

**PGDP Citizens Advisory Board
Water Task Force
October 3, 2003 * CAB Office**

CAB Members Present: Linda Long
Jim Smart, Chair
Dorothy Starr
Bill Tanner

DOE Representatives Present: Gary Bodenstein

**Commonwealth of Kentucky
Representatives Present:** Brian Begley (via telephone)
Gaye Brewer
Todd Mullins (via telephone)

BJC Representatives Present: Craig Jones (via telephone)
Eric Morti, SAIC (via telephone)
Larry Young (via telephone)

Support Staff Present: Kim Crenshaw
Kendra Payne

Public: Vicki Jurka

The meeting was called to order at 12:00 p.m.

North-South Diversion Ditch Update

Jones reported he had received one data point for hydrogen ion concentration (pH) in the North-South Diversion Ditch (NSDD). He said the soil sample pH result was 6.6 taken from Section 1 of the ditch and believed this was collected less than a foot in depth on March 3, 1990.

Jones reported the east side of the Surge Basin is complete and work on the west side should be complete on October 8. He said the bags, which will hold the excavated soil, have been received and have met specifications. Smart asked if the soil is going in the bags as it is excavated. Jones said no, the soil will be stockpiled within the Remedial Unit by a larger backhoe, while another backhoe with a smaller bucket fills the bags in an effort to be more efficient. Smart asked how sampling for trichloroethylene (TCE) would be conducted. Jones said the samples will be sent to a on-site fixed base lab operated by the United States Enrichment Corporation. Other alternatives will be investigated, such as portable gas chromatography (GC). Tanner asked if the U.S. Department of Energy (DOE) had ever considered purchasing a mobile GC to be used from project to project for

quicker results of data flow. Bodenstein said it was not cost effective during down time of projects.

Jones stated the Remedial Action Work Plan (RAWP) for Section 1 of the NSDD has gone to the Commonwealth of Kentucky for review. DOE and the Commonwealth of Kentucky will be working to reach an agreement on the RAWP to move forward with that section of the ditch.

Southwest Plume Sampling Approach

Payne provided the task force with a copy of the presentation of the Southwest Plume Site Investigation. Tanner suggested this presentation be added to the agenda for the October Board Meeting. Smart asked when the sampling would begin. Bodenstein said it would start the summer of 2004. Jones said a camera would be run through the storm sewer line that leads to Outfall 008. Tanner asked if the sewer line only flows after rainfall. Brewer said this particular sewer line is always flowing.

Tanner suggested grab sampling at each manhole to determine the section of the pipe that is contaminated. Morti said first a camera would be run through the pipe to identify where the major cracks and holes were located and the priority was to sample the embedded materials. Smart asked, once the details are defined with the plume concentrations, what technologies will DOE apply for remediation. Bodenstein said the only technology that would be used is to pump the water to C-612 for treatment. Tanner said he would like for the Water Task Force to draft a recommendation for presentation to the Board that DOE incorporate in the work plan sampling of every manhole on Outfall 008 to help define the areas of contamination. The task force agreed.

Six-Phase Heating Treatability Study Update

Jones reported the Six-Phase Heating System operations were shut down on September 6. He said demobilization and the 100 percent groundwater sampling event are completed. He stated the soil borings were completed the previous week. Jones said samples were collected every two feet for metals, radionuclides, and volatile organic compounds. He said the teflon sleeves that were being used were melted, and pushed up into the cylinders, due to the heat. A change was made to the push method with split spoons. Jones reported the water samples were taken immediately after shut down, soils samples were taken within two weeks of shut down, water was collected again just for TCE, and one more water sample will be taken October 6. He said 90 percent of the mass was removed, the base line results were over 100-200 parts per million (ppm) and the final results were less than 1 ppm in some wells. Jones said the final report is due the end of December.

The Proposed Plan will be completed January 30, 2004 on C-400 recommending the technology to the public and regulators, and in August 2004 a D1 Record of Decision will be completed.

Tanner asked Jones if he thought the Six-Phase Treatability System will be used for cleanup at the Paducah site to remove TCE at the source. Jones said that was possible. Tanner stated he would like to issue a recommendation to DOE, stating if Six-Phase technology is utilized again, that the vapor extraction process continue for a longer period of time after shut down, unless it is proven that no additional product is recovered. Tanner said before this system is used again with carbon recovery vessels, other methods need to be investigated in the interest of eliminating as many air emissions as possible. Smart said the Water Task Force should first recommend that a list of lessons learned be added to the final report. The task force agreed.

S&T Landfill Scoping Plan

Payne provided to the Board a copy of the S&T Landfill presentation from the September board meeting. Bodenstein said there was a lack of data between the plumes and DOE is not sure if the plume is migrating or if there is leakage from the landfill. Tanner asked how long the routine monitoring for the S&T Landfill had shown contamination in the groundwater. Bodenstein said for at least four years the samples have shown small levels of TCE and Tc99, 13 parts per billion being the highest level. Bodenstein said monitoring wells could not be put in the areas of the data gap because of the Tennessee Valley Authority power lines.

The meeting adjourned at 1:25 p.m.

Action Items

- Tanner: Ask full board if DUF₆ can be replaced by Southwest Plume Sampling presentation.
- Jones: Move pages 9 and 10 of the Southwest Plume Scoping Presentation to the front of the presentation.
- Staff: Prepare draft recommendation for October Board packet for Southwest Plume Sampling Approach.
- Staff: Prepare draft recommendation for October Board packet for Six-Phase Treatability Heating System.