

**Gold Dissolver Tank
DMSA C-400-03
Solid Waste Management Unit (SWMU) Assessment Report**

SWMU/AOC NUMBER: 48

DATE OF ORIGINAL SAR: 08/24/87

DATE OF SAR REVISIONS: 06/14/10

REGULATORY STATUS: SWMU

LOCATION: West wall of the C-400 Chemical Operations facility, column A9

APPROXIMATE DIMENSION OR CAPACITY: 360 ft²

FUNCTION: Temporary storage of materials

BRIEF HISTORY: The gold dissolver system was used to recover gold from various pieces of equipment. The system consists of an acid tank, pumps, piping, work platform, and other fixed accessories. Since the system was abandoned in place in the 1960-1970 time frame, the area was utilized as a storage area for several miscellaneous items until 2004.

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. From February to March 2002, DOE characterized the materials in this DMSA in accordance with the DMSA Characterization/Remediation Plan, which was incorporated as Appendix E of the 2003 Agreed Order. The Final Inventory and Characterization Report (FI/CR) was submitted on September 11, 2002, to the Kentucky Division of Waste Management (KDWM). KDWM approved the FI/CR on July 28, 2005.

Resource Conservation and Recovery Act closure was not required for this SWMU, since no hazardous wastes were stored in this unit, per the 2003 Agreed Order. The gold dissolver system is considered fixed equipment and will be removed with the decontamination and decommissioning (D&D) of this building.

This area was used for staging of the characterized LLW waste until 2004.

OPERATIONAL STATUS: Inactive

DATES OPERATED: Unknown to 2004

SITE/PROCESS DESCRIPTION: A DOE designated storage area located inside the C-400 Chemical Operations facility.

WASTE DESCRIPTION: This SWMU currently is empty except for the D&D items, which include a gold dissolver system and associated fixed equipment. Low-level waste formerly stored included several small plastic containers, a wooden step ladder, a wet mop, and several metal items. A detailed description can be found in the FI/CR.

WASTE QUANTITY: Estimated quantity 500 ft³ for D&D; waste quantity removed 6.27 ft³

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

DESCRIPTION OF RELEASE AND MEDIA AFFECTED: There are no known releases associated with this SWMU.

GROUNDWATER:	None known
SURFACE WATER:	None known
SOIL:	None known
ECOLOGY AFFECTED (i.e., threatened/endangered species):	None known

DOCUMENTATION OF NO RELEASE: None

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

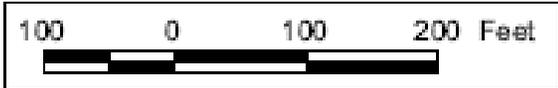
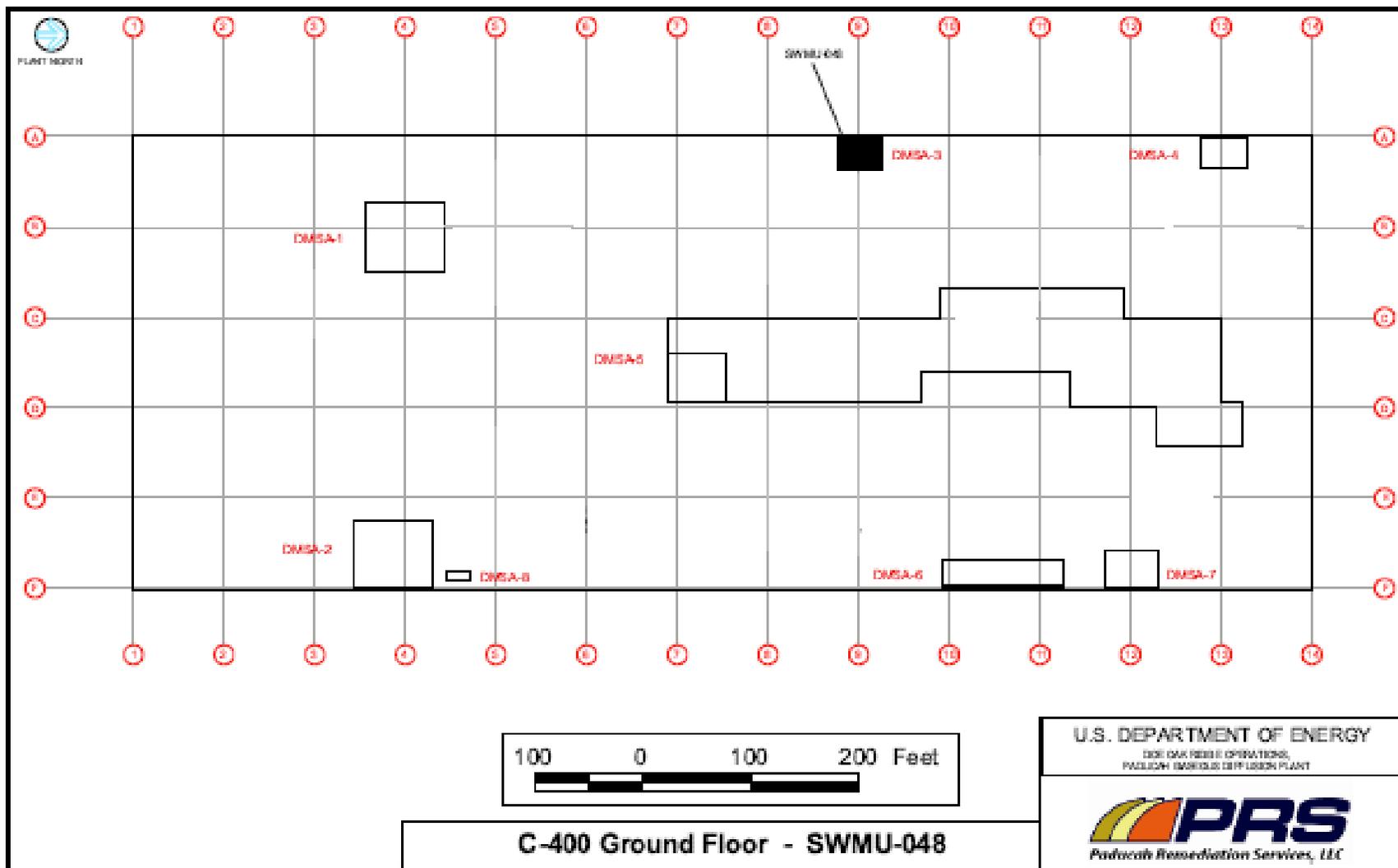
RFI NECESSARY: No. This SWMU is located in an active process building with a concrete floor. This unit is no further action because it no longer is active, has no evidence of releases to the environment, and is not believed to pose a risk to human health or the environment. The gold dissolver system was characterized and remains in-place in the DMSA to be addressed as part of the decontamination and decommissioning of the gaseous diffusion plant.

OPERABLE UNIT ASSIGNMENT: N/A



**DMSA C-400-03
Gold Dissolver System
September 16, 2003**

DOCUMENT No.



C-400 Ground Floor - SWMU-048

U.S. DEPARTMENT OF ENERGY
DOE OAK RIDGE OPERATIONS,
PADUCAH EMERGENCY DECONTAMINATION PLANT



PRS
Paducah Remediation Services, LLC

FIGURE No. C-400-048-03.spr
DATE 02-04-10