

N60201.AR.002301
NS MAYPORT
5090.3a

CORRECTIVE MEASURES IMPLEMENTATION PLAN SOLID WASTE MANAGEMENT UNIT
17 (SWMU17) REVISION 3 NS MAYPORT FL
4/13/2011
TETRA TECH

**NAVAL STATION MAYPORT
CORRECTIVE MEASURES IMPLEMENTATION PLAN
CARBONACEOUS FUEL BOILER AREA
SOLID WASTE MANAGEMENT UNIT 17
FACILITY IDENTIFICATION NUMBER FL9 170 024 260**

1. OBJECTIVE

A Resource Conservation and Recovery Act (RCRA) Statement of Basis (SB) for Solid Waste Management Unit (SWMU) 17, the Carbonaceous Fuel Boiler (CFB) Area, completed public comment requirements in November 2008. The SB stipulated the implementation of Land Use Controls (LUCs) including Institutional Controls (ICs) to prevent unacceptable human health risks from exposure to contaminated surface soils at SWMU 17. The objective of this Corrective Measures Implementation Plan (CMIP) is to provide information on how the Corrective Measures selected in the SB for SWMU 17 are implemented, maintained, and monitored.

Pursuant to RCRA, as amended by the 1984 Hazardous and Solid Waste Amendments (HSWA), the Florida Department of Environmental Protection (FDEP) issued the current HSWA permit to NAVSTA Mayport on August 17, 2009. The HSWA permit requires the CMIP to include identification of the LUC objectives.

The requirements set forth in this CMIP shall supersede the requirements of the LUC Memorandum of Agreement signed on September 7, 1999, by the United States Navy (Navy), the United States Environmental Protection Agency, and the FDEP. The inspections and reporting requirements described herein will be effective immediately upon approval of this CMIP by the FDEP. Once put into effect, the requirements set forth in this document will remain applicable to SWMU 17 during Navy ownership, as well as subsequent ownership of the SWMU unless otherwise amended by the Navy and with FDEP concurrence.

2. SWMU DESCRIPTION

SWMU 17 is located in the north central part of NAVSTA Mayport, southwest of the Mayport Turning Basin and approximately 50 feet west of Echo Pier. The SWMU contained a CFB that was a furnace fueled by domestic solid waste from the NAVSTA Mayport fleet and the housing area within the station. The CFB also burned waste oil collected from various locations within the station. Waste oil and diesel fuel were stored at the CFB in two 6,000-gallon underground storage tanks (USTs) and two 550-gallon USTs. The CFB was operated 24 hours a day from 1979 to mid-1994, at which time it was taken out of service. Dry ash and wet ash generated by the CFB were collected and stored in roll-off containers at the SWMU on the northern side of the building.

The RCRA Facility Investigation (RFI) and Corrective Measures Study (CMS) for SWMU 17 were submitted to the FDEP in December 1996 and March 2003, respectively. The RFI concluded that SWMU 17 has been impacted by low concentrations of polycyclic aromatic hydrocarbons (PAHs) in soil and ammonia, manganese, and iron in groundwater. Recent groundwater sampling indicates that groundwater contamination is not a concern at SWMU 17. Corrective measures recommended for surface soils in the CMS and selected in the SB are LUCs including ICs. LUCs are in place to prevent the site from being used for residential purposes. LUCs will be maintained until the concentrations of contaminants of

concern (COCs) in the soil are at such levels to allow for the unrestricted use and unlimited exposure of the SWMU 17 property as determined by the FDEP.

The corresponding soil LUC areas cover approximately 0.2 acre (see Attachment 1). The Navy plans to continue to use SWMU 17 for industrial operations. A table detailing the COCs is presented below:

SWMU 17 COCs

Media of Concern	COCs	SCTLs ²
Soil	• Benzo(a)pyrene Equivalents (BaPEq) ¹	1.2 mg/kg

¹ Site concentrations for carcinogenic PAHs must be converted to BaPEq before comparison with the appropriate direct exposure ²Soil Cleanup Target Level (SCTL) for benzo(a)pyrene using the approach described in the 'Final Technical Report: Development of Cleanup Target Levels for Chapter 62-777, F.A.C' (February 2005). COCs considered for surface soil BaPEq calculations at SWMU 17 are benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; benzo(k)fluoranthene; chrysene; dibenzo(a,h)anthracene; and indeno(1,2,3-cd)pyrene.

3. CORRECTIVE MEASURES

a. Engineering Controls: None proposed.

b. Institutional Controls: The following are the Corrective Measures for the LUC corrective action to be implemented at SWMU 17 until such time as the concentrations of COCs in the soil/sediment are at levels to allow for unrestricted use and unlimited exposure:

1. Prohibit the excavation and uncontrolled removal of soil/sediment with COC concentrations in excess of FDEP Direct Exposure Residential SCTLs unless prior written approval is obtained from the FDEP.
2. Restrict the site to nonresidential use only. Nonresidential land use restrictions prohibit residential or residential-like uses including, but not limited to, any form of housing; childcare facilities; any kind of school including preschools, elementary schools, and secondary schools; playgrounds; and adult convalescent and nursing care facilities. Excavation, disturbance, or removal of soil/sediment at SWMU 17 is prohibited unless prior written approval is obtained from the FDEP and the NAVSTA Mayport Environmental Department in accordance with the NAVSTA Mayport excavation permit process.

c. Monitoring: The following monitoring of the Corrective Measures for the LUC corrective action will be implemented at SWMU 17:

1. Physical inspections of SWMU 17 will be conducted by the Navy annually to ensure that the implemented LUCs are being maintained.

4. CORRECTIVE ACTION IMPLEMENTATION

The following implementation plan shall be executed by the Navy to ensure that the Corrective Measures for SWMU 17 are met and maintained:

a. CMIP Distribution: Within 30 days of receiving FDEP approval of this CMIP, the Navy will place the CMIP in the Information Repository located at the Jacksonville Public

Library – Beaches Branch, 600 3rd Street, Neptune Beach, Florida, 32266, (904) 241-1141.

- b. Implementing Corrective Actions:** LUC monitoring (SWMU inspections) for SWMU 17 shall begin within six months of the FDEP's approval of this CMIP.
- c. SWMU Inspections:** Upon the FDEP's approval of this CMIP, the Navy will conduct annual physical inspections of SWMU 17 to confirm compliance with the Corrective Measures. Any activity inconsistent with the Corrective Measures objectives or use restrictions, or any other action that may interfere with the effectiveness of the Corrective Measures, will be addressed by the Navy upon discovery, and the FDEP will be notified per NAVSTA Mayport's RCRA permit. Groundwater monitoring may be required once these inconsistent activities have been corrected.
- d. Compliance Reporting:** Upon FDEP's approval of this CMIP, the Navy will provide to the FDEP an annual Corrective Measures Compliance Certificate (consistent with Attachment 2) after the inspection of SWMU 17 has been completed. In addition, should any deficiencies be discovered during the annual inspection, the Navy will provide FDEP a written description of the deficiencies and the measures that are proposed to correct the deficiencies per NAVSTA Mayport's RCRA permit.
- d. Remedy Reviews:** The Navy will conduct routine reviews of the corrective measures at SWMU 17 to ensure that the corrective measures remain protective of human health and the environment.
- e. Notice of Planned Property Conveyances:** Although the Navy may later transfer these procedural responsibilities to another party by contract, property transfer agreement, or through other means, the Navy shall retain ultimate responsibility for Corrective Measures integrity. In the event of any conveyance of the SWMU 17 property to any other agency, person, or entity, the Navy shall provide notice to the FDEP of such intended conveyance at least 6 months prior to the conveyance. If it is not possible for the Navy to notify the FDEP at least 6 months prior to the conveyance, then the Navy will notify FDEP as soon as possible, but no later than 60 days prior to the conveyance. The notice shall describe the mechanism for maintenance of Corrective Measures and the responsible party. In the event of a property transfer, the Navy and FDEP shall have the opportunity to review the intended deed restrictions.
- f. Changes and Termination of Corrective Measures:** The Navy shall not modify or terminate Corrective Measures, implementation actions, or modify land use without approval by the FDEP. The Navy shall seek prior FDEP concurrence before any anticipated action that may disrupt the effectiveness of the Corrective Measures or any action that may alter or negate the need for Corrective Measures. When the Navy determines, with the FDEP concurrence, that one or more of the Corrective Measures at SWMU 17 are no longer needed for protection of human health and the environment, the Navy shall complete the appropriate documentation.

5. POINTS OF CONTACT

Listed below is the point-of-contact information for the Navy and FDEP.

Navy

Paul Malewicki
Environmental Division
Public Works Office
Naval Station Mayport
Jacksonville, FL 32228-0067
(904) 270-3188
Paul.Malewicki@navy.mil

FDEP

John Winters (MS 4535)
FDEP, Bob Martinez Center
Bureau of Waste Cleanup
Federal Programs Section
2600 Blair Stone Road
Tallahassee, FL 32399-2400
(850) 245-8999 or Fax (850) 245-7690
John.Winters@dep.state.fl.us

6. REFERENCES

ABB-ES, January 1996a. Resource Conservation and Recovery Act Facility Investigation Group II Solid Waste Management Units, U.S. Naval Station, Mayport, Florida.

ABB-ES, December 1996b. Resource Conservation and Recovery Act Facility Investigation Group III Solid Waste Management Units, U.S. Naval Station, Mayport, Florida.

Tetra Tech NUS, Inc., 2008. Statement of Basis for SWMU 17 – Carbonaceous Fuel Boiler Area, Naval Station Mayport, Jacksonville, Florida, August.

Tetra Tech NUS, Inc., 2003. Corrective Measure Study for Solid Waste Management Units 12 and 17, Naval Station Mayport, Jacksonville, Florida, March.

ATTACHMENT 1
CORRECTIVE ACTION FOR SOIL FIGURE



Location	Northing	Easting
1	2201503.1810	526611.6375
2	2201425.7675	526611.6592
3	2201425.7668	526566.2144
4	2201503.1765	526566.2221

Legend	
●	Coordinate Location
—	Road
—	Vegetation
- - -	Fence
□	Building
▒	Surface Water Area
▨	LUC Boundary



DRAWN BY	DATE
S. PAXTON	2/09/07
CHECKED BY	DATE
J. GIBSON	2/13/09
COST/SCHEDULE-AREA	
SCALE AS NOTED	



LAND USE CONTROL MAP
SWMU17
NAVAL STATION MAYPORT
MAYPORT, FLORIDA

CONTRACT NUMBER CTO 033	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO.	REV
ATTACHMENT 1	0

ATTACHMENT 2
ANNUAL CORRECTIVE MEASURES COMPLIANCE CERTIFICATE

SWMU 17

ANNUAL CORRECTIVE MEASURE COMPLIANCE CERTIFICATE

Naval Station Mayport
 Facility I.D. No.: FL9 170 024 260

SWMU and LUC boundaries are shown on the Attachments in the CMIP for SWMU 17.

This evaluation covers the period from **1 January through 31 December** _____. Form shall be submitted by **1 March** of the year following the reporting period.

CERTIFICATION CHECKLIST

	IN COMPLIANCE	NON- COMPLIANCE	SEE COMMENT	NOT APPLICABLE
1) No residential development or use on parcel including but not limited to, any form of housing, child-care facilities, pre-schools, elementary schools, secondary schools, playgrounds, or full-time adult convalescent or nursing care facilities. <u>Comments:</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) No excavation of the cap or uncontrolled removal/ disturbance of soil/sediment exceeding FDEP Direct Residential Exposure SCTLs (unless Previously approved by FDEP and the Navy). <u>Comments:</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) No digging into or disturbance of any concrete or asphalt covered areas (unless previously approved by the FDEP and the Navy). <u>Comments:</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) No human consumption of groundwater. <u>Comments:</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SWMU 17

	IN COMPLIANCE	NON- COMPLIANCE	SEE COMMENT	NOT APPLICABLE
5) No groundwater usage. <u>Comments:</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) No tampering or damage to any Navy monitoring or remediation systems. <u>Comments:</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7) Periodic assessments addressing MNA and contaminant migration <u>are</u> occurring reports summarizing the findings of each monitoring event and annual analytical results <u>are</u> being submitted to the Navy and the FDEP. <u>Comments:</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I, the undersigned, hereby certify that I am an authorized representative of the above named property owner and that the above described remedies and controls have been complied with for the period noted. Alternately, any known deficiency(ies) and the owner's completed or planned actions to address such deficiency(ies) are described in the attached page explaining the deficiency(ies).

Signature/Printed Name

Date

Mail completed form(s) to:

Chief, RCRA Programs Branch
U.S. Environmental Protection
Agency Region IV
Sam Nunn Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-3104

Florida Dept of Environmental Protection
Bob Martinez Building
Bureau of Waste Cleanup Federal
Facilities Section
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Commanding Officer
NAVFAC SE
Attn: Director, Environmental
Services Business Line
PO Box 30
Jacksonville, FL 32212-0030