



Paducah Citizens Advisory Board

"working for the future"

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Recommendation 13-04: Prompt Initiation of PGDP Operating Facility Decontamination and Decommissioning after Transition of Leased Buildings to DOE

June 20, 2013

Background

The United States Enrichment Corporation (USEC) ended enrichment operations on May 31, 2013. The Department of Energy (DOE) has commenced planning for return of the facilities once USEC has completed commercial activities and lease obligations. As site landlord, DOE is responsible for environmental restoration and decontamination and decommissioning (D&D) of the site.

At the Oak Ridge Gaseous Diffusion Plant (ORGDP), more than 10 years passed after shutdown before serious decontamination and decommissioning work began. During that time, much plant knowledge that would have been useful at the beginning of D&D was lost. The DOE could avoid this mistake at Paducah by beginning D&D promptly after the plant is returned from USEC. The Paducah Gaseous Diffusion Plant (PGDP) is operated and maintained by trained and experienced workers who possess security clearances. These workers perform operations and maintenance tasks that are similar to process equipment preparation and removal tasks in D&D. The workers are also trained in environmental safety and health (ES&H) issues that are important to the D&D effort. Workers that are available as a result of declining USEC needs following notification, with a minimum of D&D-specific training, could move directly to D&D work. (1.)

Long-term surveillance and maintenance (S&M) is not acceptable to our community. It is imperative that DOE adequately fund the PGDP post operation shutdown and move into the D&D phase of restoration of the site. DOE Environmental Management (EM) has submitted a FY2014 budget request for \$321M for the PGDP. Sustaining or increasing that number through transition and into full D&D of the facility is critical to maintaining cleanup momentum and avoiding what could be potentially a very long delay period between transition/deactivation and actual D&D of the plant. Delay in D&D will increase eventual life-cycle costs and human risks involved with the process. The negative effects of delayed D&D are well chronicled at the ORGDP site. Structures were weakened by decay and posed greater hazards during demolition. Contaminants were dispersed and were more difficult to clean up. Plant knowledge was lost. Time is not our friend.

(1.)BJC/OR-573, *Planning Study for Return of a Gaseous Diffusion Plant from the United States Enrichment Corporation to the United States Department of Energy Oak Ridge Tennessee*, Page 37.

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The Paducah Citizens Advisory Board (CAB) has studied the *Uranium Enrichment Decontamination and Decommissioning Report, Report to Congress, December 2010*, and understands the following:

- DOE plans to D&D the PGDP when operations are concluded and the site is transitioned to DOE.
- Projected cost to D&D the PGDP site is \$9 billion, with a range of \$6.3 billion to \$13.5 billion.
- According to *the Uranium Enrichment Decontamination and Decommissioning Report, Report to Congress, December 2010*, Pages 9, 30, and 40, "D&D work at Paducah is scheduled to begin in 2017 and continue through 2040", prior to completion of Portsmouth D&D in 2044.
- Assumptions for the PGDP timeline include an on-site Comprehensive Environmental Response Compensation and Liability Act (CERCLA) cell, presence of a skilled workforce, and recycling.
- Paducah is planned for a shorter D&D time period than Portsmouth due to the following:
 - With regard to radiation hazards, Paducah has cleaner buildings than Portsmouth
 - The community desires to redevelop the site as soon as possible.
- Lessons learned from ongoing D&D of the ORGDP and Portsmouth GDP will enhance full scale D&D operations at Paducah.

The CAB feels that DOE should re-commit to helping the community create the next economic chapter for the PGDP site. Re-commitment includes adequate funding for full scale D&D of the PGDP. Should an ongoing mission of the operating facility not be found, the CAB is concerned that a delay of the D&D of the enrichment facilities would hinder future use development.

- A cost-effective site-wide cleanup with a goal of obtaining an end-state site condition acceptable to stakeholders must commence upon transition of the PGDP to the DOE.
- *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY2013*, Page 3, the CAB suggests that the DOE give D&D priority following immediate threats and reword the line to address sources as shown below:
 - Mitigate immediate threats, both on- and off-site.
 - Perform D&D of the GDP and address sources contributing to off-site contamination
 - Address post-GDP Operable Units(OU).
 - Reduce further migration of off-site contamination.
 - Address remaining sources contributing to on-site contamination.
 - Perform D&D of the Depleted Uranium Hexafluoride (DUF6) Plant once it ceases operations.
 - Evaluate the final Comprehensive Site Operable Unit(CSOU) .
- A successful and timely remediation of the site supports adaptive reuse. Key assumptions are that in addition to on-site disposal, recycling, and asset revitalization, a trained and skilled workforce will be immediately available.

Portions of this background were borrowed from DOE document, BJC/OR-573; Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual

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Revision—FY 2013; and the Uranium Enrichment Decontamination and Decommissioning Report, Report to Congress, December 2010.

Recommendation

The PGDP CAB recommends that DOE adequately fund the PGDP post operation shutdown and initiate immediate D&D of the enrichment operating facility upon return of the PGDP to DOE.

The CAB, along with other stakeholders, recommends that DOE continue to support the goal of adaptive reuse including the development and successful completion of a strategy that supports revitalization. Furthermore, where possible, the CAB recommends that the DOE increase its efforts to support this initiative. The CAB is aware that the EM program is not tasked with site reindustrialization, however, complete transparency and constant communication is a necessity for the community to succeed in transitioning property and assets from DOE to the community for the purpose of adaptive reuse.