

**Paducah Gaseous Diffusion Plant
Citizens Advisory Board
Meeting Minutes
February 17, 2005**

The February 17, 2005 Citizens Advisory Board (CAB) meeting was held at the CAB office in Paducah, Kentucky at 5:30 p.m.

Board members present: Barry Eadens, Ricky Ladd, Shirley Lanier, Bobby Lee, Linda Long, Rhonda McCorry, John Russell, and Jim Smart

Board members absent: Chad Kerley and Janet Miller

Ex Officio members and related regulatory agency employees present: Doug Dawson and Tim Kreher, Kentucky Department Fish and Wildlife Resources; and David Williams, Environmental Protection Agency

Deputy Designated Federal Official present: William Murphie

DOE Federal Coordinator present: David Dollins

DOE-related employees present: Greg Bazzell, Jeannie Brandstetter, Kim Crenshaw, Jim Ethridge, Greg Felts, Ed Holmes, Lester Hurst, Steve Kay, Reinbaud Kuerr, Bruce Phillips, Danny Smith, and Glenn VanSickle

Public: Bill Tanner and Ken Wheeler

Agenda

Long called the meeting to order at 6:00 p.m. Board facilitator Steve Kay asked if there were any proposed modifications to the agenda. He said Board elections would be conducted prior to the task force reports.

The Board adopted the agenda as modified by consensus.

Minutes

Kay asked if there were any proposed modifications to the draft January minutes. There were no modifications. **The Board approved the minutes as submitted by consensus.**

Deputy Designated Federal Official's Comments

Murphie, on behalf of the Department of Energy (DOE), awarded a plaque to Bill Tanner for appreciation on serving the Citizens Advisory Board (CAB) and the community for eight years.

Murphie provided the CAB with DOE's response to the recommendation (05-02) concerning the waste projections update and development of appropriate disposal options. He said DOE agrees with the recommendation and has provided information on the C-746-U Landfill Waste Generation Plan.

Progress of the Paducah Project

Murphie reported January progress as follows:

- Utility electrical duct banks and water and sewer lines are being installed at the Depleted Uranium Hexafluoride (DUF₆) Conversion Facility. Administration and warehouse construction may begin in the Spring.
- Drummed material at the DOE Material Storage Area (DMSA) is being removed, sorted, characterized, segregated, and repackaged. 634,000 of 866,000 ft³ of DMSA material has been characterized over the project life. Mobilization and characterization of "Priority B" DMSAs have been initiated.
- DOE is continuing to resolve the shipping issues in the Scrap Metal Removal project. Machine turnings waste processing started in the Northwest Scrap Yard. Expected shipping start date is March 10, 2005. 3,900 drums of machine turnings are to be disposed at Envirocare by October 2005.
- Landfill disposition of 14 B-25 boxes of non-hazardous tank debris has been completed at the C-410 Decontamination and Decommissioning (D&D) complex. Mixed low-level waste tank residuals and hydrogen fluoride (HF) piping for the HF Tank Farm is being prepared for shipment to Envirocare.
- 1,864 ft³ of Legacy Waste was disposed of in the C-746-U Landfill in January.
- The C-400 Source Removal Record of Decision is under review by the regulators. Approval is anticipated in mid-April. The Southwest Plume Site Investigation/Risk Assessment Report was submitted to regulators on February 17, 2005.
- DOE submitted the Surface Water Operable Unit Sampling and Analysis Plan to the regulators on December 15, 2004. Mobilization activities for the site investigation will begin in the Spring.
- Protests were filed staying execution of the Paducah remediation contract with North Wind Paducah Cleanup Company, LLC on January 10, 2005. The contract with Bechtel Jacobs Company is extended through May, with further options for extensions.
- The fiscal year 2006 budget request was submitted to Congress on February 7. The budget request supports projects such as; groundwater treatment at C-400, DMSA activities, C-410 complex D&D, scrap metal removal, burial grounds field work and surface water projects.

Federal Coordinator Comments

Dollins made several announcements:

- Responses are being drafted to the CAB's recommendation for resolution of Holocene displacement at the C-746-Landfill (05-01) and for the Board's End State Vision recommendation (04-07). He said DOE would only be able to respond to a portion of the End State Vision letter. Some of the points listed in this recommendation cannot be answered at this time.

- DOE is currently reviewing the applications for proposed membership issued to DOE last month.
- The Site Investigation Report for the Southwest Groundwater Plume is available for review.
- The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) chart discussed in last month's meeting has been provided in the Board packets. Murphie said the chart he envisioned would focus on the baseline with more detailed activities through completion of the cleanup process. Lee requested that the CERCLA chart show opportunities for CAB and public input.

Comments

Ladd said DOE is beginning to miss some of the transition dates in the DUF₆ project that were outlined in the request for proposal (RFP), such as transferring the cylinder management work to Uranium Disposition Services (UDS) and transition of employees. He asked if this was an isolated incident or if the whole project would be running behind schedule. Murphie said the contract protest could affect everything in the scope of work for the new contract. He said DOE anticipates transferring the cylinder yards to UDS in May.

Ladd asked if a list of the heavy metals associated with the machine turnings from the scrap metal project was available. Murphie said the heavy metals regulated under the Resource Conservation Recovery Act (RCRA) set the standards for the toxic leachate collection process. Ladd asked if beryllium was one of the metals listed. Murphie said beryllium is not listed under RCRA. Murphie said an action would be taken to check to see if beryllium was one of the metals associated. Smart asked if the metals turnings would be disposed in the on-site landfill. Murphie stated due to the hazardous nature of the content, the metals would be sent to an approved RCRA facility, such as Envirocare.

Lee requested the Water Quality task force be provided a presentation on the Site Investigation Report for the Southwest Groundwater Plume. Dollins agreed.

Ex- Officio Comments

Williams said the Kentucky Research Consortium for Energy and the Environment (KRCEE) were involved in several projects of high importance. He said it would be beneficial for the CAB to request a quarterly update. Murphie said he would speak with Steve Hampson, KRCEE, to propose a way to convey an updated status of the projects more routinely.

Williams said he has heard rumor of Oak Ridge and Savannah River DOE employees competing for their jobs. Murphie said the department is in the process of an A76 process, which is a federal requirement where the government periodically examines its services and decides whether they should be competed. He said this requirement is for environmental and engineer work and is currently six months through the process, usually taking about two years. He said a scope of work is prepared and competed with a private sector.

Williams said the scoping on the burial grounds by DOE using the water models is very good work and very valuable to the Paducah technology to be able to go exactly where the plume or contamination is migrating.

Election for Chair

McCorry reported three nominations had been received for the interim position of Chair. Two of the nominees had declined. She said she had been nominated and would agree to serve the interim term. Kay asked if there were any additional nominations. There were none. McCorry was elected Chair by acclamation.

Task Forces/Presentations

Waste Disposition Task Force

Burial Grounds Operable Unit

Russell provided a presentation on the Burial Grounds Operable Unit (BGOU).

Murphie stated one of DOE's most important issues at the Paducah site are the decisions to be made on the BGOU. He said it is very important to obtain community input and proper support for the decisions made from a financial and future risk perspective. He said this is the time, during the scoping document, to have the most influence on decisions than any other point. Russell said it is ultimately a political decision whether to cap or excavate the burial grounds rather than information from an investigation. He said the final decision is derived from the expectations on the final use of the entire area.

Water Quality Task Force

Surface Water Operable Unit On-Site Phase 1 Sampling and Analysis Plan

Long provided a presentation on the Surface Water Operable Unit On-Site Phase 1 Sampling and Analysis Plan.

Russell said he did not recall Cesium-137 ever being an issue and now it is an indicator chemical of interest in the North-South Diversion Ditch and Outfall sampling. Williams said when this chemical is listed, it is an indicator that other radionuclides are present in sampling that are not as easy to detect. Murphie said if Cesium-137 were identified, they would then look for other chemicals. Williams said the Commonwealth of Kentucky wants to add more indicator chemicals to the list. Lee asked why Cesium-137 is 10 times higher in Outfall indicator chemicals than in North-South Diversion Ditch indicator chemicals. Murphie said he would provide Lee with an answer to this question.

Long Range Strategy/Stewardship

Kay said the draft agenda for the Chairs Meeting in Savannah River is in the packet. He said the support staff needs to know as soon as possible, who would be attending in order to meet registration and hotel reservation deadlines.

Kay said a Chairs Conference call is scheduled for February 24 at 2:00 p.m., if anyone would like to participate.

Kay said comments on the CAB's Annual Report are due on February 25. He said this would be the last opportunity to comment before the report goes to the printer.

Community Outreach

Speakers Bureau

Eadens provided a draft Speakers Bureau presentation to gain comments and suggestions from the Board. He said the presentation was to inform the public on the projects that are being conducted at the Paducah site.

Suggestions for the presentation are as follows:

- Eadens suggested including a slide on the DUF₆ Conversion Facility,
- Murphie suggested including a photograph on the burial grounds while in operation,
- Long suggested adding the actual number of cylinders on-site and add a photograph showing the majority of the cylinders,
- Murphie suggested increasing information on plant precedence,
- Smart suggested adding the end result for cleanup (current estimate 2019), towards the end of the presentation, and
- Lee suggested adding the web site information on the last slide and an opportunity for the public to be added to the mailing list.

Kay suggested the task force provide a list of the organizations they plan to visit with this presentation.

McCorry said the task force would review the suggestions, revise the presentation, and bring back to the Board for approval in April. She said the task force would be discussing adding youth representatives from local schools.

Kay stated a letter from the Active Citizens for Truth (ACT) is in the Board packets. He said an invitation has been extended to attend the public meeting on March 15 at the Western Kentucky Wildlife Management Area clubhouse. He said a presentation is scheduled describing the Environmental Garden Project coordinated and administered by ACT.

Kay said a flier from the U.S. Department of Labor for eligibility of compensation and payment of medical expenses under the Energy Employees Occupational Illness Compensation Program Act is included in the Board packets. He said the Board needs to decide whether to place this flier in the *CABfare* or provide a paragraph on this subject in the *CABfare*. Kay said the decision can be made in the task force since the Board did not have a preference.

Review of Workplan

Russell said Dorothy Starr has resigned from the Board. He said she would need to be replaced on the workplan. Dollins said that decision can be made at task force level.

Kay asked if there were any proposed modifications to the workplan. There were none.

Review of March Agenda

Kay asked if there were any proposed modifications to the agenda. He noted web site review should be added to the March agenda and Speakers Bureau added to the April agenda under Community Outreach.

Action Items

Kay reported the action for updated information on the C-746-U Landfill is still pending. Dollins said this action could be closed due to DOE issuing a response to the landfill recommendation. Kay said the CERCLA chart action will remain pending.

Subcommittee Reports

Executive Committee

Membership Ad Hoc Subcommittee

Long said the support staff contacted the remaining applicants in the membership pool. Three of the applicants are available for membership at this time. Dollins encouraged the Board to be mindful of the diversity and consider conducting a membership drive before recommending the final three applicants for membership. Long asked if the previous two applicants recommended to DOE had been processed. Dollins said he was in receipt of the recommendation and no letters have been sent at this time. Lee said she believes the two applicants previously submitted need to go forward.

Murphie suggested public participation as ex-officios at task forces and Board meetings, without the ability to vote. Kay said the Executive Committee can consider this idea.

Final Comments

Eadens asked the results of the terrorism drill held at the plant. Murphie said DOE was not an active participant, and he is unsure of the official results. He said the local newspaper should report the results the following day.

The meeting adjourned at 8:30 p.m.



Sampling and Analysis Plan for Site Investigation and Risk Assessment of the Surface Water Operable Unit (On-Site)



SWOU Overview

- Surface Water Operable Unit (SWOU) – source units that contain or potentially contribute to surface water contamination
- SWOU On-Site Assessment is first sequenced response action
- SWOU On-Site Assessment includes:
 - ✓ NSDD Sections 3, 4, and 5
 - ✓ PGDP outfalls
 - ✓ Internal ditches at PGDP
 - ✓ PGDP storm sewers
 - ✓ Evaluation of additional sediment controls
- SWOU Off-Site includes Little Bayou and Bayou creeks and is scheduled in outyears 2015 through 2017



Utilization of Historical Data

- Previous assessments reviewed to determine data gaps and designate areas adequately characterized with regard to potential for sourcing off-site contaminant migration
- Previous assessments included:
 - ✓ Historical data from NSDD Sections 3, 4, and 5
 - ✓ 2000/2001 assessment of outfalls
 - ✓ Waste Area Grouping (WAG) 15 Site Evaluation
 - ✓ Historical data from WAG 19
 - ✓ Historical investigations of storm sewers



Areas Targeted

- NSDD Sections 3, 4, and 5
- Surface soil and sediments of Outfalls 001, 002, 008, 010, 011, 012 (downgradient of storm sewer discharge point) and 015 and associated internal ditches and areas (SWMUs 92 and 97)
- Storm sewers on south side of C-333; storm sewers associated with C-337-A Vaporizer and C-340 Building; and storm sewers associated with C-535 and C-537 electrical switchyards
- Evaluation of need for additional sediment controls will be documented in D1 Site Investigation/Baseline Risk Assessment Report



NSDD and Outfall Sampling

Activity 1 “Hot Spot” Identification

- Complete survey sampling using indicator chemicals to identify “hot spots”
- NSDD indicator chemicals and associated indicator levels:
 - ✓ U-238 10 pCi/g
 - ✓ Cs-137 1 pCi/g
 - ✓ Total PCBs 1 mg/kg
 - NSDD – 284 samples planned
- Outfall indicator chemicals and associated indicator levels:
 - ✓ U-238 100 pCi/g
 - ✓ Cs-137 10 pCi/g
 - ✓ Total PCBs 20 mg/kg
 - Outfalls - 2329 samples planned



NSDD and Outfall Sampling

Activity 2 Definitive Sampling to further delineate “hot spots”/determine potential for migration

- Collect surface soil and sediment grab samples for fixed base laboratory analysis for inorganic chemicals, trichloroethene (TCE), semi-volatile organic compounds, and radionuclides
 - NSDD - 93 samples planned
 - Outfalls - 327 samples planned



Storm Sewer Sampling

- Step 1 Collect storm water samples at point of discharge to outfall
 - ✓ Contaminants of concern and associated indicator levels - Total PCBs (0.5 ug/L), TCE (5 ug/L), Total Uranium [30 ug/L (20 pCi/L)]
 - 24 samples planned
- Step 2 Collect storm water samples at locations upgradient of point of discharge to outfall (only for storm sewers that show indicator level exceedances for above samples)
 - ✓ Contaminants of concern and associated indicator levels - Total PCBs (0.5 ug/L), TCE (5 ug/L), Total Uranium [30 ug/L (20 pCi/L)]
 - Up to 72 samples planned



Storm Sewer Sampling

- Step 3 Collect soil samples from source areas (only for storm sewers that show indicator level exceedances for above samples)
 - ✓ Contaminants of concern and associated risk-based and waste disposition-based values will include the following:
 - ✓ Total PCBs – risk-based: 19.9 mg/kg; waste disposition-based: 50 mg/kg
 - ✓ TCE – risk-based: 141 mg/kg; waste disposition-based: 10.0 mg/kg and 39.2 mg/kg
 - ✓ ^{234}U – risk-based: 1,980 pCi/g; waste disposition-based: 150 pCi/g
 - ✓ ^{235}U – risk-based: 39.5 pCi/g; waste disposition-based: 150 pCi/g
 - ✓ ^{238}U – risk-based: 171 pCi/g; waste disposition-based: 150 pCi/g
 - Up to 50 samples planned



Schedule

- 04/30/04 – Issued D1 Sampling and Analysis Plan (SAP) for Site Investigation and Risk Assessment of the SWOU On-Site to EPA and KDEP
- 12/16/04 – Issued D2 SAP to EPA and KDEP
- 01/18/05 – EPA approved the D2 SAP (project schedule delayed due to review process and additional scope of work)
- 03/15/05 – Forecasted KY D2 SAP approval date (forecasted delays)
- Spring/Summer/Fall 2005 – Conduct fieldwork
- 05/26/05 – Issue D1 Site Investigation/Baseline Risk Assessment Report (SI/BRA) to EPA and KDEP
- 04/27/06 – Issue D1 SI/BRA to EPA and KDEP as Proposed in SMP Annual Revision for FY 2005 (assumes project schedule delayed)

**Project Status Update for Paducah DOE Citizens Advisory Board
February 10, 2005**

Project: Surveillance/Maintenance & Conversion, Depleted Uranium Hexafluoride (DUF₆)

Contact Persons:

DOE Site Office: John Sheppard
Bechtel Jacobs Company LLC (surveillance/maintenance): Don Ulrich/Craig Dowdy
Commonwealth of Kentucky:
U.S. Environmental Protection Agency:
Citizens Advisory Board:

Purpose: Maintain safe storage of DOE DUF₆ cylinder inventory pending disposition.

Description: The Atomic Energy Act, as amended, gives DOE responsibility for the DUF₆ inventory, which is a by-product from enriching uranium for nuclear fuel. Approximately 739,000 metric tons of DUF₆ is stored in solid form in metal cylinders at the DOE Paducah site as well as the Portsmouth, Ohio, and Oak Ridge, Tennessee, DOE sites. At Paducah, approximately 38,000 cylinders contain approximately 437,000 metric tons of DUF₆. The DOE inventory at Paducah includes the material generated from 1952 until the establishment of USEC in July 1993, and material transferred from USEC to DOE since that time. **Surveillance and maintenance** involves safely storing DUF₆. Portions of the 60-acre DOE cylinder yard complex now consists of concrete yards, which provide for improved storage and inspection. In recent years, DOE cleaned and painted 3,368 cylinders which had surface corrosion. DOE continually monitors and inspects its cylinder inventory to assure safe storage. **Conversion** is expected to begin in 2006. DOE selected Uranium Disposition Services LLC to design, build, and operate facilities in Paducah and Portsmouth to convert DUF₆ to a more stable form for disposal or recycling. DOE is reviewing draft conceptual design reports for the conversion facilities. Construction began in July 2004.

Key Documents for surveillance/maintenance:

- Handling and Inspection of DOE 48-Inch Diameter UF₆ Cylinders at Paducah (PA-2400)
- Agreed Order DWM-31434-030
- Final Environmental Impact Statement for the Construction and Operation of the DUF₆ Conversion Facility at the Paducah Site (DOE/EIS-0359)
- Record of Decision for Construction and Operation of the DUF₆ Conversion Facility

Recent accomplishments/activities:

- Completed 1,789 cylinder inspections and 953 radiological surveys in December
- Resumed relocating cylinders from gravel C-yard to new concrete K-yard
- Transition 216 Metric MTU UF₆ to USEC per barter agreement

Ongoing construction of the DUF₆ Conversion Facility includes installation of temporary construction power and utility duct banks and water lines.

Issues: (none)

Activity over next 60 days for surveillance/maintenance:

- Continue cylinder relocations
- Continue cylinder inspections
- Complete installation of utility lines and complete storm drains and final grade for DUF₆ Conversion Facility

Project Status Update for Paducah DOE Citizens Advisory Board
February 10, 2005
Project: Solid Waste Contained Landfill

Contact Persons:

DOE Site Office:

Bechtel Jacobs Company LLC: Steve Davis/Dwight Lamb

Commonwealth of Kentucky: Todd Mullins

U.S. Environmental Protection Agency: David Williams

Citizens Advisory Board:

Purpose: Waste Disposition

Description: The operating landfill and support facilities are located on 60-acres of DOE property near Ogden Landing Road, operating under a permit from the Kentucky Division of Waste Management (KDWM). Landfill disposal operations began in 1997. DOE uses the landfill for disposal of solid waste generated from its operations at the Paducah site. Examples of wastes accepted include non-hazardous soil and debris from environmental cleanup and other DOE projects, protective clothing worn by workers, paper, packaging, and landfill office wastes. No waste classified as hazardous or radioactive is accepted.

Key documents:

- Environmental Assessment for the Construction, Operation and Closure of the Solid Waste Landfill at the Paducah Gaseous Diffusion Plant (DOE/EA-1046)
- Environmental Assessment on the Implementation of the Authorized Limits Process for Waste Acceptance at the C-746-U Landfill (DOE/EA-1414)
- Waste Acceptance Criteria for the Department of Energy Treatment, Storage, and Disposal Units at the Paducah Gaseous Diffusion Plant (BJC/PAD-111R4)
- C-746-U Landfill Solid Waste Disposal Facility Permit Number 073-00045

Issues:

Recent accomplishments/activities:

- Resumed full operations capability
- Disposed of 621 tons of waste in January.
- Submitted permit modification for construction of a leachate treatment facility

Activity over next 60 days:

- Continue disposal of construction debris and other non-hazardous solid waste streams
- Receive permit modification for construction of a leachate treatment facility
- Support the Kentucky Research Consortium for Energy and Environment Holocene Displacement Study

**Project Status Update for DOE Paducah Citizens Advisory Board
February 10, 2005
Project: Waste Disposition**

Contact Persons:

Bechtel Jacobs Company LLC: Steve Davis/Greg Shaia/Sam Leone

Commonwealth of Kentucky: Tuss Taylor/Mike Guffey

U.S. Environmental Protection Agency: David Williams

Citizens Advisory Board:

Purpose: Waste Disposition

Description: DOE is responsible for disposal and/or recycling of legacy wastes (wastes generated at the PGDP prior to establishment of USEC on July 1, 1993); wastes generated from ongoing DOE projects; and a limited amount of waste generated by USEC. After characterization to assure selection of the appropriate disposition method, non-hazardous and non-radioactive wastes are disposed of in the DOE Solid Waste Contained Landfill. (*Please see landfill update sheet.*) Hazardous and radioactive wastes are treated if necessary and shipped off-site to approved DOE or commercial disposal facilities. Wastewater (collected from sumps in diked areas in DOE waste storage facilities at PGDP) is treated and discharged in accordance with the Kentucky Pollutant Discharge Elimination System permit.

Key documents:

- Paducah Waste Acceptance Criteria (BJC/PAD-11, Revision 4)
- Final Environmental Assessment for Proposed Disposition of Waste from the Paducah Site (DOE/EA-1339 and Addendum DOE/EA-1339-A) (FONSI)
- Agreed Order DWM-31434-042
- Site Treatment Plan DWM-30039-42

Issues:

- Because of transportation related issues at Paducah, BJC self-suspended off-site shipments in September 2004 pending a review of the shipping program. Waste Disposition Project schedules are being revised as effort continues in developing the corrective actions necessary to resume safe, compliant shipments.

Recent accomplishments/activities:

- Disposed 1,864 cubic feet of Agreed Order waste in the C-746-U landfill.
- Processing of Agreed Order waste for landfill disposal continues.
- Shipped 7.5 cubic feet of mixed low-level waste for treatment/disposal.

Activity over next 60 days:

- Continue shipment of incinerable RCRA PCB wastes (PPE, sludges, and wood) to the TSCA Incinerator
- Continue shipment of mixed low-level waste to PermaFix facility
- Continue disposition of solid waste in the C-746-U Landfill
- Continue disposition of ~ 5100 containers of Agreed Order "no-longer contains" waste at Envirocare or the C-476-U Landfill as appropriate

**Project Status Update for DOE Paducah Citizens Advisory Board
February 10, 2005**

Project: Decontamination & Decommissioning (D&D)

Contact Persons:

Bechtel Jacobs Company LLC: Brad Montgomery
Commonwealth of Kentucky: Tuss Taylor/Todd Mullins
U.S. Environmental Protection Agency: David Williams
Citizens Advisory Board:

Purpose: Environmental Cleanup/Waste Disposition

Description: The D&D project has completed development of Comprehensive Environmental Response, Compensation, and Liability Act regulatory documentation and has initiated actual D&D of the C-410/420 Feed Plant Complex. The current scope of D&D includes infrastructure removal on the C-410/C-420 complex, as well as ongoing surveillance and maintenance of the C-410/C-420 complex and the C-340 Metals Plant complex. Scope also included development of Safety Basis Documentation for the removal of equipment, piping, and stored material from the C-410 Complex. Operations at both complexes ended in 1977.

Key documents (C-410):

- Engineering Evaluation/Cost Analysis (EE/CA)
- Action Memorandum
- Removal Action Work Plan (RAWP)
- Cultural Resources Assessment of C-410 Complex
- Agreed Order DWM-31434-042

Issues:

- Commonwealth of Kentucky permit regulations are more stringent than Federal Regulations, and will not allow disposition of scrap metal from tank farm demolition in the C-746-U Landfill due to levels of PCBs in the paint.
- Based on waste shipment suspension, disposition of HF Tank Farm Residuals has been delayed, and feed plant equipment demolition and removal is being rescheduled to focus on activities that do not generate large volumes of waste for disposition.

Recent accomplishments/activities:

- Demolition of equipment and material in Sector 1, Zone 21 continues, and is now approximately 35% complete. This area will be developed into a permanent boundary control station for personnel entry and exit.
- Engineering and work planning to begin active D&D operations (equipment and piping removal) inside C-410 Complex is underway
- Continued installation of temporary power and emergency lighting in C-420. Installation of generator to provide emergency lighting to western half of building completed, and began vendor testing.
- Received results of asbestos sampling in Sector 1, Zone 21, indicating most of insulation is non-asbestos.
- Disposed of 14 B-25 boxes of non-hazardous scrap metal from sulfuric acid tank demolition in the C-746-A Landfill.
- Preparations underway to ship 17 B-25 boxes of mixed low level waste (tank residuals and HF piping) from HF Tank farm demolition to Envirocare for treatment and disposal.
- Initiated planning for accelerated D&D of the C-603 Nitrogen Facility.

Activity over next 60 days:

- Ship HF Tank residuals (17B-25 Boxes) to Envirocare.
- Continue packaging of loose materials in C-410 Complex
- Continue installations of temporary power and emergency lighting in C-410 Complex

- Continue construction of power distribution throughout building
- Develop landfill package and disposition material from C-410-A Hydrogen Holder in landfill
- Begin asbestos abatement and continue demolition in Sector 1
- Begin repackaging of scrap metal from HF Tank Farm for disposition at Envirocare.

Project Status Update for DOE Paducah Citizens Advisory Board
February 10, 2005
Project: DOE Material Storage Areas (DMSAs)

Contact Persons:

Bechtel Jacobs Company LLC: Rick Keeling
Commonwealth of Kentucky: Mike Guffey
U.S. Environmental Protection Agency: David Williams
Citizens Advisory Board:

Purpose: Environmental Cleanup/Waste Disposition

Description: The 160 DMSAs are nonleased areas inside buildings as well as outdoor areas. DOE accepted the return of the areas that are now the DMSAs , and the material and equipment they contained from USEC on December 31, 1996, to facilitate NRC certification of the gaseous diffusion plants. At that time, most of the contents needed detailed inventory, characterization, and disposition. Since that time, DOE and contractors have been documenting contents, resolving environmental concerns such as draining and disposing of oils from old equipment, and segregating and disposing of wastes.

Key documents:

- PGDP Department of Energy Material Storage Area Characterization/Remediation Plan (BJC/PAD-186/R4), April 2001
- Agreed Order DWM-31434-042
- Documented Safety Analysis (DSA)

Issues:

- Because of recent shipment difficulties at Paducah, BJC has self-suspended shipments pending a programmatic review. This review includes transporting waste to the C-746-U Landfill and off-site disposal facilities.

Recent accomplishments/activities:

- A total of 781 cubic ft. of material was characterized during January, and approximately 634,000 cubic ft. of material has been characterized to date.
- 370 cubic ft. packaged for the month of January; 185,587 cubic ft. over project life
- Drummed material being removed, sorted, characterized, segregated, and repackaged
- Initiated mobilization and characterization activities in Priority "B" DMSAs

Activity over next 60 days:

- Complete disposition activities in DMSA OS-17
- Pursue disposition of OS-4 and OS-14 material
- Pursue boundary removal of OS-02, C-331-04, -07, and -20
- Continue characterization of "Priority B" DMSAs under the Agreed Order

Project Status Update for DOE Paducah Citizens Advisory Board
February 10, 2005
Project: Groundwater Operable Unit

Contact Persons:

Bechtel Jacobs Company LLC: Bryan Clayton/Craig Jones
Commonwealth of Kentucky: Tuss Taylor/Todd Mullins
U.S. Environmental Protection Agency: David Williams
Citizens Advisory Board:

Purpose: Environmental Cleanup

Description: This project addresses environmental remediation of groundwater contamination on a site-wide basis at the Paducah Gaseous Diffusion Plant. The main contaminants of concern are trichloroethylene (TCE) and technetium-99 (⁹⁹Tc). Remedial actions will be designed and implemented after completion and signing of Records of Decision (RODs).

Key documents:

- Feasibility Study of the Groundwater Operable Unit at PGDP (DOE/OR/07-1857)
- Agreed Order DWM-31434-042
- Six-Phase Treatability Report (DOE/OR/07-2113)
- Proposed Remedial Action Plan for the Volatile Organic Compound Contamination at the C-400 Cleaning Building (DOE/OR/07-2114)
- Southwest Plume Site Investigation Workplan (DOE/OR/07-2094)
- S&T Landfill Site Investigation Workplan (DOE/OR/07-2098)
- Record of Decision for Interim Removal Action for the Volatile Organic Compound Contamination at the C-400 Cleaning Building (DOE/OR/07-2150)

Issues: (none)

Recent accomplishments:

- Continued development of the Southwest Plume Site Investigation Report
- Submitted the D2 C-400 ROD to regulators December 2; Kentucky requested extension of review period to February 19, 2005
- Initiated procurement activities for selecting a remedial contractor for the implementation of electrical resistive heating/direct heating at the C-400 area

Activity over next 60 days:

- Continue development of the Remedial Design Work Plan to support development of the C-400 Remedial Action design and construction specifications for submission in early 2005
- Continue development of the Southwest Plume Site Investigation Report
- Initiate development of the C-746-S&T Landfill Site Investigation Report
- Obtain C-400 ROD signature in Spring 2005

FFA Milestones:

- Submit the D1 C-400 Record of Decision by August 3, 2004 (complete).
- Submit the D1 Southwest Plume Site Investigation/Risk Assessment Report by February 17, 2005.
- Submit the D1 C-400 Remedial Design Work Plan by March 23, 2005
- Submit the D1 S&T Landfill Site Evaluation Report by September 30, 2005.

**Project Status Update for DOE Paducah Citizens Advisory Board
February 10, 2005
Project: Surface Water Operable Unit (On-Site)**

Contact Persons:

Bechtel Jacobs Company LLC: Rudy Bonilla/Craig Jones

Commonwealth of Kentucky: Tuss Taylor/ John Maybriar

U.S. Environmental Protection Agency: David Williams

Citizens Advisory Board:

Purpose: Environmental Cleanup

Description: The Surface Water Operable Unit (On-Site) Project includes a site investigation to identify hot spots in ditches and outfalls, including Sections 3, 4, and 5 of the North-South Diversion Ditch. The site investigation scope also includes an evaluation of whether additional sediment control measures are needed, as well as actions for potential legacy releases associated with the storm sewer system. The results of the site investigation will be documented in a Site Investigation/Baseline Risk Assessment Report and non-time-critical removal action documentation, as appropriate.

Key documents:

- Sampling and Analysis Plan for Site Investigation and Risk Assessment of the Surface Water Operable Unit (On-Site)

Issues: (none)

Recent accomplishments:

- On December 15, 2004, DOE submitted to the regulators the D2 Sampling and Analysis Plan (SAP) of the Site Investigation and Risk Assessment of the Surface Water Operable Unit (On-Site).
- EPA issued unconditional approval of the sampling proposed in the D2 SWOU SAP on January 18, 2005.
- On February 3, 2005, DOE received conditional concurrence from KDEP, dated January 31, 2005, of the D2 SAP for the SWOU (On-Site). KDEP's conditional concurrence set forth certain changes to the SAP that KDEP would require before approving the document. One of the five conditions set forth in KDEP's letter included changes to the SAP to require DOE to include Total PAHs as an indicator chemical for all Activity 1 samples collected during the implementation of the SWOU (On-Site) project. Previously, DOE, the U.S. Environmental Protection Agency (EPA), and KDEP have discussed this issue without reaching an agreement. Pursuant to these discussions, DOE considered additional indicator chemicals, however, based on review of historical analytical data and the intent of the sampling strategy proposed, DOE determined that including these additional indicator chemicals would not be consistent with the project goals and would not be cost effective.

Activity over next 60 days:

- Resolve KDEP's comments received in the conditional approval of the D2 Sampling and Analysis Plan of the Site Investigation and Risk Assessment of the Surface Water Operable Unit (On-Site).
- If comments are resolved and SAP is unconditionally approved, start mobilization activities for the site investigation of the Surface Water Operable Unit.

FFA Milestones:

- Issue Site Investigation/Risk Assessment Report by May 27, 2006.
- Issue Removal Notification by June 23, 2006.

Project Status Update for DOE Paducah Citizens Advisory Board
February 10, 2005
Project: Scrap Metal Removal Project

Contact Persons:

DOE Site Office: J. Raúl Castañeda

Bechtel Jacobs Company LLC: Chris Marshall/Wes Bass/Craig Jones

Commonwealth of Kentucky: Tuss Taylor/Tony Hatton/Mike Guffey

U.S. Environmental Protection Agency: David Williams

Citizens Advisory Board:

Purpose: Environmental Cleanup/Waste Disposition

Description: About 54,000 tons of scrap metal exists at the PGDP. This project involves the removal of: 26,700 tons of general scrap metal; 2,000 tons of aluminum ingots; 15,600 tons of classified material. This project does not include the recycling or disposal of 9,700 tons of nickel.

Key documents:

- Engineering Evaluation and Cost Analysis
- Action Memorandum
- Removal Action Work Plans
- Agreed Order DWM-31434-042
- Documented Safety Analysis (DSA)

Issues: Several sealand containers packaged for transport of general scrap to NTS leaked moisture prior to shipment. Container inspections identified the presence of circuit boards and other electronic devices that conflict with the NTS waste acceptance criteria. Currently shipments are suspended and scrap metal waste has not been shipped off site in several months.

Recent accomplishments:

- The Scrap Metal project and Paducah programs have been evaluated for improvements.
- Corrective action development is near completion.
- Over 200 drums of machine turnings waste have been processed for shipment and disposal.

Activity over next 60 days:

- Complete development of corrective actions and begin implementation to resume general scrap metal shipments to NTS.
- Continue disposition operations: scrap metal will be removed from the pile, inspected, size-reduced as necessary. Packaging and shipment for disposition will resume upon completion of corrective actions and certification by NTS.
- Continue inspection, segregation, and packaging of machine turnings waste
- Ship containers of machine turnings waste to Envirocare for treatment and disposal.
- Continue downsizing of classified scrap metal from the Kellogg pad.