



HIGHLIGHTS

HIGHLIGHTS OF THE SPRING 2007 TECHNICAL SUPPORT PROJECT MEETING

Technical outreach was the focus of EPA’s Technical Support Project (TSP) at this year’s National Association of Remedial Project Managers (NARPM) conference. The conference, held May 21-25 in Baltimore, featured nine training courses, information sessions, and panel sessions sponsored by the TSP’s three technical forums—the Engineering, Federal Facilities, and Ground Water Forums. These included brand new courses on nanotechnology, subsurface characterization for vapor intrusion, the Department of Defense’s (DOD) Military Munitions Response Program, and other timely topics. Norm Neidergang, the new Division Director of EPA’s Technology Innovation and Field Services Division (TIFSD), thanked forum members for their contributions and provided an update on current work within TIFSD. Members of the TSP forums also discussed current and future activities, such as preparing technical issue papers and addressing technical issues affecting the regional offices. This newsletter highlights these activities.

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New Co-Chairs

Congratulations to Mike Overbay and Gary Miller (both of Region 6) who were recently elected as co-chairs of the Federal Facilities Forum and Engineering Forum, respectively. Mike is serving his second consecutive term as co-chair. Gary is replacing outgoing co-chair Steve Kinser (Region 7). Thanks to everyone for their leadership and dedication to the forums!

Federal Facilities Forum

The Federal Facilities Forum (FFF) welcomed John Reeder, newly appointed Director of EPA’s Federal Facilities Restoration and Reuse Office (FFRRO), to its business sessions. Members of the FFF described to John and other FFRRO representatives the unique cleanup issues faced at federal facilities. Increased discussions among FFRRO and RPMs are anticipated over the next few months to support development of Headquarters policy statements clarifying EPA’s roles and regulatory requirements. One high-priority issue is the need for consistent standards regarding documentation of long-term monitoring and related 5-year remedy review components. In June, the FFF will form a workgroup to work with FFRRO on a strategy clarifying these documentation requirements and related EPA reviews. The FFF also anticipates related discussions with the Agency’s Office of Federal Facility Enforcement to address facility-specific cleanup problems.

Monica McEaddy (FFRRO) summarized the status of various FFRRO projects impacting regional work at federal facilities. Doug Maddox (FFRRO) currently is evaluating potential impacts of DOD’s Military Munitions Response Program (MMRP) over the next five years. Impacts include increased Regional workloads. In the next five years, the MMRP will generate an estimated 1,000 site-investigation reports requiring EPA and/or state review. Approximately two-thirds of DOD’s NPL sites are now managed under the MMRP. Doug will work with the FFF to prioritize and proactively address site-specific MMRP issues potentially affecting “construction completion” targets. In support of FFRRO’s input to EPA’s 2007 mid-year performance report, Trina Martynowicz (FFRRO) will work with Paul Ingrisano (Region 2) and Bob Lim (Region 1) to develop an approach to address impacts of Congressional funding reductions for DOD’s cleanup programs.

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In Recognition

Rich Steimle of the Technology Innovation and Field Services Division (TIFSD) and long-time advisor to the TSP forums presented each member of the Ground Water Forum with an award recognizing the 20th anniversary of the forum. (Many members have actively participated in the forum throughout this 20-year span!) In addition, all three forums also presented Rich Steimle, who retired from EPA following the NARPM conference, with a plaque to show appreciation for his 17 years of support.



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By the end of May, FFRRO will release the first three fact sheets of a 6-part series on emerging contaminants at federal facilities. The FFF earlier reviewed and provided comments on drafts of the fact sheets, which address 1,4-dioxane, perchlorate, and NDMA (*n*-nitrosodimethylamine), and will soon review draft fact sheets on polybrominated biphenyls and trichloropropane. Earlier this year, the FFF also reviewed and commented on the draft framework by the Office of Pollution Prevention and Toxics for addressing TSCA issues related to open burning of PCB-contaminated buildings. The FFF will provide additional comments on a recent revision of the framework.

This spring, the FFF outlined its issue paper on explosives-contaminated sites, which will provide reference materials to RPMs addressing characterization of explosives on training ranges and open burning / open detonation ranges.

Workgroup members soon will begin working with representatives of EPA's National Exposure Research Laboratory, the Idaho National Laboratory, and the Army Corps of Engineers' Cold Regions Research and Engineering Laboratory to complete a (50- to 70-page) draft by the end of September. The FFF will make final changes to the document during the Fall 2007 TSP meeting.

Forum members explained portions of the issue paper's content during delivery of the group's 4-hour "Explosives and Perchlorate Sampling and Analysis Issues" training session at the NARPM meeting. The FFF also organized the meeting's 4-hour "Military Munitions Response Program" training. Last fall, the FFF developed a 3-day munitions workshop in Region 6. Positive reception has led to national expansion of the course. Future training organized by the FFF potentially includes a 2- to 3-day course at an upcoming Federal Facilities Remediation Seminar.

Recognizing that federal facility partnerships and communications are critical to the group's mission, the forum continues to brief the Federal Facilities Leadership Council about FFF activities during each FFLC meeting and to investigate venues for joint meetings with other organizations having similar interests. Monica McEaddy will work with Jim Kiefer (Region 8) to establish an Internet "QuickPlace" for easily exchanging updates and documentation within the FFF and to interested Agency staff.

Ground Water Forum

Members of the U.S. Geological Survey (USGS), Water Resources Division for Maryland, Delaware, and the District of Columbia made several technical presentations to the Ground Water Forum (GWF), which are summarized below. For further details, the slides can be viewed on the TSP's webpage at www.epa.gov/tio/tsp/meetings.htm.

Emily Majcher (Geosyntec, formerly with USGS) presented the results of a USGS study characterizing preferential ground-water seeps to wetlands along a creek at Aberdeen Proving Ground. She and her colleagues used aerial thermal infrared imaging to identify seeps, which occurred both as discrete points and diffuse areas. They used passive diffusive samplers to analyze seeps and non-seep areas for VOCs and methane. Concentrations of VOCs in the seeps were substantially greater than those in non-seep areas, while the converse was true for methane. Overall, observable microbial communities decreased in seep areas, although they were enriched with certain microbes that feed on contaminants.

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Comparison of landscape locations and discharge locations did not reveal why seeps occurred where they did. Concentrations of contaminants in seeps corresponded well to nearby concentrations in the aquifer. Although ecological risk was shown to exist at the seeps, bulk water samples from the creek did not suggest risk.

Brad Garner (USGS) summarized some new real-time, water-quality sensors including luminescent dissolved oxygen, ultraviolet absorption (particularly useful for measuring compounds with benzene rings), total organic carbon, and a biomonitor that uses bluegill fish to directly measure toxicity. He explained how event detection software can be used to identify departures from baseline conditions. Real-time monitoring with these sensors and software can be applied at remediation sites to monitor effluent from a site or treatment process and detect potential failure events.

Doug Yeskis, a supervisory hydrogeologist at USGS and former GWF member from Region 5, spotlighted some of USGS's databases and real-time data collection programs (including stream flow, ground-water levels, and water quality parameters) that EPA may find useful. Databases include the Ground-Water Site Inventory (accessible through the National Water Information System Web Interface, <http://nwis.waterdata.usgs.gov/nwis>), the automated data processing system, and water-quality data (<http://nwis.waterdata.usgs.gov/usa/nwis/qwdata>). These sources can be used to obtain background data, trends, and an analytical routine for processing continuous data.

During their business sessions, members of the GWF conducted a regional roundtable to identify ground-water

issues affecting each participating regional office and state. The most common issues cited were vapor intrusion, 5-year reviews (including the evaluation of MNA), ground-water/surface water interactions, and nanotechnology%particularly the use of nanoscale zero-valent iron (NZI) for groundwater remediation. The forum has workgroups addressing each of these topics except for nanotechnology and will include one or more NZI case studies at a future meeting.

Other action items include: (1) review the vapor intrusion mitigation paper being written by Ray Cody (Region 1) of the Engineering Forum; (2) review a USGS document (co-authored by Richard Willey, Region 1) on tree coring for VOC plume identification; (3) develop an advanced contaminant hydrogeology training course for a future NARPM meeting; (4) develop and test a Quickplace internet site to facilitate information exchange within the Ground Water Forum; (5) coordinate the presentation of the ORD training on "A Systematic Approach to Ground Water Capture Zone Analysis" in Regions 2, 4, 5, 6, and 8; and (6) increase coordination with ITRC by establishing liaisons to ITRC technical teams.

Engineering Forum

During their business sessions, the Engineering Forum discussed a number of issue papers in production as well as their plans for the Fall 2007 meeting.

Issue papers

Co-chair Mike Gill (ORD, Region 9) drafted a *Guide of Online Remediation Technologies Databases and Resources*, which summarizes many of the online resources that can assist with hazardous waste cleanups in the Superfund, RCRA, and Brownfields programs. The paper will be ready for publication later this summer.

The forum will begin writing a series of "lessons learned" papers based on field applications of various remedial technologies. They elected to start with in-situ chemical oxidation (ISCO). The forum is seeking feedback from RPMs and others on their experience with ISCO.

The forum agreed to assist and move forward with publishing the ORD issue paper *Ex-Situ Treatment of Oxygenated Hydrocarbons and Perchlorates in Groundwater* despite the age of the data and publication of similar work by ITRC. Comments from the forum and

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Next TSP Meeting

The Fall 2007 TSP meeting will be held November 5-8 at the National Exposure Research Laboratory (NERL) in Las Vegas, Nevada. The meeting will feature presentations from NERL scientists about their current research and technical support capabilities. The meeting will offer a chance for forums to meet jointly to discuss current projects and opportunities for collaboration. In addition, working business sessions will be held to advance progress on issue papers and other forum projects. A tentative field trip is planned to observe remediation systems for perchlorate-contaminated ground water at the AMPAC and Tronox sites.

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the Corps of Engineers on the draft paper must be incorporated.

ORD is almost finished its next draft of *Technology Alternatives for the Remediation of Soil and Sediments Contaminated with PCBs*. Comments received from non-forum members will require additional work, but in order to make it a useful document, several forum members volunteered to review the revised draft and provide comments to ORD.

The forum is also assisting ORD with a paper on evapotranspirative covers for landfills that it aims to publish in 2007.

The Engineering Forum will also investigate participating on ITRC technical teams to identify any overlapping projects that might warrant collaboration with ITRC in writing or reviewing papers. A few forum members plan to meet with the ITRC at their mid-year meeting in Chicago on July 25th to discuss the issue.

Fall Meeting

The Engineering Forum is planning to host a roundtable on permeable reactive barriers during the NARPM 2008 conference and will work on the logistics for the roundtable during their fall meeting. As a product of the roundtable, they plan to prepare proceedings that document the interactive discussion. During the fall meeting, members also will review a summary of commonly used material-handling equipment that was prepared by the Illinois Bureau of Land.

Technical Support Project Regional Contacts

	GROUND WATER FORUM	FEDERAL FACILITIES FORUM	ENGINEERING FORUM
REGION 1	Bill Brandon Richard Willey	Carol Keating Ginny Lombardo Christine Williams	Jim Brown Ray Cody Aaron Gilbert
REGION 2	Robert Alvey Ruth Izraeli Richard Krauser Michael Scorca Kevin Willis	Paul Ingrisano*	Stephanie Vaughn
REGION 3	Kathy Davies Joel Hennessy	Steve Hirsh Frank Vavra	Russell Fish Fred MacMillan Donna McCartney Andrew Palestini Hilary Thornton
REGION 4	Dave Jenkins Bill O'Steen Kay Wischkaemper	Michelle Thornton	Jon Bornholm* Leo Romanowski
REGION 5	Gwen Massenburg Luanne Vanderpool*	Karen Mason-Smith	Tony Holoska Bernard Schorle David Seely
REGION 6	Dave Abshire Greg Lyssy Vince Malott	Mike Overbay* Stephen Thzone	Gene Keepper Gary Miller* Carlos Sanchez

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	GROUND WATER FORUM	FEDERAL FACILITIES FORUM	ENGINEERING FORUM
REGION 7	Dave Drake Lisa Gotto Jeff Johnson Bill Pedicino Brian Zurbuchen	Scott Marquess	Don Bahnke Michael B. Davis Steve Kinser
REGION 8	Helen Dawson Kendra Morrison	Jerry Cross Jim Kiefer*	Sandra Bourgeois Bill Rothenmeyer
REGION 9	Kathy Baylor Glenn Bruck* Rich Freitas Herb Levine	Rich Muza	Harold Ball Michael Gill* Jim Polek
REGION 10	Curt Black René Fuentes Marcia Knadle Howard Orlean Jonathan Williams Bernie Zavala	Harry Craig	Position Vacant

* Denotes Forum Co-Chair