

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

**UNIT NUMBER:** 513

**UNIT NAME:** C-411 Cell Maintenance Room Sump Pit

**DATE:** 12/21/01

**REGULATORY STATUS:** Solid Waste Management Unit (SWMU)

**LOCATION:** Sump located outside the north end of the Cell Maintenance Area.

**APPROXIMATE DIMENSION:** Approx. 5 ft x 6 ft. Depth not determined.

**FUNCTION:** Sump identified in facility blueprints as a moisture collection system in a pit system in the C-410 Building.

**BRIEF HISTORY:** Sump served as a sludge collection system for the fluorine cell neutralization process. The contents of the settling basin were periodically discharged (gravity fed) to the C-410-B holding pond (SWMU 19) via this sump (sludge pit). Sludge was captured in the pit, with the liquids flowing into the holding pond. Maintenance personnel periodically removed the sludge using a backhoe bucket. Building manager interview indicates that this was not a frequent occurrence, perhaps annually, perhaps less frequent. The ultimate destination of the sludge removed from the pit is unknown.

**OPERATIONAL STATUS:** Inactive

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

**SITE/PROCESS DESCRIPTION:** Involved the processing of wastes from the neutralization room settling basin and inverter spray operations, including the accumulation of neutralization sludge with respect to the former. A soda ash solution was used to neutralize residual electrolyte on fluorine cells, prior to maintenance work. This solution was periodically flushed to the pit, where sludge accumulated and the liquid flowed on to the holding pond (SWMU 19). In addition, building manager interviews indicate that water generated as a result of inverter spray operations also was discharged to the pit.

**WASTE DESCRIPTION:** Sludge from the cell neutralization process.

**WASTE QUANTITY:** Unknown

**SUMMARY OF ENVIRONMENTAL SAMPLING DATA:** NA

**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):** None

**DOCUMENTATION OF NO RELEASE:** NA

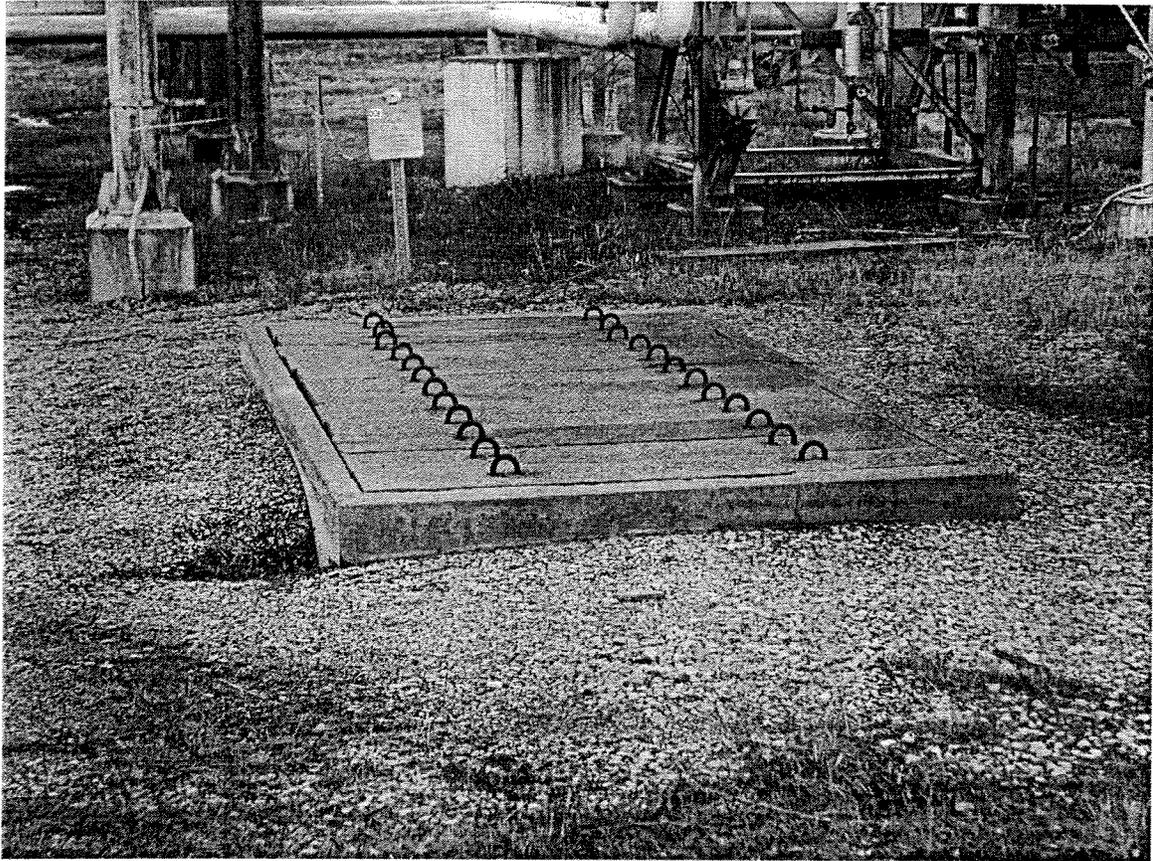
**IMPACT ON OR BY OTHER SWMU/AOC:** The following SWMUs are in the vicinity of the C-410/420 complex:

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

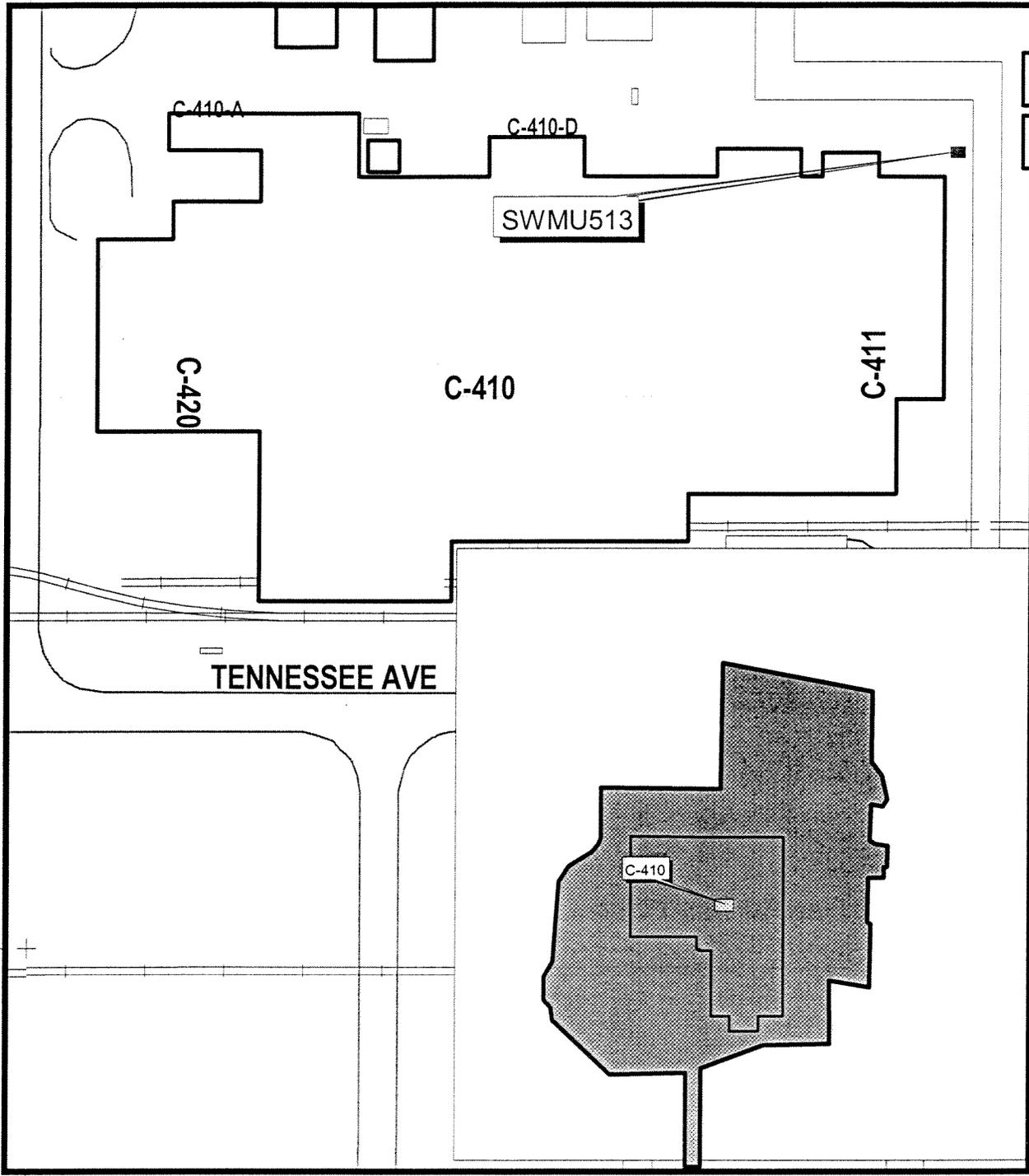
**RFI NECESSARY:** This area is associated with an inactive facility that is included in the decontamination and decommissioning (D&D) program. Site evaluation work is underway at this time, along with planning associated with the infrastructure D&D phase. The need for a Remedial Investigation/Feasibility 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 513

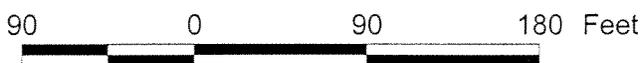
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U.S. DEPARTMENT OF ENERGY  
DOE OAK RIDGE OPERATIONS  
PADUCAH GASEOUS DIFFUSION PLANT

**BECHTEL JACOBS** BECHTEL JACOBS COMPANY LLC  
MANAGED FOR THE US DEPARTMENT OF ENERGY UNDER  
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Oak Ridge, Tennessee • Paducah, Kentucky • Portsmouth, Ohio

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SWMU 513 at C410.

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DATE 01-02-02