ken raised the issue with the Superfund managers of not knowing the extent of DNAPL source zones. Ken stated that the Forum should be aware of what this policy says and that it may impact DNAPL sites.

Other issues which were discussed by the managers include:

(1) States do not have the funds to pick up the operation and maintenance at Fund-lead sites and consider this to be an unfunded mandate. Kevin Willis stated that there is a new model for state Superfund contracts currently being developed by HQ. Kevin said the operation and maintenance costs were not typically added in RODs and remedy cost estimates.

(2) Sediment remedy issues were discussed by Steve Els of HQ.

(3) *ACL Policy* – Ken drafted an Alternate Contaminant Level (ACL) policy document which applies to CERCLA. This policy states that ACLs were never intended to be used in lieu of MCLs and clarifies the use of ACLs for Superfund remedies. The draft policy should be available in a couple of weeks.

(4) Residential cleanups.

(5) Streamlining technical impracticability waivers. The Superfund managers had a lengthy discussion on vapor intrusion issues and were given a presentation by Helen

Dawson (R8). The regions are looking for clearer direction of when to collect samples and implement mitigation measures for indoor air.

Workgroup Updates

Possible New Issue Paper: Indoor Air Decision Criteria – Jeff stated that Helen Dawson (R8) is modifying the indoor air guidance and that the modified guidance may incorporate elements that the Forums believes are missing. Therefore there may be no need for an issue paper. The issue paper will be tabled for now.

GWF/ERAF Paper – Kathy Davies said that this document is in external peer review. Kathy has received half of the comments from reviewers to date and is expecting the remainder soon. The document will be revised by the ERAF contractor to respond to all peer reviewer comments. Kathy said that the ERAF finally considered all GWF comments. Since the ERAF considers the paper to be guidance, it needs final review by EPA HQ. ERAF dropped “Ground Water Issue Paper” from the title of the document and now it is just called an “Eco-Update”. Ken Lovelace and Rich Steimle will look into a compromise title.

Multi-level Well Sampling Comparison – Kevin Willis reported that he and Dick Willey submitted to Cindy Paul (GWERD-Ada) a proposal for a study of multi-level well sampling systems and preparation of an issue paper. Cindy submitted the proposal to The Office of Research and Development’s ETV program and should hear about funding soon. GWERD will be responsible for conducting the research. Rich Steimle said that ETV funding cannot be used for a comparative analysis. The West Bay system, FLUTE, two types of Solinst sampling systems, and perhaps others will be evaluated. Kathy Davies suggested that SNAP samplers be included.

Site Characterization for MNA – Bill Brandon (R1) stated that the draft report from Ada will be ready next month. The workgroup consisting of Bill, Steve Mangion, Herb Levine (R9) and Curt Black will review it.

LTMO Roadmap – Bernie Zavala (R10) said that the “unofficial” workgroup reviewed this document and sent comments to Ellen Rubin (HQ). The final paper will be distributed during the NARPM workshop.

Direct Push Technology Guidance Document – This paper originally developed by Rob Hitzig is due out soon and has been sent to the States for final review.

Workgroup to address ASTM papers – Bernie stated that ASTM is coming out with an updated low-flow sampling guidance. He asked whether the Forum wants to review this guidance. Should we point out conflicts with EPA guidance? Rich Steimle said that EPA sent a letter stating that we would acknowledge the existence of ASTM documents in EPA documents. The letter stated that ASTM documents should be sent to Bernie Zavala who would inform the Ground Water Forum. The Forum decided to review the low-flow document. Gareth Pearson asked that a few members take a look at the document to see

if there are major issues that should be brought to the attention of the whole forum. Volunteers to review the low-flow document include Mark Henry (Michigan DEQ), Dick Willey, Kathy Davies, Brian Lewis (CA DTSC), Judy Canova (South Carolina DHEC), Kevin Willis, Gary Newhart (NRMRL-Cincinnati) and Marcia Knadle. Bernie Zavala will chair the workgroup.

Helen Dawson (R8), Update on the OSWER Vapor Intrusion Guidance - Helen told Forum members that this issue should engage ground-water hydrogeologists. Issues for the ground-water experts include: (1) Is the ground-water sample(s) representative? (2) How long is the screen? (3) Where was the sample collected? (4) Does the ground-water level fluctuate? (5) What is the stratigraphy? (6) What is the moisture content? (7) Are there laterally extensive layers? Helen believes that the Ground Water Forum is a good mechanism for educating managers and RPMs. Helen hopes to send the revised guidance document to Forum members by the end of summer. The Ground Water Forum is interested in reviewing this guidance. Helen will also send spreadsheets with the guidance.

To view a copy of her presentation for more details, [click here](#).

Surface and Borehole Geophysics – Dick Willey proposed a large workgroup to review this issue paper.

Dick proposed that the Ground Water Forum become more involved in the Triad approach. Dave Jenkins (R4) work with Draeger tubes would fit in with the use of Triad.

Jeff Johnson said that when a request comes in to the Forum from an author or sponsor to review a document, the co-chairs (Jeff and Howard Orlean) will respond to the requester with requirements for the Ground-Water Forum review. The co-chairs will also send out a request for volunteers for a workgroup to review the document.

Action Items:

Jeff Johnson went over the following action items:

- 1) Review the white papers on workgroup participation – All
- 2) Develop a draft Forum policy on short-term review requests and distribute to Forum membership – Jeff
- 3) Uncertainty issue paper – Dave Burden gave Ruth Izraeli an update today. Ruth will send the paper out to the workgroup for final review.
- 4) Bernie Zavala will send out the ASTM document to the Forum.
- 5) Ruth Izraeli proposed putting together a list of experts. The Forum decided not to do this as we would just need to contact Dave Burden who would refer us to an expert.

ATTENDEES

Dick Willey, Region 1	Ruth Izraeli, Region 2	Dave Jenkins, Region 4
Bill Brandon, Region 1	Kevin Willis, Region 2	Bill O'Steen, Region 4
Robert Alvey, Region 2	Kathy Davies, Region 3	Kay Wischkaemper, Region 4
Andy Crossland, Region 2	Joel Hennessey, Region 3	Gwen Massenburg, Region 5

Luanne Vanderpool, Region 5
Gregg Lyssy, Region 6
Dave Drake, Region 7
Lisa Gotto, Region 7
Jeff Johnson, Region 7
Brian Zurbuchen, Region 7
Helen Dawson, Region 8
Kendra Morrison Huang,
Region 8
Glenn Bruck, Region 9

Curt Black, Region 10
René Fuentes, Region 10
Marcia Knadle, Region 10
Howard Orlean, Region 10
Bernie Zavala, Region 10
Judy Canova, South Carolina,
DHEC
Mark Henry, Michigan DEQ
Brian Lewis, California DTSC
Jennifer Sutter, Oregon DEQ

Barbara Vetort, Michigan DEQ
Terry Burton, HSTL Region 6
Dave Burden, GWERD-Ada
Steve Gardner
Gareth Pearson, NERL-Las
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