

ENGINEERING FORUM TELECONFERENCE MINUTES

January 5, 2005

TOPICS IN THIS MONTH'S MINUTES:

CHET JANOWSKI RETIRES

SPRING 2005 NARPM MEETING PLANNING

FALL 2005 TSP MEETING PLANNING

LONG-TERM GROUNDWATER MONITORING OPTIMIZATION ASSISTANCE

PROJECT UPDATES

- *Expertise Survey*
 - *Selecting Treatment Process Design Data to Collect at Hazardous Waste Sites*
 - *Update on In-Situ Soil Treatment Issue Paper*
 - *Evergreen List*
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Chet Janowski Retires

Sharon Hayes (Region 1) announced that Chet Janowski (Region 1), former EF co-chair, had retired from the Agency. EF members thanked him for his years of service and wished him well.

Spring 2005 NARPM Meeting Planning

Robert Pope (NARPM) sent an updated agenda for the Spring 2005 NARPM meeting to the co-chairs on December 21. The co-chairs distributed this draft agenda to EF members following the call. An updated agenda will be sent to all EF members as soon as it is received in mid-January. The proposed agenda will be discussed during the February teleconference.

Fall 2005 TSP Meeting Planning

The EF has the lead for planning the Fall 2005 TSP meeting. In late December, members of the fall 2005 meeting planning subcommittee (Bill Rothenmeyer (Region 8), Gene Keepper (Region 6), and Sharon Hayes) discussed the upcoming meeting via teleconference. Subcommittee members Steve Kinser (Region 7) and Bernie Schorle (Region 5) were unable to participate on the call. If any other EF members would like to volunteer for the planning subcommittee, they should contact Sharon. Sharon will schedule the next subcommittee teleconference for late January and will email the call-in information to subcommittee members.

Bernie noted that John Quander (OSRTI) suggested the TRIAD approach as a possible topic for the fall 2005 meeting. None of the EF members on the call had ever used the TRIAD approach, but many thought that was a relevant and interesting topic. TRIAD was featured in a session led by Richard Smith and Kira Lynch (both with USACE, Seattle District) at the TSP meeting in Seattle, so it's not an entirely new concept (a copy of the presentation can be found at: http://www.epa.gov/tio/tsp/download/2003_meeting/ftlewis.pdf). Ed Mead (USACE) said that he attended a TRIAD session at last year's NARPM conference. Mike Gill (Region 9 HSTL) mentioned that OSRTI is pushing the use of field-based instruments to expedite the decision-making process in the field. The TRIAD approach can be repackaged to highlight some of its more innovative concepts, such as dynamic work plans. Kelly Madalinski (OSRTI) confirmed that OSRTI is placing a greater emphasis on using the TRIAD approach as a means of managing decision uncertainty. He suggested that TRIAD

could serve as the topic for one or more technical sessions or the main plenary session. The discussion could revolve around case studies that illustrate implementation issues, cost savings, benefits, and other aspects of the approach. Mike noted that there is a Powerpoint presentation on TRIAD that was developed by ITRC. Ed suggested that the EF review the Technical Project Planning Engineering Manual (TTP EM 200-1-2) that was prepared by USACE (available online at <http://www.usace.army.mil/inet/usace-docs/eng-manuals/em200-1-2/toc.htm>). In order to get more information about TRIAD, the EF will invite Dan Powell (OSRTI) to discuss the approach in greater detail during the February EF teleconference. Kelly will contact Dan and will send an email to Gene to let him know if Dan can participate. Ed will invite the individual who wrote USACE's TPP EM to participate as well.

Several potential topics for the fall 2005 meeting could focus on reuse. Engineered barriers for vapor intrusion is a high priority topic. Long-term problems with caps, covers, and liners also is a hot topic. NRC is set to begin a study on the long-term performance of caps and covers as soon as EPA approves the paperwork. Steve Rock and Dave Carlson, both with NRMRL-Cincinnati, have been working on clay cap issues and waste containment system improvements, respectively. The EF may consider asking them to give presentations on their work at the fall meeting. Gene mentioned that Terry Burton (Region 6 HSTL) sent out for review another document dealing with clay liners. Gene will send this document to Keith Arnold (EMS) for distribution to EF members. Finally, Ken Skahn (OSRTI) is finalizing a guidance document dealing with landfill caps. Kelly offered to help coordinate lining up these speakers if the EF decides to focus the meeting on long-term performance issues with caps and covers.

Gene also recommended focusing a session on contamination emanating from confined animal feeding plants. He said that solid waste from many such plants migrates offsite and can contaminate ground water with ammonia, nitrates, chloroforms, and other pollutants that are harmful to human health. Once drinking water is impacted by these contaminants, the plants are subject to corrective action under RCRA. Gene suggested a session on engineering solutions to prevent feeding plant solid wastes from infiltrating ground-water systems.

EF members also liked the idea of focusing a session on innovative solutions to unique problems, such as disposing of animal waste (such as chicken carcasses) by feeding them to alligators. To be a viable topic, EF members would need to research 5 or 6 case studies highlighting unique approaches to waste management.

Possible locations for the fall meeting include Charlotte (NC), Austin (TX), Cincinnati (OH), or Denver (CO). One possibility would be to hold the meeting in conjunction with Brownfields 2005 in Denver (November 2-4, 2005).

Long-term Ground-Water Monitoring Optimization Assistance

Ellen Rubin reported that EPA is looking for 2-3 Fund-lead sites to apply long-term ground-water monitoring optimization (LTMO) methods at for a cost of 10-20K/site.

LTMO methods include quantitative statistical and geostatistical methods for evaluating monitoring locations and monitoring frequency. EPA is offering access to contractors with expertise in LTMO methods to apply these methods at several state and EPA sites. Also, the Technology Innovation and Field Services Division (TIFSD) is offering technical support to states and EPA with questions about reviewing LTMO evaluations. The set-aside could be as high as \$100,000 for FY05, but funding has not yet been approved.

EPA wants to work with site teams to better understand how methods can be used to support overall ground-water monitoring decisions at sites, including the qualitative aspects of LTMO such as evaluating the site conceptual model, evaluating contaminant distribution relative to hydrogeology, sampling and

analytical methods, and data management, as well as quantitative methods. EPA also is concerned that regulators are neither familiar nor comfortable with quantitative methods.

This assistance is offered through EPA TIFSD and support contractors. EPA has contacted the USACE to determine if the two agencies can partner to offer this assistance. The goal of the project is to use the tools that are necessary to make the best decision for the LTMO of the site.

Requirements:

- Must be willing to work as a project team;
- Minimum of 20-30 samples collected per year (the more the better);
- Minimum of 4-6 sampling events already completed;
- Site in long-term monitoring (no change to remedy); and
- Preferred if the site is costly.

For more information, or to nominate a site, please contact Ellen (rubin.ellen@epa.gov) or Kathy Yager (yager.kathleen@epa.gov).

In addition, Ellen notified EF members of an upcoming LTMO seminar to be held March 30-31, 2005, in Sacramento, CA. This new seminar will provide state and federal regulators with information about new quantitative methods of LTMO for ground water. The U.S. Air Force and other responsible parties have used LTMO techniques at an estimated 50 sites nationwide and are likely to use them at more sites in the future. As a result, it is important for regulators to be familiar with LTMO techniques such that appropriate decisions can be made regarding the optimal location and frequency of groundwater monitoring and approval of changes to groundwater monitoring networks. The seminar will offer hands-on training in the use of some recently developed quantitative (based on statistics and geostatistics) LTMO methods, such as the Monitoring and Remediation Optimization System (MAROS), the Geostatistical Temporal-Spatial algorithm or GTS, and the three-tiered monitoring network optimization (MNO) approach. While the seminar is designed primarily for state and federal regulators, federal facilities cleanup managers, potentially responsible parties (PRPs), and contractors are welcome to participate. Capacity for the hands-on training on Day 2 of the seminar is limited. Participation will be accepted on a first-come, first-served basis and preference will be given to state and federal regulators. SO REGISTER EARLY. For more information and to register, visit <http://www.trainex.org>.

Project Updates

Expertise Survey

Regional summaries are still needed from Mark Granger (Region 2), Julie Santiago (Region 4), Gene Keepper (Region 6), and Harry Ball (Region 9). Bill Rothenmeyer may complete the Regional summaries himself and ask the Regional representatives to review them.

Selecting Treatment Process Design Data to Collect at Hazardous Waste Sites

Bernie Schorle (Region 5) has received several comments on Ed Mead's (USACE) Remedial Process Characterization Screening Data Collection Guidance. He is in the process of reviewing the comments and will forward them to Ed.

Update on In-Situ Soil Treatment Issue Paper

Marta Richards (NRMRL-Cinc.) is incorporating extensive comments into the issue paper. All reviewers should send their reviewer forms to Marta as soon as possible. Marta will resend the reviewer form to Mike Gill.

Evergreen List

The "evergreen list" of technical topics will be discussed during the next EF teleconference.

ATTENDEES

Sharon Hayes, Region 1
Ray Cody, Region 1
Andy Palestini, Region 3
Hilary Thornton, Region 3
Frank Vavra, Region 3
Leo Romanowski, Region 4
Karen Mason-Smith, Region 5
Bernie Schorle, Region 5
Gene Keepper, Region 6
Carlos Sanchez, Region 6
Gary Miller, Region 6

Steve Kinser, Region 7
Brian Caruso, Region 8 HSTL
Harry Ball, Region 9
Mike Gill, Region 9 HSTL
Kelly Madalinski, OSRTI
Ellen Rubin, OSRTI
Marta Richards, NRMRL-Cinc.
Gareth Pearson, ESD–Las Vegas
Ed Mead, USACE
Keith Arnold, EMS, Inc.

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