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RESOURCE CONSERVATION AND RECOVERY ACT FACILITY ASSESSMENT VOLUME V  
ADDENDUM I CNC CHARLESTON SC  
9/1/1995  
ENSAFE

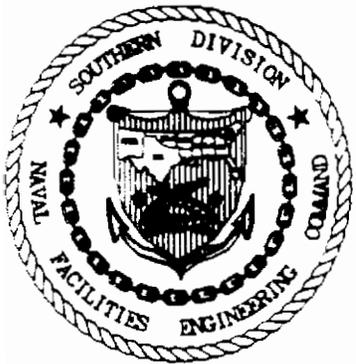


**RCRA FACILITY ASSESSMENT  
NAVAL BASE CHARLESTON  
VOLUME V, ADDENDUM I**

**SOUTHDIV Contract Number:  
N62467-89-D-0318  
CTO-029**

**Prepared for:**

**Department of the Navy  
Southern Division  
Naval Facilities Engineering Command  
North Charleston, South Carolina**



**Prepared by:**

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**September 1995**

**PART IV  
RCRA FACILITY  
ASSESSMENT  
BINDER 10 OF 13**

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## **A. RCRA FACILITY ASSESSMENT ADDENDUM**

### **A.1 AOC #705 — Building 58 Spills**

#### **A.1.1 Unit Characteristics**

AOC #705 consists of the X-ray developing room and former Laboratory 241 within Building 58. Building 58 houses the CNSY Dispensary, as well as the Industrial Medicine and Radiation Health departments. The dispensary is currently in operation. The X-ray developing room is located on the first floor of the south wing of Building 58. Former Lab 241 is located on the second floor immediately above the X-ray developing room. During a hazardous waste inspection in 1991, a liquid waste stream consisting of leakage from Satellite Accumulation Area (SAA) #53 was identified in the X-ray developing room. The waste stream consisted of a silver-contaminated acid-base solution generated during the developing process. The material was cleaned up on discovery and a drip pan was installed. Also, in 1975, mercury contamination was discovered when the tile floorcovering was removed to be replaced with carpet. According to an employee present during this incident, the source of the mercury was a broken thermometer, and the quantity of mercury involved was small. The mercury was reportedly cleaned up following discovery. However, no documentation exists concerning the cleanup activities related to this incident. The location of AOC #705 is shown in Figure 1, which also shows SWMU #186, a second unit associated with Building 58.

#### **A.1.2 Waste Characteristics**

Wastes associated with this unit include X-ray developing chemicals and mercury. The constituents of concern include silver and mercury.

#### **A.1.3 Migration Pathways**

Soil, groundwater, surface water, and subsurface gas are unlikely pathways because of the containment provided by the building and tile-covered concrete foundation. Visual inspection of the floor structure revealed no cracking or deterioration in the vicinity of the unit. However, prior to installation of the spill containment unit, spilled silver-containing wastes from SAA #53



DEPARTMENT OF THE NAVY

CHARLESTON NAVAL SHIPYARD  
CHARLESTON, S.C. 29408-6100

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8 OCT 1995

Mr. G. Randall Thompson  
Director, Division of Hazardous and Infectious Waste Management  
Bureau of Solid and Hazardous Waste Management  
South Carolina Department of Health and Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201

RE: FORWARDING OF THE RCRA FACILITY ASSESSMENT VOLUME V,  
ADDENDUM I

Dear Mr. Thompson:

Enclosed are seven copies of the RCRA Facility Assessment Volume V, Addendum I for the Charleston Naval Shipyard as required by our Hazardous and Solid Waste Amendments Part B Permit (EPA SCO 170 022 560). If you have any questions, please contact Amos Webb at (803) 743-5519.

Sincerely,

A handwritten signature in cursive script, appearing to read "W. F. Nold".

W. F. NOLD  
Captain USN  
Commander,  
Charleston Naval Shipyard

Encl:

(1) RCRA Facility Assessment Volume V, Addendum I

Copy to:

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USEPA (Brittain)

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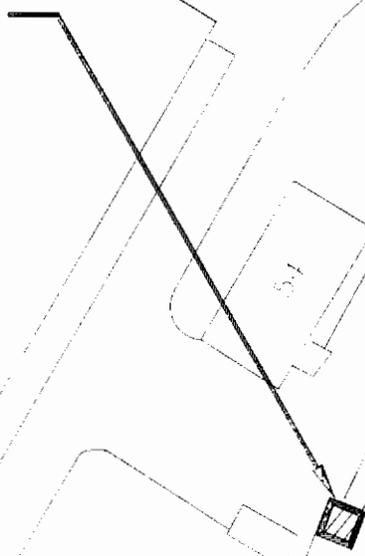
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AOC #705



SWMU #186

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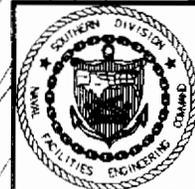
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RCRA FACILITY ASSESSMENT  
NAVAL BASE CHARLESTON  
CHARLESTON, S.C.

25 0 25

SCALE

FEET

FIGURE 1  
AOC #705  
BUILDING 58 SPILLS

DWG DATE: 7/11/95

DWG NAME: 29AOC705

were observed entering a floor drain in the X-ray developing room; this drain discharges to the North Charleston Sewer District sanitary sewer system. The mercury spill was located on the second floor and no evidence exists to indicate that the spill migrated to the lower floor. However, a potential for migration by the air pathway exists due to the volatile nature of mercury.

#### **A.1.4 Evidence of Release**

The release of silver-containing solution from SAA #53 is well documented as to the measures taken to remediate the spill and prevent future occurrences. Also, analysis of this waste material indicated that the silver concentration discharged into the sewer was within permitted specifications. SAA #53 was removed from Building #53 soon after this incident. The mercury spill was documented, but no documentation exists regarding cleanup actions. However, an employee present during the incident reported that the spill was cleaned up prior to installation of the new floor covering.

#### **A.1.5 Exposure Potential**

No residential areas or sensitive areas are in the vicinity of this AOC. Due to the location of this unit within the building, exposure potential is limited to Naval Base Charleston personnel who frequent the vicinity of the unit and future users of the site.

#### **A.1.6 Recommended Action**

No Further Investigation (NFI) is recommended for this unit due to the lack of evidence of releases which exited the building as well as the documentation and eyewitness statements that the subject spills were remediated. The Naval Base Charleston sanitary sewer system will be investigated as SWMU #37 under the RCRA Facility Investigation (RFI). The sanitary and storm sewer systems have been designated as Zone L within the RFI organization structure.

## A.2 SIGNATORY REQUIREMENT

Condition I.E. of the HSWA portion of RCRA Part B Permit (EPA SCO 170 022 560) states that "All applications, reports, or information submitted to the Regional Administrator shall be signed and certified in accordance with 40 CFR §270.11." The certification reads as follows:

"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 assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to be 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."



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Commander,  
Charleston Naval Shipyard

27 September 1995

Date