HIGHLIGHTS

HIGHLIGHTS OF THE SPRING 2006 TECHNICAL SUPPORT PROJECT MEETING

EPA's Technical Support Project (TSP) is continuing efforts to improve technical outreach within the regions by integrating their meeting with the National Association of Remedial Project Managers (NARPM) conference. This year's joint NARPM/TSP conference was held in New Orleans, LA, June 19-22. Together, the TSP's three technical forums—the Engineering, Federal Facilities, and Ground Water Forums—sponsored five training courses and panel sessions at the conference. Topics ranged from an introductory-level classes for new RPMs on contaminant hydrogeology and remedial technologies to more advanced sessions on remediating dense non-aqueous phase liquids and evaluating the ground water/surface water transition zone. Forum members also presented papers on a wide spectrum of technical topics.

During individual business sessions, members of the TSP forums discussed current and future activities such as preparing technical issue papers and highlighting technical issues affecting the regions. This newsletter highlights these activities. For additional information, slides for the presentations made during the Ground Water Forum business session can be found in on the TSP's webpage at www.epa.gov/tio/tsp/meetings.htm.

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New Members

The TSP is always seeking new members to participate in activities of the Ground Water, Engineering, and Federal Facilities Forums. If you are interested, please contact your regional TSP representative or a forum co-chair listed at the end of this newsletter. A complete list of contact information is available at www.epa.gov/tio/tsp/member.htm.

Ground Water Forum

Ground Water Forum (GWF) members made presentations on a number of ground-water related issues in which they are involved. For additional information on the following presentation summaries, please view or download the slides from the TSP's webpage at www.epa.gov/tio/tsp/meetings.htm.

Glenn Bruck (Region 9) summarized work at a site in California that highlights the difficulties in defining the capture zones for pump and treat. The Newmark/Muscoy Superfund site involves water supply wells contaminated by an old army landfill with parts per billion levels of TCE. A consent decree ordered the U.S. Army to pay to construct and operate a pump and treat system. The terms of the decree are very specific and require EPA to build the system and demonstrate it to be functional by August 2006. In addition, the system must achieve 80-85% capture, as demonstrated using particle-tracking software. A recent review of the capture analysis by Region 9 technical support staff revealed that the aquifer has three layers, rather than one, resulting in sparse data for each layer, rather than adequate data for the one layer originally thought to exist. As a result, staff are reassessing the use of older existing wells to aid in the capture zone analysis in an attempt to meet the August deadline.

Luanne Vanderpool (Region 5) raised the issue of whether the quality of 5-year reviews being performed at Superfund sites is consistent in the regions. Discussion among GWF members indicated that many 5-year reviews appear to lack sufficient hydrogeological analysis. As a result, they formed a workgroup to review the 5-year review guidance and propose ways to improve reviews of ground-water remedies.

Judy Canova (South Carolina DHEC) followed up the discussion by

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Become a Member!

Sharing regional concerns allows for the exchange of ideas and solutions and the promotion of regional consistency. If you wish to become involved in forum activities, be it engineering, federal facilities, or ground water, please contact your regional TSP representative listed on page 4 of this newsletter. A complete list of contact information is available at www.epa.gov/tio/tsp/member.htm.

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highlighting an example of a thorough 5-year review performed by a team from EPA, SCDHEC, the U.S. Army Corps of Engineers (USACE), a consulting firm, and the potentially responsible party (PRP). The review was the first one conducted following preliminary closeout of the site in 2000, and involved a site visit, data review, stakeholder interviews, analysis of the engineering, hydrogeology, and optimization opportunities, a review of changes in regulatory requirements, and an evaluation of changes in the risks posed by the site, which had been redeveloped for residential housing. The team identified a number of issues regarding protectiveness, costs, technical improvements, and achieving site closeout. They made several recommendations that included improving the ground-water extraction system, revising the analytical program, implementing institutional controls specified in the record of decision (ROD), and using new, less costly monitoring equipment.

Ken Lovelace (EPA Office of Site Remediation and Technology Innovation [OSRTI]) reported that OSRTI is developing guidance on how to assess the progress of pump and treat and when the remedy can be closed out (e.g., How does one determine that a pump and treat remedy is making timely progress towards remedial goals?) Ken's presentation focused on making a determination of technical impracticability (TI) for long-term pump and treat systems, including methods of analyzing performance data to support the determination. OSRTI is seeking case studies as well as data sets from the regions to test the various methods of data analysis.

Dave Burden (EPA Ground Water and Ecosystems Restoration Division [GWERD]) updated the GWF on GWERD's progress in writing the following guidance documents and issue papers and the next steps toward their completion:

- A Systematic Approach for Evaluation of Capture Zone and Pump and Treat Systems
- Measurement of Field Parameters in Ground-Water Sampling
- Uncertainty Associated with Calculation of Ground-Water Remediation Timeframes
- Monitored Natural Attenuation (MNA) for Inorganics
- Assessment and Delineation of DNAPL at Hazardous Waste Sites

GWERD also is developing training on capture zones, soil gas sampling in support of vapor intrusion, DNAPL remediation performance metrics and applications, and MNA for inorganics.

Felicia Barnett and Michael Gill, the EPA Hazardous Substances Technical Liaisons (HSTLs) for Regions 4 and 9, explained how the HSTL program provides technical support directly to the hazardous waste programs and coordinates support through the Office of Research and Development's (ORD) Technical Support Centers. The HSTLs are involved in a number of technical support, research planning, conference, and outside group activities. If regional staff need technical support, they are encouraged to contact their HSTL.

Rob Alvey (Region 2) described a community effort in Garden City, New York, to convert a storm water storage basin into a bird sanctuary and public park. The project involved a volunteer effort to plant trees and flowers and construct pathways, fences, and playing fields. The former blighted area now serves as a popular gathering spot for locals as well as a storm water basin.

For NARPM 2007, the GWF discussed sponsoring training on the topics of subsurface characterization for vapor intrusion, conducting remedial system evaluations, and assessing and remediating 1,4-dioxane.

Engineering Forum

The Engineering Forum's (EF) business session focused on tracking their progress on writing or reviewing the following engineering issue papers:

In Situ and Ex Situ Biodegradation Technologies for Remediation of Contaminated Sites will be published and posted online by August. The issue paper will focus on bioremediation technologies for treating contaminated media at hazardous waste sites.

The EF discussed extensively a draft of *In-Situ Treatment of Soils,* which is designed to help site managers determine when in-situ treatment is appropriate and which technologies should be considered. As a result, a revised draft will be provided shortly for further review by the EF.

ORD is incorporating EF comments on *Technology Alternatives for the Remediation of Soil and Sediment*

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Contaminated with PCBs, which provides an up-to-date overview of PCB contamination and remediation, including emerging and innovative technologies.

The information paper, *Selecting Treatment Process Design Data to Collect at Hazardous Waste Sites*, is still being revised. It will summarize the physical and chemical process design data needed to evaluate, select, and design treatment processes.

Evapotranspiration Covers (ETCs) is in review. The issue paper addresses issues related to final closure of landfills with ETCs.

Management and Treatment of Water from Hard Rock Mines, a practical guide to understanding and selecting technologies for the environmental management of waste materials and effluents at hard rock mines, has been drafted and is available at http:/intranet/nrmintra/etsc/papers.html for review.

The EF is reviewing the final draft of *In-Situ Chemical Oxidation* (ISCO), which provides an up-to-date overview of ISCO remediation technology and fundamentals.

In-Situ Thermal Remediation is still being drafted by ORD. It will include current information on thermal technologies, the mechanisms employed to mobilize organic contaminants, and guidance on selecting the proper thermal technology for a site.

Now available on the ORD Intranet, the draft *Indoor Air Vapor Intrusion Mitigation Approaches* explains design and installation of vapor intrusion prevention and mitigation techniques.

The EF discussed preparing a paper that tracks lessons learned or technical considerations for implementing a remedial technology. The paper would be assembled from possibly one or two case studies per region detailing site-specific conditions and contaminants. Research into 5-year reviews and remedial action reports may provide additional information. The EF will consider offering training, in the form of an internet seminar or NARPM session, in conjunction with publishing the paper.

Next TSP Meeting

The Fall 2006 TSP meeting will be held in conjunction with a symposium sponsored by the Groundwater Resources Association of California. The symposium, to be held in Long Beach the week of November 13th, will focus on high resolution characterization and monitoring of ground-water plumes. It will bring together a group of top researchers and practitioners from around the world to present the state of the science regarding efficient, high-resolution site assessments. Dr. John Cherry will set the stage early in the symposium by providing a historical perspective on the importance of high-resolution measurements in field studies performed by researchers at the University of Waterloo. For more information, visit http://www.grac.org/hires.asp.

Federal Facilities Forum

Staff from EPA's Federal Facilities Restoration and Reuse Office (FFRRO) addressed concerns voiced by the Federal Facilities Forum (FFF) and updated members on current work on these topics:

Allison Abernathy (FFRRO) said that in an effort to have the regions, rather than Headquarters, review RODs for institutional controls (ICs), FFRRO is asking the regions to use the IC checklist. FFRRO has been evaluating the regions' efforts to review RODs and has noted a lot of variability. So far, Region 3 has "graduated" the review program.

Tracey Seymour Stewart (FFRRO) reported that BRAC'05 was issued on April 27th and focuses on sites on the National Priorities List (NPL). The Department of Defense has not yet agreed to provide additional resources for non-NPL sites. In regards to the sitewide ready for reuse initiative, Tracey is seeking information on leases on which the armed services are asking the regions to consult, particularly for non-NPL sites. She noted that Environmental Condition of Property Reports are replacing traditional Environmental Baseline Survey Reports for federal facilities. In reviewing the completeness of these reports, RPMs must comment if gaps are present and more investigation is needed.

Aimee Storm (FFRRO) discussed the open burning of buildings at army ammunition plants that may contain regulated contaminants, such as paint with PCBs. A workgroup has been formed to identify the regulatory framework under which the issue will be addressed. A draft summary paper on the topic is available from FFRRO.

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New Co-Chairs

Congratulations to Jon Bornholm (Region 4) and Jim Kiefer (Region 8), recently elected co-chairs of the EF and FFF, respectively. Thanks to outgoing co-chairs Bernie Schorle (Region 5) and Harry Craig (Region 10) for their two-year efforts to co-lead the forums!

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Monica McEaddy (FFRRO) noted that there is a new system in CERCLIS that will track issues and recommendations in 5-year reviews. Issues and recommendations can be listed by operable unit, rather than simply sitewide. To emphasize the importance of 5-year reviews to other agencies, Headquarters is reporting to Congress on whether remedies were determined to still be protective during the reviews. Five-year reviews will soon be program targets, rather than GPRA goals.

Monica informed the FFF that *DoD/EPA Joint Guidance on Streamlined Site Closeout and the NPL Deletion Process for Federal Facilities* was signed in January. The guidance focuses on streamlining and restructuring the Remedial Action Completion Report (RACR) that is used to demonstrate remedial action completion. FFRRO is considering writing a document explaining how to interpret the new policy.

Marcia Knadle (Region 10, GWF) summarized a remedial investigation and feasibility study (RI/FS) performed by the USACE, one of the potentially responsible parties, that had many gaps. Both EPA and the State have requested more information on sources and depth to contamination at the site. FFF members mentioned other sites where the RI/FS had problems and discussed how they are trying to improve the situation. The FFF also raised issues with site investigations performed under the Military Munitions Response Program.

The FFF is looking at ways to increase their participation in the Federal Facilities Leadership Council (FFLC) and will seek to join the FFLC distribution list. The FFF is interested in becoming involved in writing policy and increasing forum membership.

Technical Support Project Regional Contacts

	GROUND WATER FORUM	FEDERAL FACILITIES FORUM	ENGINEERING FORUM
REGION 1	Bill Brandon Ernie Waterman Richard Willey	Christine Williams*	Ray Cody Sharon Hayes*
REGION 2	Robert Alvey Ruth Izraeli Kevin Willis	Paul Ingrisano	Stephanie Vaughn
REGION 3	Kathy Davies Joel Hennessy	Steve Hirsh Frank Vavra	Andrew Palestini Hilary Thornton
REGION 4	Dave Jenkins Bill O'Steen Kay Wischkaemper	Julie Corkran Michelle Thornton	Jon Bornholm* Leo Romanowski
REGION 5	Gwen Massenburg Luanne Vanderpool	Gene Jablonowski Karen Mason-Smith	Tony Holoska Bernard Schorle* David Seely
REGION 6	Dave Abshire Greg Lyssy Vince Malott	Mike Overbay* Chris Villarreal	Gene Keepper Gary Miller Carlos Sanchez

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	GROUND WATER FORUM	FEDERAL FACILITIES FORUM	ENGINEERING FORUM
REGION 7	Dave Drake Lisa Gotto Dan Gravatt Jeff Johnson Bill Pedicino Brian Zurbuchen	Scott Marquess	Steve Kinser
REGION 8	Helen Dawson Kendra Morrison	Jerry Cross Jim Kiefer*	Bill Rothenmeyer
REGION 9	Kathy Baylor Glenn Bruck* Rich Freitas Herb Levine	John Lucey Patti Collins	Harold Ball
REGION 10	Curt Black René Fuentes Marcia Knadle Howard Orlean* Jonathan Williams Bernie Zavala	Harry Craig*	Neil Thompson

* Denotes Forum Co-Chair