



Paducah Citizens Advisory Board

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Consensus Recommendation 13-01: PGDP Transition, Decontamination, and Decommissioning

Drafted: April 2, 2012

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Background

It is anticipated the Paducah Gaseous Diffusion Plant (PGDP) is scheduled to terminate operations the end of May 2013. Before returning the plant to DOE, the current operator, USEC, will be responsible for preparing the plant and ensuring that it will be returned in a state that poses no long term safety, health, or environmental threat to the workers transitioning the plant. Once the plant has been returned to DOE, they must be ready to decontaminate and decommission the facility to ensure long-term safety, to avoid higher future cleanup costs, and to be as ready as possible for adaptive reuse of the facilities after transition. As the CAB understands it, some of these activities are beyond the scope and resources in the current budget allocation for the Paducah site.

The CAB understands that the Energy Policy Act of 1992 established the DOE Uranium Enrichment Decontamination and Decommissioning Fund (D&D Fund) to pay for the costs of decontaminating and decommissioning three gaseous diffusion facilities located in Oak Ridge, Portsmouth, and Paducah. The D&D fund is currently supporting D&D activities in Oak Ridge and Portsmouth. No funding has been allocated for Paducah and there is concern that insufficient funds will be available for the Paducah site immediately after the plant has been transitioned from USEC to DOE. Timely funding of D&D activities at the Paducah site will be an important aspect when the site is being prepared for future use.

In light of the federal budget constraints and other limitations in replenishing the D&D Fund, the CAB is concerned about the timing and priority for funding these activities. Without funding commitments, planning timelines are extended. Extended timelines result in higher expenditures later in the project and can contribute to future safety and environmental problems, as well as adversely affecting adaptive reuse of the site.

Recommendation

Given the uncertainty of the funding and schedule for PGDP transition from USEC to DOE, future D&D of the facility and facility turnover for community reuse, the CAB recommends that the PGDP site be allocated sufficient funds, at a minimum, accomplish the following actions:

- Perform a comprehensive site-wide risk and safety-based characterization reflective of the D&D program as opposed to a long-term surveillance program.
- Apply the lessons learned from Oak Ridge, Portsmouth, as well as C-340 and C-410 at Paducah site for future D&D activities at the Paducah site for transition activities. Evacuating, purging and treating equipment and associated piping to a UF₆ negative must be done to leave the cascade in a safe condition for demolition.
- Remove all uranium deposits in the process system. This needs to be done while experienced operators and mechanics are available, not years after the shutdown when the job knowledge will be lost.
- Remove all chemicals, lube oils, PCB's, asbestos, radionuclides, and other hazardous materials from all buildings.
- As these materials are cleared from the buildings and isolated, they must be properly handled, treated, stored, and disposed of in compliance with all state and federal regulations.
- Perform vapor transfer from thin-walled cylinders to thick-walled cylinders in the most cost effective manner. Long-term storage will be safer in these cylinders.

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- Remove all waste and infrastructure that can be disposed of as part of a maintenance action in support of D&D. This would include loose items, which are no longer needed in a shut down facility, such as tables, chairs, refrigerators, coolers, cabinets, lockers, equipment, etc., with an eye toward recycling or reuse.

In addition to the above activities, the CAB recommends that a detailed plan be developed and shared with the community that addresses the transition, decontamination, and decommissioning of the PGDP. The plan should include, but not be limited to, the following items:

- A long-term preventative maintenance program designed to keep equipment and buildings remaining on site in a safe state of repair, especially those identified for future use.
- A prioritization of remediation activities that include future needs of the community. Areas identified for future use should be given priority over areas less attractive for future use.
- Optimization of all site utilities including water, wastewater, electricity, natural gas so that they are available for site D&D activities as well as future use by site tenants. The assets and operation of some of these utilities could be transferred from DOE control to private ownership early in the process to facilitate future use of the site.
- Retain as many plant employees as possible to ensure knowledge of the plant, its hazards, and other information is not lost. Take into account that DOE has been a site landlord for many years and is no longer intimately familiar with the process.

This plan should be published immediately after USEC has made the notification to DOE that they intend to shut down the plant. Early publication will provide the CAB and others time review the plan and recommend appropriate changes before the USEC workers are relieved of their duties at the plant. The plan should include actionable items with associated costs and a timeline. These items should be incorporated into the budget and overall scope of work for the Paducah site.

The CAB feels that short-term savings should not endanger the long-term safety and security of the local community. DOE should fund these activities as part of the shutdown of the plant in order that it be made safe, secure, and compliant. We feel that DOE's investment into these activities now will yield a reduction in long-term liabilities and cost.