

**DMSA OS-12**  
**Solid Waste Management Unit (SWMU) Assessment Report**

**SWMU/AOC NUMBER:** 223

**DATE OF ORIGINAL SAR:** 12/01/00

**DATE OF SAR REVISIONS:** 03/15/09

**REGULATORY STATUS:** SWMU

**LOCATION:** East of 16<sup>th</sup> Street and the plant fire water tank.

**APPROXIMATE DIMENSION OR CAPACITY:** 14,100 ft<sup>2</sup> (2,816 ft<sup>2</sup> of 14,100 ft<sup>2</sup> is a large concrete pad that houses an I-beam open roof building)

**FUNCTION:** Temporary storage of materials.

**BRIEF HISTORY:** This outside storage area includes the 2,816 ft<sup>2</sup> C-301 Fire Training Facility, which was used as a Fire Services training facility until 1985. The area then became storage for excess electrical equipment, cooling tower material, and low-level waste (LLW).

This area was released by the United States Enrichment Corporation to the U.S. Department of Energy (DOE) as a DOE Material Storage Area (DMSA) on December 31, 1996. An unknown quantity of drummed LLW was not included in the DMSA and was removed from this area by waste operations. From February 2001 to February 2004, DOE characterized materials in this DMSA in accordance with the DMSA Characterization/Remediation Plan, which was incorporated as Appendix E of the 2003 Agreed Order. A Satellite Accumulation Area (SAA) identified as S-DMSA-OS-12-01 was established on December 9, 2003, to store potential Resource Conservation and Recovery Act (RCRA) waste. The SAA was closed on January 16, 2004. The Final Inventory and Characterization Report (FI/CR) was submitted March 18, 2004, to the Kentucky Division of Waste Management (KDWM). KDWM approved the FI/CR on July 28, 2005.

RCRA closure activities were performed as set forth in the *Agreed Order Closure Plan for the DOE Material Storage Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, BJC/PAD-720/R3, submitted to KDWM on December 22, 2005, and approved on April 16, 2006. The *Notification of Intent to Proceed with Closure* was submitted to KDWM on December 22, 2005, and approved on April 14, 2006. The *Closure Certification Report* was submitted to the KDWM on October 18, 2006, and was approved by KDWM February 13, 2007.

**PRESENT OPERATIONAL STATUS:** Inactive.

**DATES OPERATED:** 1985 to 2004

**SITE/PROCESS DESCRIPTION:** An outside DOE storage area located within the security fence area.

**WASTE DESCRIPTION:** The SWMU currently is empty. Newly discovered RCRA-regulated, hazardous mixed waste formerly stored included two fuses. Newly generated, RCRA-regulated hazardous mixed waste removed consisted of waste oils, a battery, and four fuses. The LLW formerly stored consisted of miscellaneous metal items (carts, cabinets, pipes, and a cylinder storage rack); miscellaneous wood items (pallets, crossties, and a bookcase); equipment (welder, tilt dumpsters, and several sump pumps); and a 55-gal drum of liquid. The solid wastes formerly stored included rubber, fiberglass, plastic, paper materials, miscellaneous scrap metals, miscellaneous wood and wood debris, and porous debris. Two G-17 valve subassemblies were characterized/classified as Nuclear Criticality Safety (NCS) spacing-controlled fissile items. Following completion of Nondestructive Assay testing, the NCS items were transferred to a Fissile Material Storage Area in DMSA C-337-03. A detailed description of the characterized waste formerly stored can be found in the FI/CR.

**WASTE QUANTITY:** Currently 0 ft<sup>3</sup>; waste quantity removed 10,733 ft<sup>3</sup>

**SUMMARY OF ENVIRONMENTAL SAMPLING DATA:** No sampling of environmental media has occurred.

**DESCRIPTION OF RELEASE AND MEDIA AFFECTED:** The original SAR indicates that some of the LLW drums managed by Waste Operations were observed leaking during routine inspections. The drums either were over-packed or patched. None of the material from the drums came in contact with the storage pad.

<b>GROUNDWATER:</b>	None Known
<b>SURFACE WATER:</b>	None Known
<b>SOIL:</b>	None Known
<b>ECOLOGY AFFECTED:</b> (i.e., threatened/endangered species):	None Known

**DOCUMENTATION OF NO RELEASE:** The *Notification to Proceed with Closure* submitted on December 22, 2005, approved by KDWM on April 14, 2006, and the *Closure Certification Report* submitted on October 18, 2006, approved by KDWM on February 13, 2007, document that no signs of spill or release were found. There have been no known spills or releases of materials from this SWMU to the environment.

**IMPACT ON OR BY OTHER SWMU/AOC:** There is no evidence that this SWMU impacts or is being impacted by other SWMUs.

**PRG COMPARISON:** N/A

**RFI NECESSARY:** No. This unit is being proposed for no further action since it is no longer active, has no evidence of releases to the environment, and is not believed to pose a risk to human health or the environment. The open roof building is considered as fixed equipment and will be removed in future decontamination and decommissioning program activities.

**OPERABLE UNIT ASSIGNMENT:** Soils Operable Unit



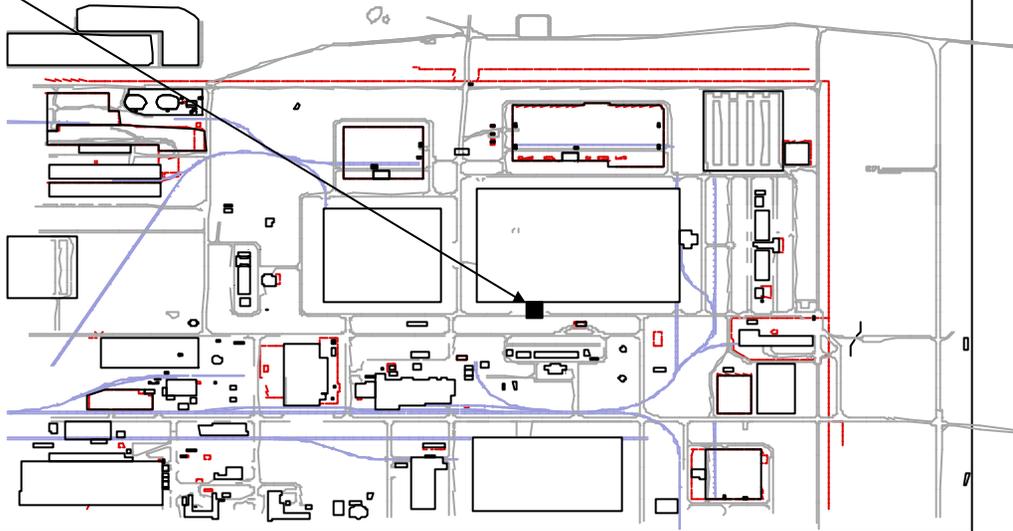
**SWMU 223  
DMSA OS-12  
January 23, 2004**



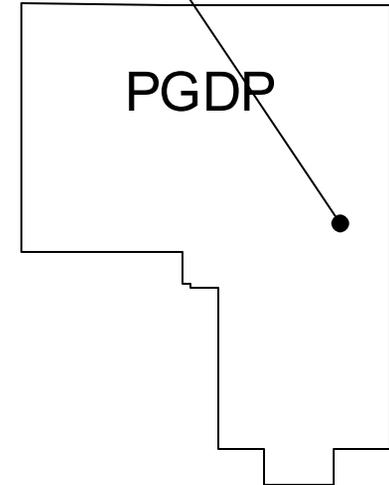
**SWMU 223  
DMSA OS-12  
Former Fire Training Facility  
January 8, 2004**

A-3

SWMU 223  
Outside  
DMSA-12



SWMU 223



Paducah Gaseous Diffusion Plant

Outside Areas - SWMU 223

U.S. DEPARTMENT OF ENERGY  
DOE PORTSMOUTH/PADUCAH PROJECT OFFICE  
PADUCAH GASEOUS DIFFUSION PLANT



Figure No. OS-12-223  
Date 11-10-08