

## **OHIO COST SAVINGS GROUP REPORT ON JANUARY WORKING MEETING**

The Ohio Cost Savings Group (OCSG) was formed to combine the resources and efforts of the technology and pollution prevention / waste management programs within OH. The OH Office of Compliance and Support under Ward Best sponsors the OCSG.

The goal of the group is to maximize use of all available resources from the National Technology (EM-50) and Pollution Prevention (EM-22) Programs and combine them with those already available in the OH Projects. Through cooperative effort, program support funds from EM-50 and EM-22 will be used with OH in-house expertise to save time and money or avoid costs for the five OH Projects.

In a November OCSG meeting at CEMP, representatives from the five OH Projects agreed to concentrate efforts in four distinct areas where common problems or opportunities exist at two or more OH sites. In addition, a fifth “cross-cutting” area involving common contracting and procurement opportunities will be worked with the Office of Acquisition and Asset Management.

Teams of problem holders or technical experts from participating sites will be established in each of the four areas. A contractor technical representative, who will be partially funded by the OCSG, will chair each of the four Teams. The independent teams will be guided by the OCSG. The teams and their leaders are:

- ***Characterization and Delineation of Contaminates – Don Krause, BWXTO***
- ***Problem Waste Disposition – Scott Altmeyer, Earthline Technologies***
- ***Materials Management – Dick Govers, Chamberlain Group***
- ***D & D Equipment, Processes and Technologies – Cid Voth, BCL***

The initial meeting of the ***Characterization and Delineation of Contaminates Team***, and the ***Problem Waste Disposition Team*** was held on January 30, 2001 in Miamisburg. The concept for the working team meetings was to bring site personnel together and present them with “state-of-the-art” technology briefings presented by subject matter experts on the EM-50 developed technologies.

Following the briefings, the two Teams met individually and developed their different approaches and paths forward in pursuit of two different technologies in each of the two areas. The summary of meeting results for the two Teams is attached.

The remaining two Teams (***Materials Management and D & D Processes and Technologies***) will conduct a similar combined kick-off meeting in early April.

## MEETING SUMMARY

### **Ohio Cost Savings Group (OCSG) Working Meeting Characterization and Delineation of Contaminants (C&D) Area**

*Leads: Don Krause, BWXTO*

*January 30, 2001*

*Mound Technology Center*

The following three companies sent a technical representatives to the working meeting to make a presentation (for additional details on each company see the Attachment):

- Science and Engineering Associates – Pipe Explorer
- Applied Research Associates – Cone Penetrometer
- Christensen Products – Coring Device

During the morning session, representatives described the technology tool their company offers and answered questions regarding specific applications at DOE-OH sites. The afternoon session, consisting only of representatives from each of the five DOE-OH sites, discussed possible opportunities to use any of the technologies presented and identified a path forward for the C&D Area Group to take.

**Pipe Explorer:** The pipe explorer had been successfully deployed at the CEMP for approximately 3700 lineal feet of underground pipe. The total amount of underground pipe for the CEMP is estimated at 8800 lineal feet. Based on this successful deployment, how do we proceed with evaluating opportunities to use it at the four other DOE-OH sites?

The group identified the three categories of underground piping to include: 1) Storm lines; 2) Sewage lines; and 3) Process lines. They agreed that there needs to be a systematic way for evaluating whether there is an opportunity to deploy the pipe explorer at the other four sites. This systematic approach should include:

Step 1. Estimate the amount of lines that could be inspected using the pipe explorer. This estimation would be done in a two-phased approach that would first identify a rough estimate of the total amount of lines. This total would be refined during the second phase estimate so as to not include any lines that are scheduled to be excavated anyway as part of D&D or that are known to be contaminated. The idea is step one is not to be exact but to determine if a site has enough lines to warrant the deployment of the pipe explorer.

Step 2. Identify a rough order-of-magnitude estimate on baseline costs associated with excavation of these lines in order to identify a rough order-of-magnitude estimate for the cost savings associated with deploying the pipe explorer.

Step 3. Identify the logistics associated with multiple DOE-OH site deployments for the pipe explorer based on current baseline schedules. This step will identify current OST and P2 funding available for initial deployment efforts, using subsequent deployment.

The path forward is for each site representative to first provide a phase I estimate of the lineal feet of pipe within two weeks. Once we have this information, an approach will be presented

to DOE-OH management identifying a relative value for cost savings that based on total lineal feet of underground pipe, multiple site deployment, and actual cost savings at the CEMP. Given a green light to proceed, the OCSG will refine estimates for each site, identify immediate and long-term deployment opportunities, and focus in on immediate projects for deployment of the pipe explorer during FY 2001.

**Cone Penetrometer and Coring Device:** The cone penetrometer uses a push technology to access unconsolidated subsurface material for the purpose of characterization. The technology allows for either sample retrieval and/or down-hole imaging and sensor characterization without creating secondary material/waste normally associated with boring or coring devices.

The group identified the three techniques that existed for subsurface sampling and characterization under buildings are: 1) Cone penetrometer; 2) Coring devices; and 3) Geophrobe. Of the three, only the cone penetrometer does not create a secondary waste-type material. The group discussed what would be the most relevant approach to identifying costs and opportunities to deploying any of these tools.

- One approach was to identify a ‘model’ D&D building and then identify sampling cost associated with the subsurface access technology as it relates to a ‘model’ sampling plan.
- A second approach was to identify a specific building and determine specific costs associated with the subsurface access technology as it relates to a ‘specific’ sampling plan.

The group noted that they could derive relative values for project specific cost for subsurface characterization beneath any building provided that they had the following specific information relative to one of these subsurface access technologies:

1. Mobilization Cost
2. Cost per access foot
3. Sampling plan and/or grid system
4. Type and concentration range for contaminants

The path forward is for each site to identify a D&D project in which subsurface access and characterization is need during FY 2001. The most immediate OH opportunities are around and under the buildings at AEMP and the SW-R Building complex at the MEMP. The OCSG will look at both as opportunities to deploy one or more of these subsurface access technologies during FY 2001.

### **Participants**

Joni Naseth – Chamberlain Gp.

Dick Govers – Chamberlain Gp.

Al Lambacher - AEMP

Michael Krstich – EMS

David Roelant - FIU

Jim Griffin - CEMP

Dick Neff - MEMP

Joan White – FEMP

Doug Maynor – DOE-