

**PRELIMINARY ASSESSMENT/SITE INSPECTION REPORT
AND SWMU ASSESSMENT REPORT**

UNIT NUMBER: 505

UNIT NAME: C-410/420 Complex – Sump at Column A-3N.

DATE: 12/20/01

REGULATORY STATUS: Solid Waste Management Unit (SWMU)

LOCATION: Sump located in the northwest corner of the Expansion Towers in the C-410/420 Complex at column A-3N.

APPROXIMATE DIMENSION: Approx. 1.5 ft x 1.5 ft. Depth not determined.

FUNCTION: Served as a moisture collection system in low-lying areas of C-410.

BRIEF HISTORY: Sump served as a moisture collection system for the Expansion Towers area. Collection trench runs along east and north walls. No drainage system is illustrated. Drainage destination is unknown.

OPERATIONAL STATUS: Inactive

DATES OPERATED: July 1953 to July 1964 and July 1968 to May 1977

SITE/PROCESS DESCRIPTION: Collection system for a liquid waste stream in the Expansion Towers. Waste consisted of liquid entering the reactor pit area. As there was no liquid associated with the process and the pit is below ground level, the sump probably collected water entering the pit. From the nature of the process, any liquid entering the sump was likely to be contaminated with uranium and traces of transuranics and technetium.

WASTE DESCRIPTION: Water

WASTE QUANTITY: The sump presently contains water that was verified by a visual inspection.

SUMMARY OF ENVIRONMENTAL SAMPLING DATA: At the time of environmental testing (1994), 220 gal of water was removed and a composite sample was taken. Sample results from this area indicated that the contents of the sump contained detectable polychlorinated biphenyls and radioactive contamination. The contents are not RCRA regulated. (*Martin Marietta Energy Systems Request for Site Surveys/Characterizations and Miscellaneous Characterizations and Survey - MMES-94-58.*)

DESCRIPTION OF RELEASE AND MEDIA AFFECTED: No releases from this SWMU have been documented.

GROUNDWATER: There are no known groundwater impacts from this SWMU.

SURFACE WATER: There are no known surface water impacts from this SWMU.

SOIL: There is no known impact on surface soils from this SWMU.

ECOLOGY AFFECTED (i.e., threatened/endangered species): No known impacts. No federal or state listed T&E plant or animal species have been identified. The federally endangered Indiana bat (*Myotis sodalis*) potentially occurs in the vicinity, but the C-410 complex does not provide a suitable habitat.

DOCUMENTATION OF NO RELEASE: NA

IMPACT ON OR BY OTHER SWMU/AOC: The following SWMUs are in the vicinity of the C-410/420 complex:

SWMU 11	SWMU 19	SWMU 20	SWMU 26
SWMU 40	SWMU 41	SWMU 47	SWMU 78
SWMU 169	SWMU 198	SWMU 203	

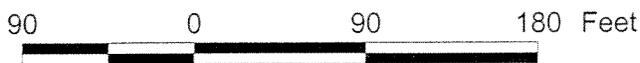
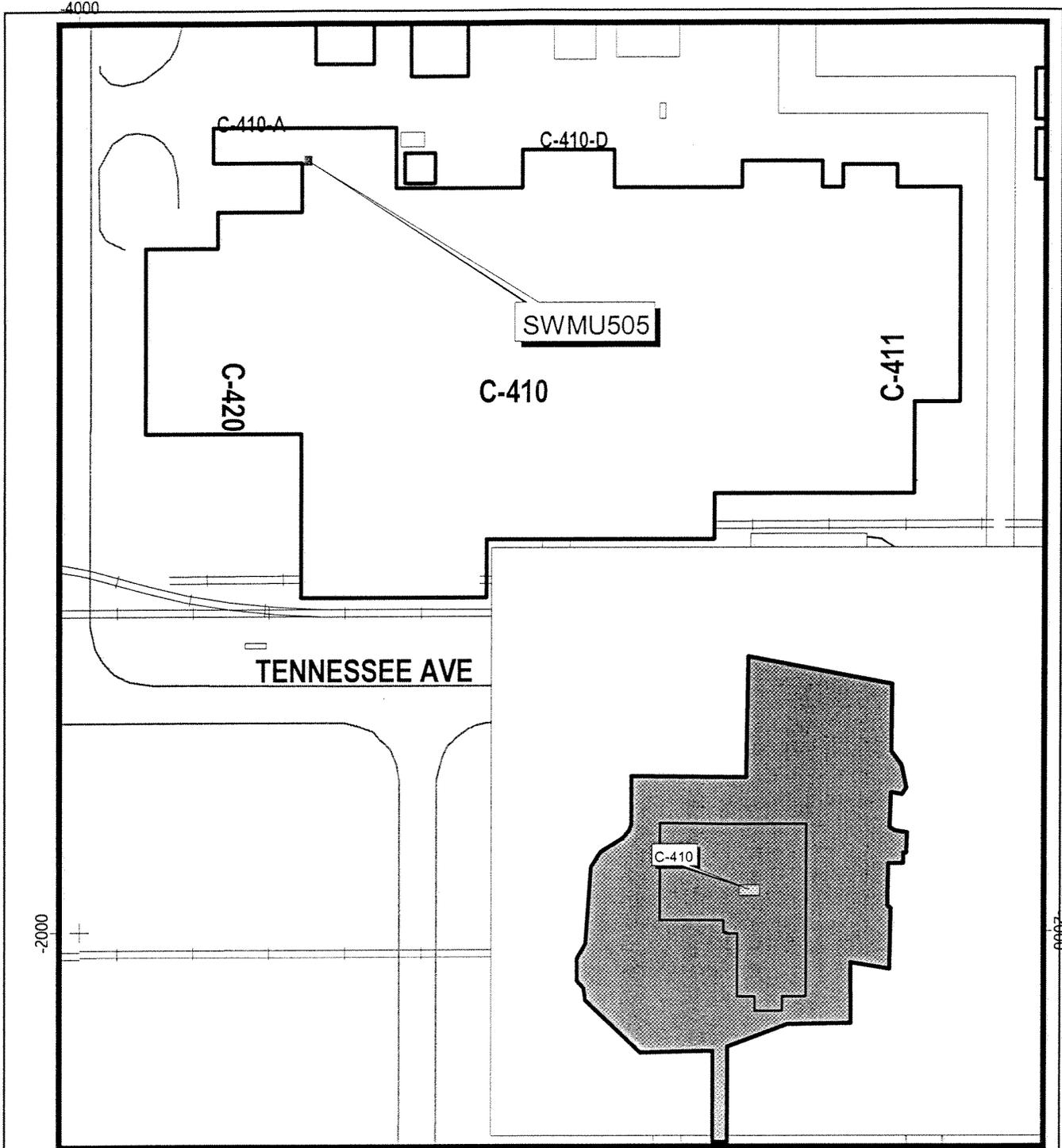
PRG COMPARISON: NA

RFI NECESSARY: This area is associated with an inactive facility that is included in the decontamination and decommissioning (D&D) program. Site evaluation work is underway at this time, along with planning associated with the infrastructure D&D phase. The need for a Remedial Investigation/Feasibility Study will be evaluated as part of the facility structure D&D phase.

NOTE: Elements included in this outline shall be considered and incorporated, as appropriate, when developing the above referenced document.



SWMU 505



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

BECHTEL JACOBS
BECHTEL JACOBS COMPANY LLC
MANAGED FOR THE US DEPARTMENT OF ENERGY UNDER
US GOVERNMENT CONTRACT DE-AC-05-98OR22700
Oak Ridge, Tennessee • Paducah, Kentucky • Portsmouth, Ohio

SWMU 505 at C410.



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