

## **ENGINEERING FORUM TELECONFERENCE MINUTES**

**February 7, 2007**

### **TOPICS IN THIS MONTH'S MINUTES:**

#### ***TECHNICAL TOPIC***

#### ***POSSIBLE COLLABORATION WITH ITRC***

#### ***SPRING 2007 NARPM MEETING***

#### ***FALL 2007 TSP MEETING***

#### ***ACCOMPLISHMENTS/GOALS SUMMARY***

#### ***EPA SCIENCE CONNECTOR***

#### ***EF PRODUCTS UPDATE***

#### ***EF MEMBERSHIP DRIVE***

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#### ***TECHNICAL TOPIC***

Ernesto Montenero from Sustainable Technologies gave a brief presentation on the benefits of using solar electric systems to provide power at remediation sites. Ernesto walked EF members through an Excel worksheet that demonstrated the costs and benefits associated with installing a solar power system at a typical pump and treat site. The worksheet detailed critical variables such as energy consumption, solar radiation, energy production, and site and equipment information. Although up-front costs might be higher than for traditional power supplies, significant cost savings can be realized over the long term. In addition, a number of states, including California and New Jersey, offer tax incentives and rebates for renewable energy systems.

O&M costs for solar energy systems are minimal, although batteries will require maintenance. Ernesto noted that solar systems operate most efficiently in areas with abundant sunshine, such as southern California and the desert southwest, but they also provide stable energy sources for sites located in more northern latitudes. The solar power sources can be stacked to provide additional power to larger remediation systems. Solar panel prices have stabilized or slightly declined in recent years, thereby lowering the overall system costs. On average, solar panels experience a one-percent degradation in total energy output per year. Sustainable Technologies' solar panels are under warranty for 25 years. For more information on solar energy systems, EF members can contact Ernesto via email at [ernesto@sustainabletech.cc](mailto:ernesto@sustainabletech.cc).

#### ***POSSIBLE COLLABORATION WITH ITRC***

Mike Gill (Region 9 HSTL) reported on a discussion that he had with Jim Harrington (NYSDEC) about increasing collaborative efforts between the TSP and Interstate Technology and Regulatory Council (ITRC). Ellen Rubin (TIFSD) will attend ITRC's annual meeting this year and will explore opportunities for EPA to work more closely with ITRC in developing joint products. Steve Kinser (Region 7) noted that the TSP forums have worked on joint projects with ITRC in the past. Although he is open to the notion of increasing collaboration with ITRC, he cautioned against being pressured to endorse practices that fall below EPA standards.

### ***SPRING 2007 NARPM MEETING***

The location and dates for the spring 2007 NARPM meeting have not yet been finalized. The EF will work with the Superfund Basic Research program to plan a 195-minute session on nanotechnology. The nanotechnology session will be held on Tuesday afternoon from 1:15-4:30 p.m. Ray Cody (Region 1) will again present his session on remedial design for vapor intrusion. The EF decided to hold its business sessions on Monday morning and Thursday afternoon. Bernie Schorle (Region 5) will ask NARPM's contractors to add the EF business sessions to the agenda.

### ***FALL 2007 TSP MEETING***

During the last co-chair call, Rich Steimle (TIFSD) said that future stand-alone TSP meetings will require written justification. The justification must include a discussion of anticipated meeting outcomes and deliverables. This topic will be discussed in greater detail during the next EF teleconference.

### ***ACCOMPLISHMENTS/GOALS SUMMARY***

Mike Gill submitted the EF accomplishments report to Rich Steimle and Kelly Madalinski (TIFSD). He thanked everyone who provided information or commented on the draft.

### ***EPA SCIENCE CONNECTOR***

Mike Gill created an EF "project" on the internal EPA file sharing tool called Science Connector. This program will allow EF members to create, store, share, edit, and update documents such as the evergreen list. EPA employees already have been sent an invitation to join. Non-EPA employees will receive an invitation to join the group in the near future. Hilary Thornton (Region 3) volunteered to upload the most recent version of the evergreen list to Science Connector. He will reconcile the evergreen list with the accomplishments report and update the list accordingly.

### ***EF PRODUCTS UPDATE***

The oxygenates issue paper is still being revised by NRMRL-Cincinnati. Some EF members were concerned that the paper has been undergoing review for so long that the information might be outdated. Bernie or Mike Gill will send a link to the draft paper (or the paper itself) so that EF members can review it.

Several EF members reviewed the Federal Remediation Technologies Roundtable and Clu-In web sites to see if there was sufficient information on remediation technologies in the form of case studies and lessons learned reports. Jim Brown (Region 1) said he did not find much useful information on in-situ chemical oxidation at either site. Hilary Thornton said he found a large number of case studies on various topics at both sites. The EF decided to forward any available case studies or lessons learned reports to these web sites for posting.

EF members should compile available resources on in-situ chemical oxidation, preferably in the form of case studies or lessons learned reports, and bring them to the spring meeting. At that point, the EF will discuss ways to distill the critical information from these information sources and synthesize the material into a comprehensive reference document. Steve Kinser and Sandra Bourgeois (Region 8) will search through 5-year reviews for information on in-situ chemical oxidation. Stephanie Vaughn (Region 2) will do the same with remedial system evaluations. Lindsey Lien said that USACE is preparing a lessons learned report on the 5-year review process. He will forward a summary of that report to the co-chairs when it is completed.

EF members also discussed the possibility of reintroducing roundtable discussions during future TSP meetings. Roundtables are an excellent means of transferring technical information and encouraging open discussion on technical topics.

### ***EF MEMBERSHIP DRIVE***

Mike Gill has revised the solicitation for new members and will send it to Regional EF representatives for final comment. Comments are due to Mike by February 23. Once finalized, EF members will distribute the solicitation to Superfund RPMs and RCRA staff in their respective Regions.

**ATTENDEES**

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|----------------------------|---|
| Jim Brown, Region 1        | Terry Burden, Region 6 HSTL                 |
| Ray Cody, Region 1         | Mike Davis, Region 7                        |
| Aaron Gilbert, Region 1    | Steve Kinser, Region 7                      |
| Stephanie Vaughn, Region 2 | Sandra Bourgeois, Region 8                  |
| Fred MacMillan, Region 3   | Bill Rothenmeyer, Region 8                  |
| Andy Palestini, Region 3   | Harry Ball, Region 9                        |
| Hilary Thornton, Region 3  | Mike Gill, Region 9 HSTL                    |
| Jon Bornholm, Region 4     | Neil Thompson, Region 10                    |
| Leo Romanowski, Region 4   | Ellen Rubin, TIFSD                          |
| Tony Holoska, Region 5     | Lindsey Lien, USACE                         |
| Tim Prendiville, Region 5  | Hugh Rieck, USACE                           |
| Bernie Schorle, Region 5   | Ernesto Montenero, Sustainable Technologies |
| David Seely, Region 5      | Keith Arnold, EMS, Inc.                     |

*In an effort to foster scientific and technical advances in characterization, monitoring and remediation of contaminated sites, the EPA Technical Support Project encourages full and frank discussion of all technical matters and related issues that come before it. Information presented in these minutes represents the views of the participants and has not received formal EPA peer review. Therefore, this information does not necessarily reflect the views of EPA or other participating organizations, and no official endorsement should be inferred. The information is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States or any other party. Use or mention of trade names does not constitute an endorsement or recommendation for use. Errors and omissions in the information will be corrected as they are found and time permits.*