

**PGDP Citizens Advisory Board
Water Task Force
May 2, 2003 * CAB Office**

- CAB Members Present:** Mark Donham
Merryman Kemp
Linda Long
Jim Smart
Bill Tanner
- DOE Representatives Present:** David Dollins
- KY Division of Waste Mgt:** Leroy Chittenden (via teleconference)
Janet Miller
Todd Mullins (via teleconference)
- BJC Representative Present:** John Farrell (via teleconference)
Craig Jones (via teleconference)
Larry Young (via teleconference)
- Support Staff Present:** Kendra Payne
- Members of the Public Present:** Vicki Jurka

The meeting was called to order at 12:05 p.m.

Surface Water Budget

Dollins provided a budget breakdown for surface water activities. He said that Bill Murphie, U.S. Department of Energy (DOE), would be discussing the Fiscal Year (FY)03 budget in further detail at the Long-Range Strategy/Stewardship meeting on May 8, 2003. The surface water budget is as follows:

NSDD Phase 1:	FY02 = 1,856,000
	FY03 = 7,800,000
	Delta = 5,900,000
Scrap Metal:	FY02 = 11,604,000
	FY03 = 12,500,000
	Delta = 896,000

Dollins said that the funding allocated for the North-South Diversion Ditch (NSDD) might not be spent in FY03 due to ongoing discussions/dispute with regulators. He reported DOE invoked informal dispute with the Commonwealth of Kentucky regarding the sampling plan for the Surge Basin, Sections 1 and 2. Tanner stated the Site Wide Sediment Control Recommendation that was made to DOE by the Board was intended to prevent disputes over sampling data. He said the recommendation requested that a Site Wide Sediment Control Plan be developed in order to simplify projects. Tanner said the plan would set a baseline for operations.

Smart asked if the dispute was invoked because the Commonwealth of Kentucky disagrees with DOE's sampling plan. Dollins said yes and that the Commonwealth of Kentucky is requesting additional sampling.

Donham asked how the dispute was related to the surface water budget. Dollins said funding is tied to the scope of work for the project. He said that money would not be spent due to the dispute, but additional sampling will increase the cost. Mullins said the Commonwealth of Kentucky wants to ensure that what is disposed into the C-746-U Landfill is non-hazardous.

Tanner asked for an explanation of the differences between DOE's and Kentucky's proposed plans. Jones said DOE proposed to conduct random sampling of bagged soil after excavation. Kentucky is requesting screening of every bag for volatile organic compounds (VOCs) and radiation in addition to random bag sampling. Smart asked what percentage of bags would be randomly sampled. Dollins said DOE proposed to random sample soil bags, but was unsure of the percentage. Mullins said Kentucky feels 5 percent random sampling along with the screening of all bags, using hand held instruments, would ensure that trichloroethylene (TCE) is not present. He said they want to prevent having an issue with F-listed waste going into the C-746-U Landfill. Mullins stated DOE believes the existing samples are sufficient and Kentucky disagrees. He said Kentucky does not discount DOE's data, but does not think the extra precautions are excessive. Dollins said DOE's sampling plan is consistent with industry standards.

Tanner asked if the soil bags would be put in additional packaging before being disposed into the C-746-U Landfill. Dollins said there will be no additional packaging. Tanner asked if VOCs have been present in the pre-excavation samples. Dollins said the samples show a non-detect for TCE, therefore, DOE feels comfortable with the contained in policy. Tanner asked how long the excavation process will be and how many bags does DOE plan to fill. Dollins said excavation will take four to five months and are expecting to fill 1,500 bags for Section 2.

Tanner suggested that DOE implement Kentucky's proposal for the first week of sampling as an extra precaution. He said if testing does not show contamination present then DOE could revert back to its original plan. Tanner asked if DOE was opposed to conducting 5 percent random sampling. Dollins said DOE planned to do random sampling but below 5 percent.

Donham said DOE has done some additional sampling in the NSDD. He asked what risk-based level does DOE plan to use as the standard. Dollins said DOE is working toward the industry standard of 10^{-4} but after back filling the soil, it would be clean to the 10^{-6} risk level. Donham said if DOE had an adequate sampling plan they would be able to identify high-risk areas. He said this would allow DOE to excavate only the necessary areas, which would cut down on cost for disposal and excavation. Dollins said the process DOE has taken for the NSDD, was agreed upon by regulators and DOE before the project began. He said the intent was do what would most benefit the site.

Six-Phase Update

Jones reported the Six-Phase Heating System is working at 80-90 percent efficiency. He said the project is progressing faster than expected, but the Regional Gravel Aquifer has not heated to optimal temperature. Jones said the system would be shut down starting Sunday, May 10 to collect the first operational samples. He said the system would be shut down in the daytime for 3-4 days to sample 28 locations. Jones stated the United States Enrichment Corporation will make a power upgrade during that time. He said a second operational sample period would occur in late May. Farrell said the temperature will drop one degree per day as a result of shutting down the system.

Smart asked how many granulated activated carbon (GAC) units have been filled. Jones said the fifth unit was filled and replaced on May 1, 2003. He stated the project fills approximately one GAC per week.

Chittenden asked Jones if the cold water entering the area is what is preventing the temperature from reaching its maximum. Jones said yes, and that there is a faster flow of groundwater in the area creating less resistivity, which slows the heating process. Donham asked if DOE planned to continue to increase the temperature. Farrell said temperatures are still climbing, and the power upgrade will allow more amperage into the subsurface. Tanner asked what temperature is needed to volatilize TCE at depth. Jones said 100 degrees Celsius. Tanner asked what is the current temperature. Jones said it ranges from 80-90 degrees Celsius.

Kemp asked if any sampling from the project had been affected by the recent discovery of laboratory sampling errors related to other projects. Jones said the Six-Phase project was not impacted in a negative manner.

Kentucky Pollutant Discharge Elimination System (KPDES) Permit Update

Tanner asked if the permit has been drafted. Mullins said he was unaware of the progress of the permit drafting. Smart asked if DOE is currently operating under an extension of the expired permit until the new permit is drafted. Mullins said yes.

Miller reported the Watershed Monitoring Plan, which is a requirement of the permit, is in the process of being written. Tanner asked if the same was being done for the Groundwater Protection Plan. Miller said she did not know. Tanner stated there is a

Kentucky law that requires a permittee to show that the sewers do not leak. He said the regulators have not enforced this law at the Paducah Gaseous Diffusion Plant. Tanner asked if Kentucky would be looking into the issue. Mullins said he would gather information on the topic. Jones said there two documents available regarding groundwater protection, a DOE document titled *Groundwater Protection Management Plan* and an Kentucky regulation document titled *Groundwater Protection Plan*. Tanner requested a copy of the *Groundwater Protection Management Plan*.

Other

The task force discussed the Long-Range Strategy/Stewardship meeting with Bill Murphie set for May 8, 2003. The group voiced some concerns and developed questions that they wanted addressed.

The meeting adjourned at 1:20 p.m.

Action Items:

1. Staff – Provide Tanner a copy of the *DOE Groundwater Protection Management Plan*