

**PRELIMINARY ASSESSMENT/SITE INSPECTION REPORT
AND SWMU ASSESSMENT REPORT
(Revised November 12, 2001)**

UNIT NUMBER: 477

UNIT NAME: C-340 Metals Plant

DATE: 06/15/01

REGULATORY STATUS: SWMU

LOCATION: C-340 Metals Plant is located between C-531-2 and C-533-2 on the east side of the plant.

APPROXIMATE DIMENSION: 68,332 sq. ft.

FUNCTION: The primary mission of the facility was to reduce UF₆ from the depleted enrichment process to uranium metal and HF.

BRIEF HISTORY: Two operations were conducted in this facility after its construction in 1957. One was the conversion of depleted UF₆ to UF₄ using a hydrogenation process and the other was the conversion of some of the UF₄ to uranium metal via a reaction with magnesium. After 1977, the facility served a variety of supporting missions, such as an electrical shop, a training school, and valve-testing facility, until disconnection of the utilities and final lockdown in December 1991. Thorough environmental inspections of the facility were performed in 1994. These inspections resulted in numerous activities to organize and characterize various materials in the building. This facility has three hydraulic systems that are covered under the TSCA FFCA. The systems were allowed to stay in place as long as they were inspected annually and any spills were cleaned according to PCB spill cleanup criteria. Under the TSCA FFCA, removal of these systems will occur under D&D.*

OPERATIONAL STATUS: Inactive

DATES OPERATED: The facility was erected in 1957 with operations continuing until 1977. Final lockdown of the facility occurred in 1991. D&D activities began in 1992.

SITE/PROCESS DESCRIPTION: A uranium reduction facility

WASTE DESCRIPTION: After D&D environmental inspections in 1994, oil was drained out of equipment, motors, and pumps, and characterized. The facility also contained miscellaneous equipment and materials. A description of the wastes associated with the 1994 environmental inspections can be found in the *Summary Report of the Paducah Gaseous Diffusion Plant Decontamination and Decommissioning Program Environmental Noncompliance Closure Activities at the C-340 Metals Plant Complex*, KY/EM-92, July 25, 1995. Presently, according to BJC personnel, there are approximately 25 drums of waste of various types and approximately 18 B-25 boxes of various waste.*

WASTE QUANTITY: A description of the wastes associated with the 1994 environmental inspections can be found in the *Summary Report of the Paducah Gaseous Diffusion Plant Decontamination and Decommissioning Program Environmental Noncompliance Closure Activities at the C-340 Metals Plant Complex*, KY/EM-92, July 25, 1995. Approximately 25 drums and approximately 18 B-25 boxes remain in the building.*

SUMMARY OF ENVIRONMENTAL SAMPLING DATA: Samples were collected and data is available on materials and equipment within the facility. Surface soils in the vicinity of C-340 building contain elevated levels of SVOCs, PCBs, dioxins/furans, metals, and radionuclides. These samples were collected as part of the site evaluation for waste area grouping 8.

DESCRIPTION OF RELEASE AND MEDIA AFFECTED: Spills occurred within the facility, but were cleaned.*

GROUNDWATER: NA

SURFACE WATER: NA

SOIL: See the *Site Evaluation Report for Waste Area Grouping 8 at the Paducah Gaseous Diffusion Plant, Paducah Kentucky*, DOE/OR/07-1867&D1.

**ECOLOGY AFFECTED
(i.e., endangered/threatened species):** NA

DOCUMENTATION OF NO RELEASE: NA

**IMPACT ON OR BY OTHER
SWMU/AOC:** The following are some of the SWMUs that are in the locale of this facility: 74, 101A, 101B, 162, and 171.

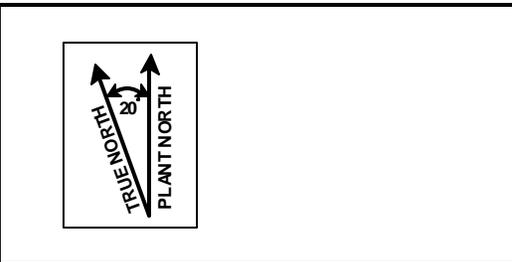
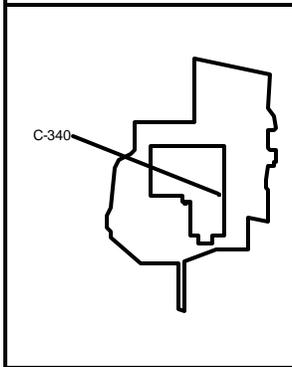
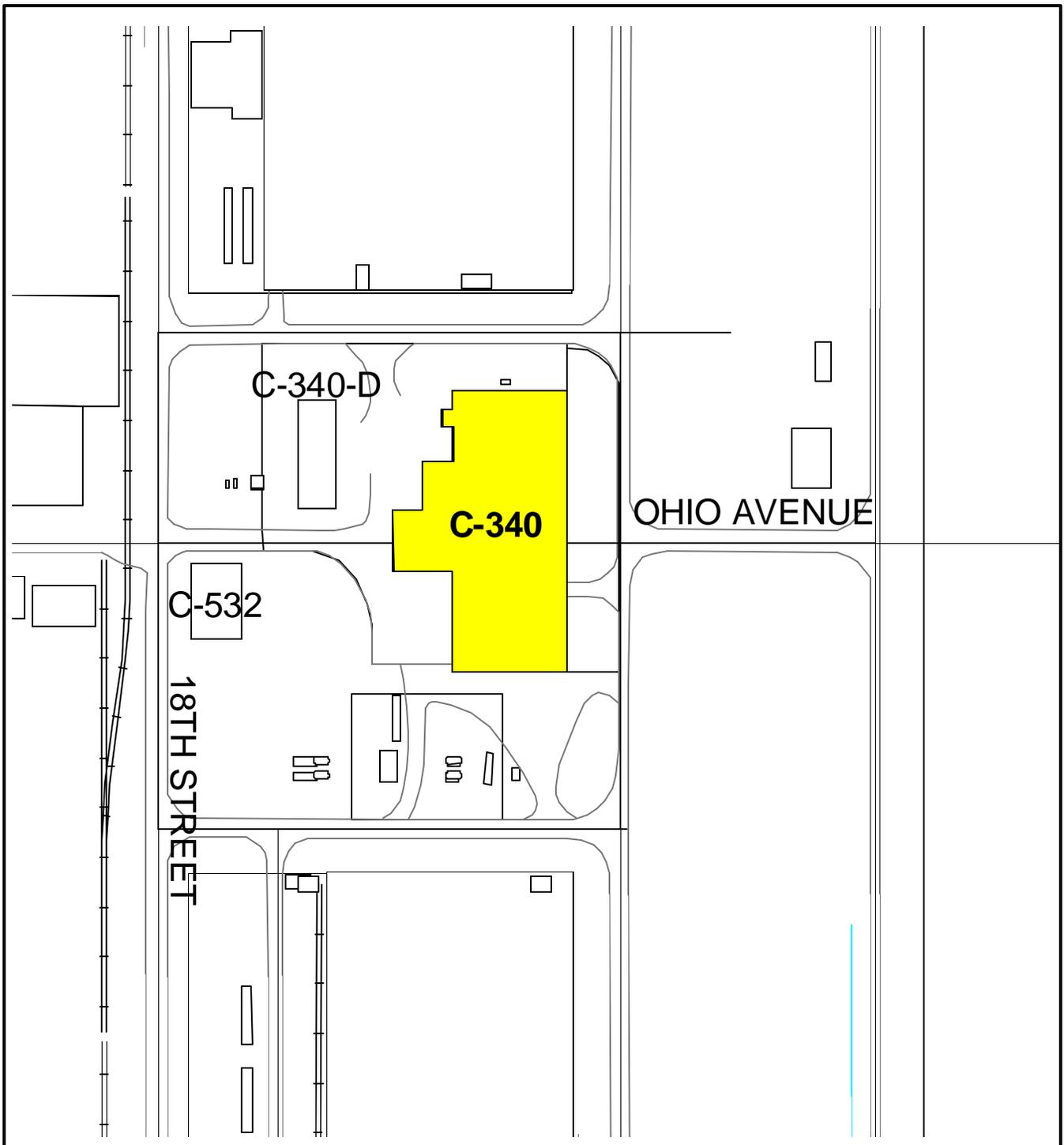
PRG COMPARISON: NA

RFI NECESSARY: Yes. This unit will be managed under the D&D Operable Unit.

*The following sources and documents were relied on in preparing this SWMU Assessment Report: Statements by personnel employed by the former Department of Energy contractor and by current Bechtel Jacobs Company LLC personnel; the *Summary Report of the Paducah Gaseous Diffusion Plant D&D Program Environmental Noncompliance Closure Activities at the C-340 Metals Plant Complex, KY/EM-92, July 25, 1995*. The information in this report truthfully and accurately reflects the information provided from these sources.



SWMU 477 C-340 # 4



SWMU 477 C-340



U.S. DEPARTMENT OF ENERGY
DOE OAK RIDGE OPERATIONS,
PADUCAH GASEOUS DIFFUSION PLANT

BECHTEL JACOBS BECHTEL JACOBS COMPANY LLC
managed for the DEPARTMENT OF ENERGY under
U.S. GOVERNMENT contract DE-AC-05-98OR227000
BECHTEL JACOBS COMPANY LLC Oak Ridge, Tennessee • Paducah, Kentucky • Portsmouth, Ohio

CDM Federal Services Inc.
CDM FEDERAL SERVICES INC.

FIGURE No. SWMU 477 C-340
DATE 06/22/01