



# PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

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## **Paducah Gaseous Diffusion Plant Citizens Advisory Board Working Session Summary August 21, 2008**

The Citizens Advisory Board (CAB) met at the CAB office in Paducah, Kentucky, August 21, 2008, at 5:30 p.m.

**Board members present:** John Anderson, Allen Burnett, Judy Clayton, Shirley Lanier, Bobby Lee, and Alex Roman

**Board members absent:** Elton Priddy, John Russell, Jim Smart and Don Swearingen

**Board Liaison members and related regulatory agency employees:** Ed Winner, Kentucky Division of Waste Management (KDWM); Turpin Ballard, U.S. Environmental Protection Agency (EPA); Tim Kreher, Kentucky Department of Fish and Wildlife Resources (KDFWR); Stephanie Brock and Rob Gresham, Kentucky Radiation Health Branch (RHB)

**U.S. Department of Energy (DOE) Deputy Designated Federal Official:** Reinhard Knerr

**DOE Federal Coordinator:** Rob Seifert

**DOE-related employees:** Kelly Ausbrooks, Rich Bonczek, Del Baird, Bryan Clayton, Kim Crenshaw, Tracey Duncan, Bruce Gardner, Jerry Mayes, Craig Jones, Janet Miller, Eric Roberts, and Karen Sizemore

## **Burial Grounds Operable Unit Remedial Investigation**

Sizemore, Paducah Remediation Services (PRS), provided a briefing on the Burial Grounds Operable Unit (BGOU) Remedial Investigation (RI) Report. The briefing included the following:

- **BGOU Overview**
  - Contains sanitary waste, hazardous waste, radioactive waste, and pyrophoric uranium
- **Scope of the RI**
  - Identify available data and additional data required to support a assessment of risks to human health and the environment
  - Data gaps were identified for Solid Waste Management Units (SWMU) 2, 3, 5, 7, 30 and 145
  - Additional sampling will be conducted in SWMU 13
  - SWMU 4 had no data gaps identified
- **Investigation Results**
  - Subsurface soil and groundwater have been impacted by releases at all the BGOU SWMUs.
  - Concentrations of trichloroethylene (TCE) at SWMU 4 suggest that TCE dense nonaqueous phase liquid (DNAPL) may be present both in waste cells and underlying soils of the Upper Continental Recharge System (UCRS) and in the matrix of the Regional Ground Aquifer.
  - TCE trends at SWMU 7 and 30 suggest that a potential TCE DNAPL source is constrained in the UCRS soils.
- **Schedule**
  - D1 RI Report submitted to regulators on 7/25/08
  - Feasibility Study is due 60 days after approved RI Report (Target date: February 2009)
  - Proposed Plan and Record of Decision scheduled in 2010 (Public comment period begins when the Proposed Plan is issued.

Burnett asked at what location the action is determined (i.e., source, boundary, reservation). Duncan said the Risk Methods Document requires identifying concentrations at various points of exposure at the source and through modeling at various locations. That information will be available in the Feasibility Study.

## **Soils and Rubble Areas, Site Walkover Survey**

Jones, PRS, provided an update on the Soils and Rubble Areas, Site Walkover Survey. The update included the following:

- **Project Background**
  - Identified soil pile area with radiation above twice background in November 2006.
  - More than 30 miles of ditches and creek banks surveyed; more than 500 signs posted as precaution
  - 99 soil area, 51 rubble piles identified
- **First Phase Background**
  - More than 1000 samples collected in area where first pile was identified
  - Results showed one area with uranium and polychlorinated biphenyls that might pose unacceptable risk based on current land use
- **Second Phase Soil Pile Sampling**
  - Collecting 300+ samples for completion in September
  - Validated lab results available in December
- **Third Phase Soil Pile Sampling**
  - Will collect 500+ samples in October
  - Validated lab results available in January 2009
- **Site Radiological Survey Plan**

- Survey being conducted to verify that areas outside plant boundary are free of radiation (i.e., less than twice background) and to identify and survey manmade surface anomalies including soil and rubble piles, debris and depressions/excavations
- Visual inspection of ~2,675 acres
- Photos and radiological/GPS survey of any area where materials have been placed, soil has been removed
- Survey scheduled to begin in November 2008 and be complete by February 2009
- Survey will include DOE-owned land outside security fence

Jones said one hot spot was identified and will be removed after all characterization is complete. Burnett asked why the hot spot has not been removed. Jones said controls are in place and public access is denied to that area. Knerr said to minimize mobilization and taxpayer money the piles will be removed during a formal removal process. Signs are in place, the area is roped off with radiological postings and KDFWR provides information indicating areas where public access is denied. In addition, Knerr said some of the rubble piles will be removed as a maintenance action because it is cheaper than characterization.

Winters said all findings are identified through the Global Positioning System and loaded into the Data Warehouse. This procedure will be beneficial in the future to determine if a pile has been identified.

Kreher asked if KDFWR owned property used for access to DOE owned property can be included in the survey if there are known anomalies. Jones said if that area can be determined as material from the plant then DOE will take responsibility. Burnett asked if there is a provision in the current survey plan to include Tim's request for the area right outside DOE-owned land if needed. Jones said if the area surveyed is radiologically contaminated, then the area would be identified as an Area of Concern or SWMU. Knerr said DOE will provide surveys or support to KDFWR if an issue arises.

### **Planned Site Flyover**

Jones, PRS, provided an update on the Soils and Rubble Areas, Site Walkover Survey. The update included the following:

- Survey Objectives
  - Provide assurance that potentially radiologically contaminated areas on DOE property are identified
  - Supplement the Site Walkover Survey
  - Collect data that may support future remedial actions
- Survey Details
  - Survey ~ 25 square miles (~ 8 hours over one week period)
  - Flight line spacing = 250 feet, ~ 200 flight lines at an altitude of ~ 150 feet
  - GPS Unit and 12 – 2 x 4 x 16 inch sodium iodide gamma radiation detectors in counts/seconds
  - Compare background versus manmade radiation

The flyover has been delayed for the United States Enrichment Corporation and the Nuclear Regulatory Commission to conduct a Safety Analysis Report.

Knerr said this data will be loaded into the Data Warehouse and will be publically accessible.

All presentations are available on the CAB Website at [www.pgpcab.org](http://www.pgpcab.org).

### **Portsmouth Site Specific Advisory Board Update**

Roberts provided an update on the Portsmouth Site Specific Advisory Board.

- 20 member Board with very diverse interests
- Meets 1st Thursday of the month; first meeting is scheduled for September 4
- Currently creating its structure: Work Plans, Operating Procedures, Committees

Knerr said if the Board is interested in sharing with the Portsmouth SSAB how the Paducah Board operates, there may be an opportunity to attend some of the Board or Executive Committee meetings to observe and provide feedback.

### **C-400 Update**

Knerr provided a status report on the C-400 project.

- EPA and Kentucky approved removal of site infrastructure.
- Remedial Action Work Plan (RAWP) currently under review by Kentucky. Reviewing EPA comments.
- Treatment system installation scheduled to begin in October.
- Operations projected to start in May 2009.
- PRS present at electrode manufacturing facility in Canada for QA inspection to ensure equipment met DOE quality standards

Ballard suggested that the on-site factory inspections be documented for enclosure in the RAWP.

### **Other**

The Executive Committee was rescheduled for Thursday, August 28.

Lee requested that members think of trends effective for future use of the site for the Scenario Planning portion of the Board Retreat. Staff will email the Board a reminder closer to the retreat.

Seifert will be meeting with Board applicants and asked staff to invite all Board members to the meeting.

DOE will be conducting a tour for new members of the Radiation Health Branch if new members are interested in attending.

The meeting adjourned at 8 p.m.

### **Actions**

1. Email the Board on the Scenario Planning for the retreat. *Closed, 8/29/08.*
2. Email Board for interest in site tour on September 16. *Closed, 9/8/08.*