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CORRECTIVE MEASURES IMPLEMENTATION PLAN FOR SOLID WASTE MANAGEMENT
UNIT 9 OILY WASTE TREATMENT PLANT NS MAYPORT FL
3/6/2014
TETRA TECH



Document Tracking Number 14JAX0071

March 6, 2014

Project Number 112G00436

Naval Facilities Engineering Command, Southeast
ATTN: Mr. Dana Hayworth (OPC 6)
Remedial Project Manager
135 Ajax Street North
Naval Air Station Jacksonville
Jacksonville, FL 32212-0030

Reference: CLEAN IV Contract Number N62467-04-D-0055
Contract Task Order Number 0033

Subject: Final Corrective Measures Implementation Plans for Solid Waste Management Units 8, 9,
and 51, Naval Station Mayport, Jacksonville, Florida

Dear Mr. Hayworth:

Tetra Tech is pleased to submit the final Corrective Measures Implementation Plans for Solid Waste Management Units 8, 9, and 51 at Naval Station (NAVSTA) Mayport, Jacksonville, Florida that was prepared for the United States Navy, Naval Facilities Engineering Command Southeast under CTO 0033 for the Comprehensive Long-term Environmental Action Navy (CLEAN) IV Contract Number N62467-04-D-0055.

If you have any questions with regard to this submittal, please do not hesitate to contact me by telephone at (904) 730-4669, extension 215, or via e-mail at Gregory.Roof@tetrattech.com.

Sincerely,



Gregory S. Roof
Project Manager

GSR/lc

Enclosure

c: John Winters, FDEP (electronic only)
Paul Malewicki, NAVSTA Mayport (1 hardcopy, 1 CD)
John King, Resolution Consultants (electronic only)
Debra Humbert, Tetra Tech (Letter only)
RDM, Tetra Tech (1 unbound, 1 CD)
CTO 0033 Project File

Tetra Tech, Inc.

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**NAVAL STATION MAYPORT
CORRECTIVE MEASURES IMPLEMENTATION PLAN
SOLID WASTE MANAGEMENT UNIT 9, OILY WASTE TREATMENT PLANT
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) 9, Oily Waste Treatment Plant (OWTP), completed public comment requirements in April 2014. The SB stipulated the implementation of land use controls (LUCs) and long-term monitoring (LTM) to prevent unacceptable human health risks from exposure to surface soil, subsurface soil, and groundwater at SWMU 9. The objective of this Corrective Measures Implementation Plan (CMIP) is to communicate the requirements to implement, maintain, and monitor the corrective measures selected for SWMU 9.

The Florida Department of Environmental Protection (FDEP) issued the current Hazardous and Solid Waste Amendments (HSWA) permit to Naval Station (NAVSTA) Mayport on August 17, 2009 pursuant to RCRA, as amended by HSWA. 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, 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. The requirements set forth in this document, once put into effect, will remain applicable to SWMU 9 during Navy ownership, as well as subsequent ownership of the SWMU. The Navy may amend these requirements with FDEP concurrence.

2. SWMU DESCRIPTION

SWMU 9 (the OWTP) began operation in 1979, treating bilge water and other oily wastes generated at NAVSTA Mayport. Oily fractions of influent are separated from bilge water through the treatment facility at the OWTP. Settled sludge, floating solids, and grease are removed for off-site disposal. The system originally discharged to the OWTP Percolation Pond (SWMU 8); however, when the pond was closed in 1994, the discharge was rerouted to the main wastewater treatment plant. The only reported release of contaminants from SWMU 9 was caused by operator error in 1988 in which oil was released into the OWTP Percolation Pond (SWMU 8). Due to the permeability of soils in the area, the potential for leaks from underground or aboveground systems, the wastes managed in the system, and the presence of hazardous materials in the influent, a potential for impacts to soil and groundwater at SWMU 9 was identified. The treatment facility at SWMU 9 is currently in operation.

The RCRA Facility Investigation (RFI) Addendum and Corrective Measures Study (CMS) for SWMU 9 were submitted to the FDEP in June 2012 and November 2013, respectively. The RFI Addendum concluded that SWMU 9 exceeded FDEP Soil Cleanup Target Levels (SCTLs) for benzo(a)pyrene and equivalents in surface soil and benzo(a)pyrene and equivalents, naphthalene, and 2-methylnaphthalene in subsurface soil. Analytical results exceeded FDEP Groundwater Cleanup Target Levels (GCTLs) for iron.

The corresponding subsurface soil and groundwater LUC areas cover approximately .017 acre and 0.71 acre, respectively (see Attachment 1). The Navy plans to continue to use SWMU 9 for industrial operations. A table detailing the constituents of concern (COCs) follows.

SWMU 9 COCs

Media of Concern	COCs	SCTLs	NAVSTA Mayport BSVs
Subsurface Soil	Benzo(a)pyrene	2.1 mg/kg	0.1 mg/kg
	Naphthalene	120 mg/kg	55 mg/kg
	2-Methylnaphthalene	0.1 mg/kg	N/A
Media of Concern	COCs	GCTLs	NAVSTA Mayport BSVs
Groundwater	Iron	300 µg/L	494 µg/L

BSV = Background Screening Value
 mg/kg = milligram per kilogram
 µg/L = microgram per liter

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 9 until such time as the concentrations of COCs in the soil and groundwater are at levels to allow for unrestricted use and unlimited exposure:

1. Prohibit the excavation and uncontrolled removal of soil with COC concentrations in excess of FDEP Direct Exposure Residential SCTLs unless notification is provided to the FDEP.
2. Prevent exposure to contaminated groundwater underlying SWMU 9 including, but not limited to, potable use, dewatering, irrigation, heating/cooling purposes, and industrial processes, unless notification is provided to the FDEP.
3. 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.
4. Maintain the integrity of any existing or future monitoring or remediation system(s).

c. Monitoring: The following monitoring of the corrective measures will be implemented at SWMU 9:

1. Physical inspections of SWMU 9 will be conducted by the Navy annually to ensure that the implemented LUCs and existing soil cover are being maintained.
2. Monitoring of the groundwater at SWMU 9 per the Sampling and Analysis Plan, approved July 2013, to assess possible contaminant reduction and migration of the following COCs:
 - Iron

4. CORRECTIVE ACTION IMPLEMENTATION

The following implementation plan shall be executed by the Navy to ensure that the corrective measures for SWMU 9 are met and maintained:

- a. **CMIP Distribution:** The CMIP will be placed in the Information Repository within 30 days of receiving FDEP approval. The Information Repository is located at the Jacksonville Public Library – Beaches Branch, 600 3rd Street, Neptune Beach, Florida, 32266, (904) 241-1141.
- b. **Implementing Corrective Actions:** LUCs and LTM are the only planned corrective actions for this site. LUCs will be implemented by NAVSTA Mayport upon approval of the CMIP. LTM will be implemented in conjunction with the modification of the current Sampling and Analysis Plan approved for LTM at NAVSTA Mayport.
- c. **SWMU Inspections:** Annual physical inspections of SWMU 9 will be conducted by the Navy upon the FDEP's approval of this CMIP. The annual inspections will 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. Additional groundwater monitoring may be required once these inconsistent activities have been corrected.
- d. **Compliance Reporting:** The Navy will provide to the FDEP an Annual Corrective Measures Compliance Certificate (consistent with Attachment 2) after the inspection of SWMU 9 has been completed. The Navy will also provide the FDEP a written description of any deficiencies discovered during the annual inspection along with the proposed measures to correct the deficiencies per NAVSTA Mayport's RCRA permit.
- e. **Remedy Reviews:** Remedy reviews are not required under RCRA; however, the Navy will conduct periodic reviews of the corrective measures at SWMU 9 to ensure that the corrective measures remain protective of human health and the environment.
- f. **Notice of Planned Property Conveyances:** The Navy may transfer these procedural responsibilities to another party by contract, property transfer agreement, or through other means; however, the Navy shall retain ultimate responsibility for the integrity of the corrective measures. The FDEP will be notified of any conveyance of the SWMU 9 property to any other agency, person, or entity by the Navy 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 the 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. The Navy and the FDEP shall have the opportunity to review the intended deed restrictions in the event of a property transfer.
- g. **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. Appropriate documentation will be provided by the Navy when the Navy determines, with FDEP concurrence, that one or more of the corrective measures at SWMU 9 are no longer needed for protection of human health and the environment.

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.G.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

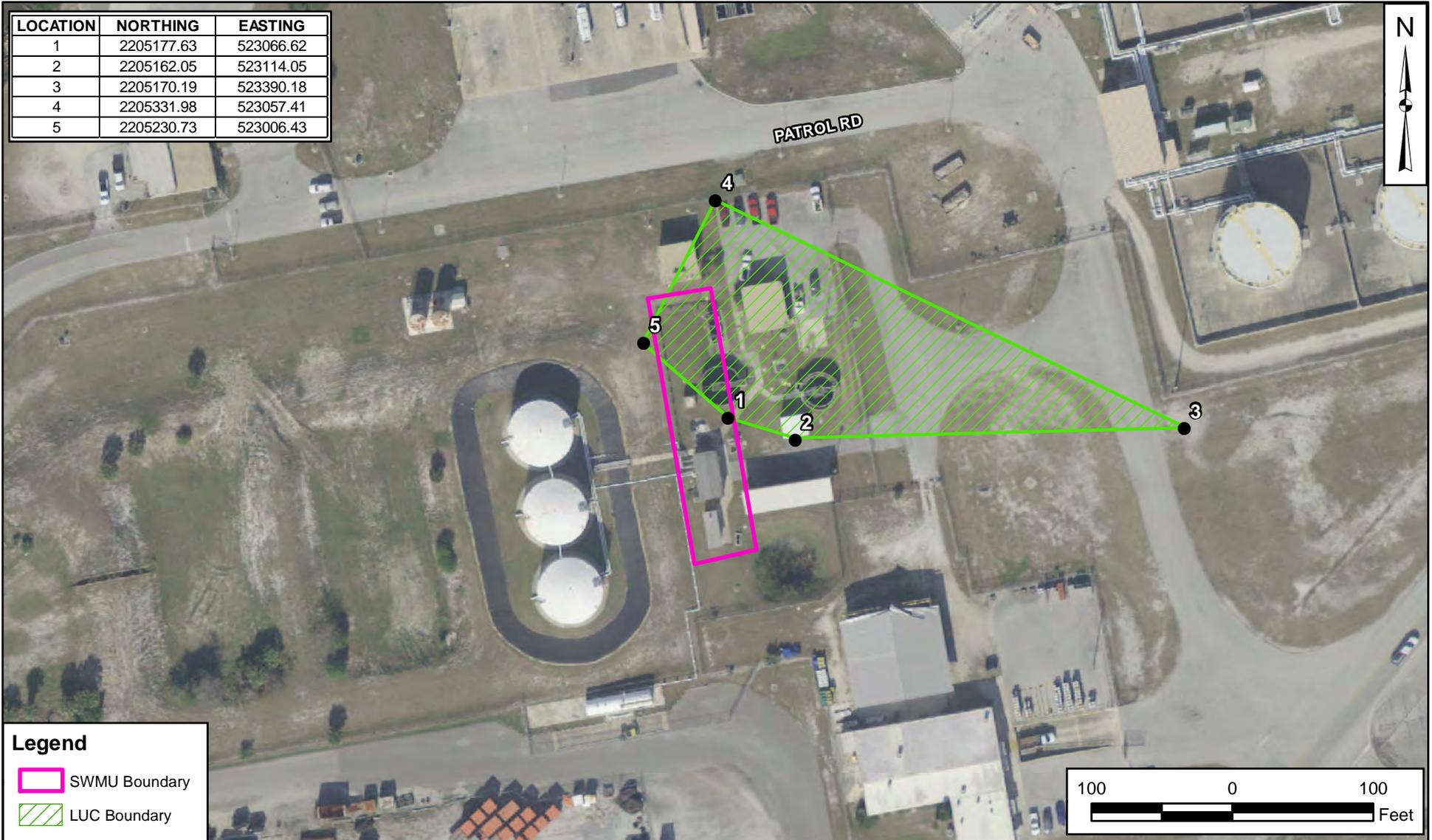
Tetra Tech, Inc., 2014. Corrective Measure Study for Solid Waste Management Units 8, 9, 11, and 51, Naval Station Mayport, Jacksonville, Florida. January.

Tetra Tech, Inc., 2014. Statement of Basis for SWMU – Oily Waste Treatment Plant, Naval Station Mayport, Jacksonville, Florida. January.

ATTACHMENT 1

LUC FIGURES

LOCATION	NORTHING	EASTING
1	2205177.63	523066.62
2	2205162.05	523114.05
3	2205170.19	523390.18
4	2205331.98	523057.41
5	2205230.73	523006.43



Legend

-  SWMU Boundary
-  LUC Boundary

DRAWN BY	DATE
J. MADDEN	10/21/13
CHECKED BY	DATE
D. FEARS	10/21/13
COST/SCHEDULE AREA	

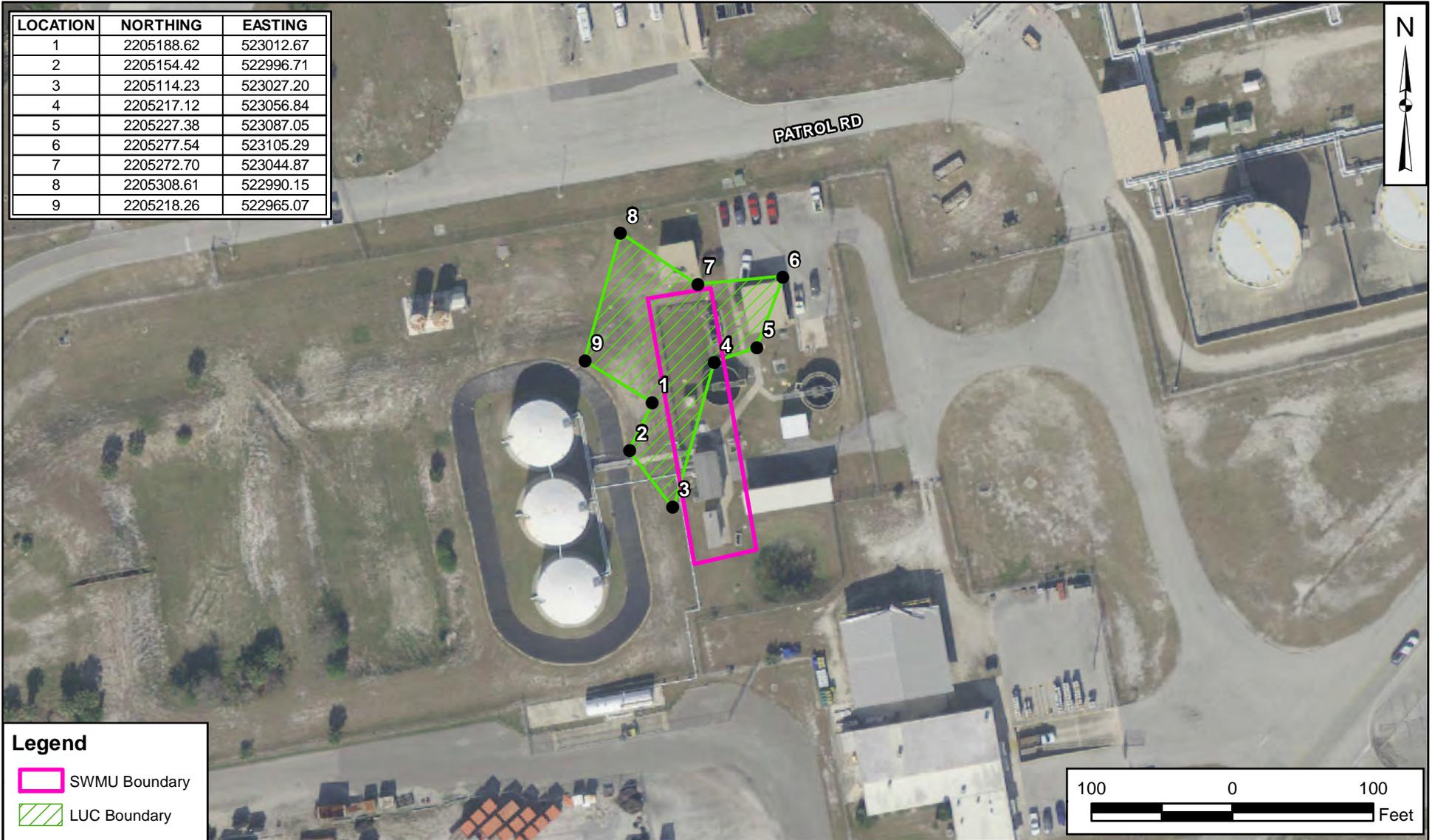
SCALE
AS NOTED



GROUNDWATER LUC BOUNDARY MAP
SWMU 09 - OILY WASTEWATER TREATMENT PLANT
NAVAL STATION MAYPORT
MAYPORT, FLORIDA

CONTRACT NUMBER CTO	
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. 1	REV 0

LOCATION	NORTHING	EASTING
1	2205188.62	523012.67
2	2205154.42	522996.71
3	2205114.23	523027.20
4	2205217.12	523056.84
5	2205227.38	523087.05
6	2205277.54	523105.29
7	2205272.70	523044.87
8	2205308.61	522990.15
9	2205218.26	522965.07



Legend

-  SWMU Boundary
-  LUC Boundary

DRAWN BY	DATE
J. MADDEN	10/21/13
CHECKED BY	DATE
D.FEARS	10/21/13
COST/SCHEDULE AREA	
SCALE AS NOTED	



SOIL LUC BOUNDARY MAP
 SWMU 09 - OILY WASTEWATER TREATMENT PLANT
 NAVAL STATION MAYPORT
 MAYPORT, FLORIDA

CONTRACT NUMBER	
CTO	
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO.	REV
1	0

ATTACHMENT 2
ANNUAL CORRECTIVE MEASURES COMPLIANCE CERTIFICATE

Solid Waste Management Unit (SWMU) 9

ANNUAL CORRECTIVE MEASURES COMPLIANCE CERTIFICATE

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

SWMU and LUC boundaries are shown on the Attachments in the Corrective Measures Implementation Plan (CMIP) for SWMU 9.

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"/>

Solid Waste Management Unit (SWMU) 9

	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 groundwater sampling addressing contaminant migration and achievement of site closure <u>are</u> occurring reports summarizing the findings of each monitoring event and the 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