



Department of Energy

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APR 16 2012

Mr. Wm. Turpin Ballard
Remedial Project Manager
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street
Atlanta, Georgia 30303

PPPO-02-1432933-12

Mr. Todd Mullins, FFA Manager
Kentucky Department for Environmental Protection
Division of Waste Management
200 Fair Oaks Lane, 2nd Floor
Frankfort, Kentucky 40601

Ms. April Webb, Hazardous Waste Branch Manager
Kentucky Department for Environmental Protection
Division of Waste Management
200 Fair Oaks Lane, 2nd Floor
Frankfort, Kentucky 40601

Dear Mr. Ballard, Mr. Mullins, and Ms. Webb:

TRANSMITTAL OF THE REVISED C-747-A UF₄ DRUM YARD (SOLID WASTE MANAGEMENT UNIT 12) SOLID WASTE MANAGEMENT UNIT ASSESSMENT REPORT

Please find enclosed the *C-747-A UF₄ Drum Yard Solid Waste Management Unit (SWMU) Assessment Report (SAR)*. The C-747-A UF₄ Drum Yard is listed as SWMU 12 under the Soils Operable Unit in the current, approved Site Management Plan. This SAR has been revised based on the agreement reached by the Federal Facility Agreement (FFA) parties at the November 17, 2011, FFA meeting that SWMU 12 be classified as no further action.

If you have any questions or require additional information, please contact Lisa Santoro at (270) 441-6804.

Sincerely,

A handwritten signature in black ink, appearing to read "Reinhard Knerr", written over a horizontal line.

Reinhard Knerr
Paducah Site Lead
Portsmouth/Paducah Project Office

Enclosures:

1. Certification Page
2. C-747-A UF₄ Drum Yard Solid Waste Management Unit Assessment Report

e-copy w/enclosures:

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CERTIFICATION

Document Identification: *Solid Waste Management Unit Assessment Report—Solid Waste Management Unit 12*

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

LATA Environmental Services of Kentucky, LLC



Mark J. Duff, Paducah Project Manager

4-16-12

Date Signed

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

U.S. Department of Energy



Reinhard Knerr, Paducah Site Lead
Portsmouth/Paducah Project Office

4/16/12

Date Signed

**C-747-A UF₄ Drum Yard
Solid Waste Management Unit (SWMU) Assessment Report**

SWMU/AOC NUMBER: 12

DATE OF ORIGINAL SAR: 8/24/1987

DATE OF SAR REVISIONS: 3/16/2012

REGULATORY STATUS: SWMU

LOCATION: Northwest area of the Security Area

APPROXIMATE DIMENSION OR CAPACITY: 20,000 ft² (100 ft x 200 ft)

FUNCTION: Scrap metal yard

BRIEF HISTORY: The Paducah Gaseous Diffusion Plant (PGDP) site investigations conducted in 1991 and 1992 documented contamination in the vicinity of the scrap yards. A Public Health and Ecological Assessment (PHEA) conducted in conjunction with the 1992 investigation concluded that the scrap yards might contribute to off-site migration of uranium. In addition, the PHEA concluded that off-site migration of uranium may be significant and that exposures in the vicinity of the scrap yards may pose risks to human health. PGDP installed silt barriers in 1993 as an interim action to reduce the potential for uranium-contaminated silt and sediment migration from the scrap yards. Reference: *Engineering Evaluation/Cost Analysis for Scrap Metal Disposition at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1880&D2/R1.

Fieldwork to process and containerize the waste began on June 23, 2000, and was completed 13 weeks later on September 14, 2000. Shipment of 2,730.32 tons of packaged waste began on October 24, 2000, and was completed by June 19, 2001. DOE documented this removal in the *Removal Action Report for Drum Mountain at the Paducah Gaseous Plant, Paducah Kentucky*, DOE/OR/07-1962&D1.

PRESENT OPERATIONAL STATUS: Inactive

DATES OPERATED: 1979 to June 19, 2001

SITE/PROCESS DESCRIPTION: Aboveground metal waste pile

WASTE DESCRIPTION: Drums used for storage of UF₄ were emptied, rinsed, and crushed prior to placement into the yard.

WASTE QUANTITY: 2,730.32 tons of scrap metal was removed. No waste currently is stored at the C-747-A UF₄ Drum Yard.

SUMMARY OF ENVIRONMENTAL SAMPLING DATA: As reported in Results of the Site Investigation, Phase II, surface water samples were collected from several ditch locations and outfalls that drain runoff from the scrap yards. Total uranium analyses indicate that uranium is being transported from the scrap yards, and the rates of migration are highest after rainfall

events. Total uranium levels up to 3,400 µg/L (approximately 4,420 pCi/L at natural assay) were detected in runoff samples in 1990. Inspections of the scrap yards conducted in May and October 2000, which included limited radiological scanning of scrap material, further confirmed that components stored in the scrap yards are radiologically contaminated.

DESCRIPTION OF RELEASE AND MEDIA AFFECTED: Potential

GROUNDWATER: None Known

SURFACE WATER: See Summary of Environmental Sampling Data

SOIL: None Known

ECOLOGY AFFECTED: (i.e., threatened/endangered species): None Known

DOCUMENTATION OF NO RELEASE: The scrap material was identified as a SWMU under the Paducah Federal Facility Agreement (FFA) due to the potential for actual or threatened releases of hazardous substances from the site. This SWMU was an aboveground scrap metal pile and the soils beneath are associated with SWMU 7.

IMPACT ON OR BY OTHER SWMU/AOC: This SWMU was an aboveground scrap metal pile and the soils beneath are associated with SWMU 7.

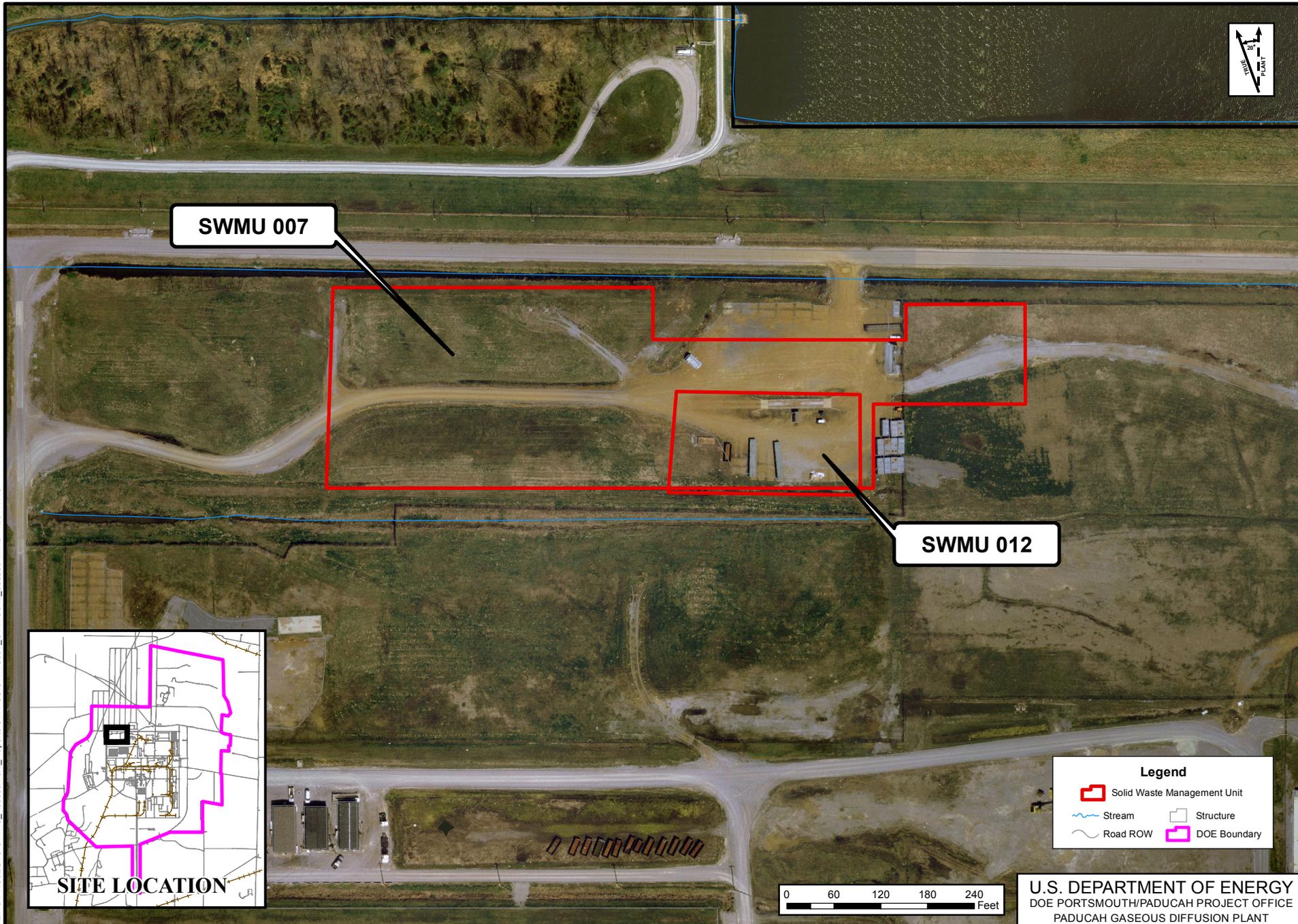
PRG COMPARISON: N/A

RFI NECESSARY: No. All wastes have been removed from this SWMU. This unit is being proposed for no further action since it no longer is active. The soils underlying the scrap yard will be addressed as SWMU 7 within the Burial Grounds Operable Unit.

OPERABLE UNIT ASSIGNMENT: N/A

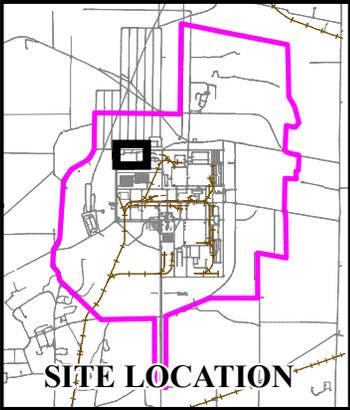


Approximate footprint of C-747-A, UF4 Drum Yard
(Drum Mountain) from Northwest side facing
Southeast on February 28, 2012



SWMU 007

SWMU 012



Legend

- Solid Waste Management Unit
- Stream
- Road ROW
- Structure
- DOE Boundary



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



LATA Environmental Services
 of Kentucky, LLC

Location of SWMU 007 and SWMU 012