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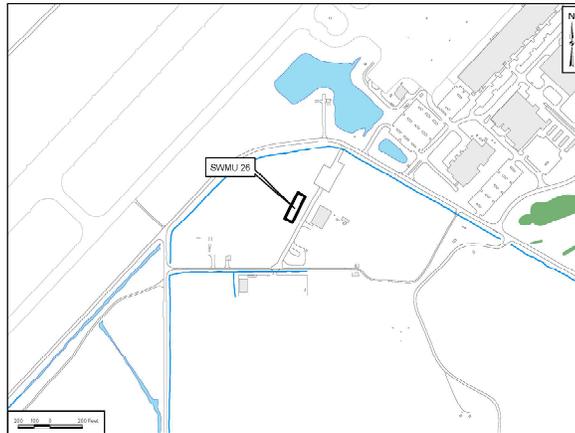
STATEMENT OF BASIS FOR SOLID WASTE MANAGEMENT UNIT 26 NS MAYPORT FL
4/14/2014
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STATEMENT OF BASIS
Solid Waste Management Unit 26
Naval Station Mayport
Jacksonville, Florida



USEPA ID #FL9 170 024 260

April 14, 2014



Facility/Unit Type: Naval Station

Contaminants: Soil – Buried Waste. No Contaminants Exceed Residential Cleanup Target Levels
Groundwater – No Contaminants Exceed Cleanup Target Levels

Media: Soil and Groundwater

Corrective Action: Soil – Land Use Controls (LUCs) and Site Monitoring; Groundwater – No Action

SUMMARY

The proposed corrective action for **Solid Waste Management Unit (SWMU) 26** at the Naval Station (NAVSTA) Mayport include **land use controls (LUCs)** and site monitoring for **soils** and **No Action** for **groundwater**. SWMU 26 was reported to be used in 1963 for a one-time disposal of scrap metal and construction debris transported to NAVSTA Mayport from the Green Cove Springs Naval Facility. No **contaminants of concern (COCs)** were identified during sampling events at SWMU 26.

Land use at SWMU 26 is to remain industrial due to the presence of buried waste. Non residential 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 pre-schools, elementary schools, and secondary schools; playgrounds; and adult convalescent and nursing care facilities.

The public is invited to comment on this proposed corrective action or any other **corrective measure** alternative including those not previously studied. Information on how the public may participate in this

decision-making process is provided in the Public Participation section of this document.

INTRODUCTION

Pursuant to the **Resource Conservation and Recovery Act (RCRA)**, as amended by the 1984 **Hazardous and Solid Waste Amendments (HSWA)**, the **Florida Department of Environmental Protection (FDEP)** issued the renewed HSWA **permit** to NAVSTA Mayport on August 17, 2009.

This **Statement of Basis (SB)** identifies the proposed corrective action for SWMU 26, explains why the selected corrective action was chosen, solicits public review and comment on this decision, and provides information as to how the public can be involved in the corrective action selection process. Additional details regarding the facility, environmental investigations, and the evaluation of the corrective measure alternatives may be found in the **RCRA Facility Assessment-Sampling Visit (RFA-SV)**, and **Corrective Measures Study (CMS)**. These documents are kept as part of the Administrative Record at the **Information Repository**. Refer to the Public Participation section of this document for their location. A glossary, which defines some of the

technical terms contained herein, is included at the end of this document.

The corrective measures reflected in this SB are those proposed by the United States Navy and the FDEP for implementation at SWMU 26. Changes to the proposed corrective measure or a change from the proposed corrective action to another appropriate solution will require public participation as described in this document.

PROPOSED CORRECTIVE ACTION

The proposed corrective measure for soil is the implementation of institutional controls and maintenance of the existing soil cover. Land use at SWMU 26 would remain industrial, and unauthorized soil disturbance would be prohibited due to the presence of buried waste. The implemented institutional controls and LUCs would serve to protect human health by precluding exposure to contamination and serve to prevent contaminant migration to other areas of the base. The proposed corrective measure for groundwater is No Action.

As required by NAVSTA Mayport's RCRA permit, the Navy will develop a **Corrective Measures Implementation Plan (CMIP)** for this SWMU, with FDEP concurrence, following selection of the final corrective measure. The CMIP will specify procedures for the future long-term oversight and maintenance of the institutional controls and LUCs to be imposed in the area of SWMU 26. The facility will ensure that these or similar instructions, processes, and requirements are complied with for all activities at SWMU 26 under the NAVSTA Mayport site approval process and/or the excavation permit process. NAVSTA Mayport will also conduct periodic inspections to confirm that the LUCs are complied with and report the results of those inspections to the FDEP. All processes, site inspections, and reporting activities will be conducted pursuant to specific requirements to be set forth in an approved CMIP for the site. The proposed LUC corrective action at SWMU 26 will ensure future protection of human health and the environment.

FACILITY BACKGROUND

NAVSTA Mayport is located near the town of Mayport within the city limits of Jacksonville, Florida, in northeastern Duval County, on the southern shore of the confluence of the St. Johns River and the Atlantic Ocean (see Figure 1). SWMU 26 is located in the southwestern portion of the NAVSTA Mayport (see Figure 2).

Figure 1. Naval Station Mayport Location Map

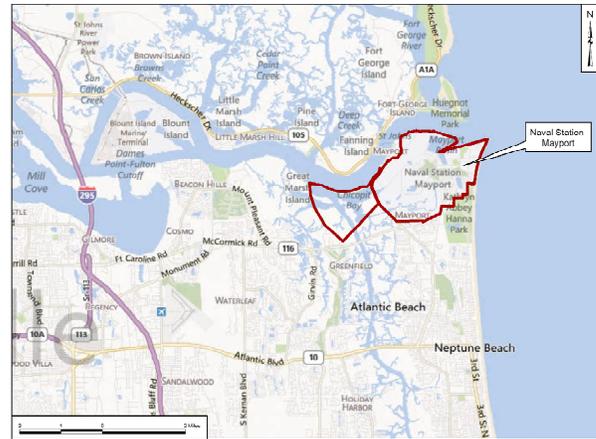
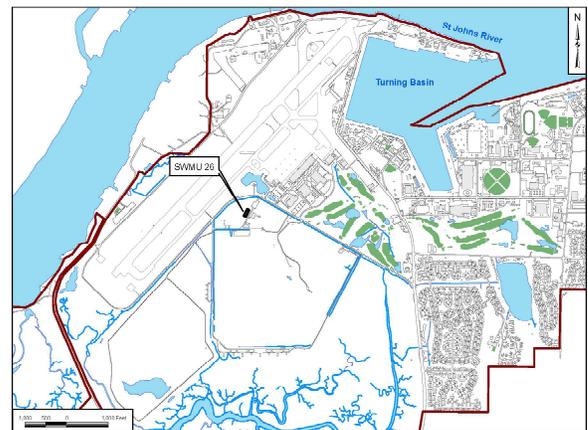


Figure 2. SWMU Location Map



SWMU 26 (Landfill E) was used as a one-time trench-and-fill disposal site in 1963. The trench was approximately 100 feet long by 20 feet wide and 8 feet below ground surface. The trench was filled with scrap metal and construction debris transported to NAVSTA Mayport from the Green Cove Springs Naval Facility. The trenches excavated at the landfill site intersected the water table, and materials were placed below the water table. SWMU 26 is currently covered with soil and supports vegetation. No hazardous wastes were disposed at the site.

The investigation at SWMU 26 was conducted by ABB Environmental Services, Inc. between 1992 and 1994 as part of the Group II RFA-SV. Field activities consisted of the collection of surface and subsurface soil samples, installation of monitoring wells, and collection of groundwater samples. During the RFA-SV, four surface soil and four subsurface soil samples were collected and analyzed by a fixed-base laboratory. Additional surface and subsurface soil samples were taken at SWMU 26 in 1994 and were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), metals, and cyanide. No surface soil

or subsurface soil borings at SWMU 26 exceeded the FDEP Soil Cleanup Target Levels (SCTLs) or NAVSTA Mayport Background Screening Values (BSVs); therefore, no COCs were identified for this site.

Initial groundwater samples taken in 1994 were analyzed for VOCs, SVOCs, pesticides, PCBs, metals, and cyanide. Groundwater sample results from the 1994 sampling were compared to the FDEP Groundwater Cleanup Target Levels (GCTLs) and the NAVSTA Mayport BSVs. Iron and manganese exceeded the FDEP GCTLs and NAVSTA Mayport BSVs; however, wells were identified as being downgradient from SWMU 2. The groundwater at SWMU 2 is in long-term monitoring (LTM); thus, no COCs were identified for SWMU 26.

SUMMARY OF FACILITY RISKS

The FDEP Cleanup Target Levels (CTLs) are based upon human health risk criteria. Sample results that exceed the FDEP CTLs indicate a potential concern for SWMU 26.

Human Health Risk Assessment

Surface Soil. None of the surface soil sample results exceeded FDEP SCTLs at SWMU 26.

Subsurface Soil. None of the subsurface soil sample results exceeded FDEP SCTLs at SWMU 26.

Groundwater. None of the groundwater sampling results associated with SWMU 26 exceeded FDEP GCTLs.

Ecological Assessment

An assessment of ecological impacts was not performed for SWMU 26 in the RFA-SV report.

SCOPE OF CORRECTIVE ACTION

No COCs are identified in the soil at SWMU 26; however, buried waste is still present in the landfill area. Therefore, the proposed corrective action is implementation and maintenance of LUCs.

No COCs were identified for groundwater at SWMU 26. The proposed corrective action for groundwater is No Action.

SUMMARY OF ALTERNATIVES

An evaluation of the following corrective measure alternatives for SWMU 26 was conducted in accordance with the final RCRA Corrective Action Plan Guidance (United States Environmental Protection Agency

[USEPA], May 31, 1994, Office of Solid Waste and Emergency Response [OSWER] Directive 9902.3-2A).

Alternatives

Soil Alternative 1: No Action. The No Action alternative addresses SWMUs that do not require remediation.

Soil Alternative 2: Institutional Controls, LUCs, and Site Monitoring. Alternative 2 would maintain the existing 2-foot soil cover and vegetation and require it to remain in place. Land use at SWMU 26 would remain industrial, and soil disturbance would be prohibited. The implemented LUC would serve to protect human health by precluding exposure to contamination and serve to prevent contaminant migration to other areas of the station. This alternative would impose LUCs in the form of unauthorized soil disturbance prohibition at the SWMU. Once implemented, certain procedures would be set in place to ensure that the LUCs continue to be maintained via preparation of a SWMU-specific CMIP. This implementation plan will provide for periodic inspection and reporting requirements.

Groundwater Alternative 1: No Action. The No Action alternative serves as a baseline consideration or addresses SWMUs that do not require remediation.

EVALUATION OF THE PROPOSED REMEDY AND ALTERNATIVES

The identified corrective measure alternatives were evaluated using the criteria contained in the final RCRA Corrective Action Plan Guidance (USEPA, May 31, 1994, OSWER Directive 9902.3-2A). Four criteria and five other factors were used to evaluate the corrective measure alternatives. These criteria and factors are as follows:

Criteria

- Protect Human Health and the Environment
- Attain Media Cleanup Standards
- Source Control
- Waste Management Standards

Other Factors

- Long-term Reliability and Effectiveness
- Reduction in Toxicity, Mobility, or Volume
- Short-term Effectiveness
- Implementability
- Cost

Table 1 summarizes the evaluation of the corrective measure alternatives for SWMU 26 as performed in the CMS report.

TABLE 1. EVALUATION OF SOIL CORRECTIVE MEASURE ALTERNATIVES FOR SWMU 26

Soil Alternative 1: No Action	Soil Alternative 2: Institutional Controls, Cover, and Site Monitoring
Protect Human Health and the Environment	
Would not be protective of workers or hypothetical future residents because it would not restrict future use to industrial activities.	Would be protective of workers and would restrict the future use from residential or residential-like use.
Attain MCS	
May attain residential standards over time, but the SWMU already meets industrial standards.	LUCs would not attain clean-up standards for residential use. LUCs would manage unacceptable risks.
Source Control	
No new source control would be implemented.	No new source control would be implemented.
Comply with Waste Management Standards	
No standards for waste management apply as no waste would be generated.	No standards for waste management apply as no waste would be generated.
Long-Term Reliability and Effectiveness	
Would not provide long-term reliability and effectiveness because it would not prevent future residential development.	LUCs would provide long-term reliability and effectiveness.
Reduction in Toxicity, Mobility, or Volume through Treatment	
Reduction of toxicity may occur through natural processes, but would not be monitored.	Reduction of toxicity may occur through natural processes over a long period of time, but would not be monitored.
Short-Term Effectiveness	
No short-term risks to workers, the community, or the environment.	No short-term risks to workers, the community, or the environment.
Implementability	
Would be readily implementable since no action would occur.	Would be readily implementable.
Cost (Net Present Worth over a 30 year period)	
No corrective action would occur; therefore, there would be no costs.	\$96,000

Shading indicates Proposed Alternative.

RECOMMENDATIONS

Based on the screening of technologies and assessment of various alternatives performed, Soil Alternative 2 is preferred for addressing the subsurface soil contamination.

Soil Alternative 2 would implement LUCs to restrict the site to non-residential use only, and it would also prohibit any unauthorized surface and subsurface soil disturbance at the SWMU. No contaminants in surface or subsurface soil exceeded SCTLs for industrial direct exposure; however, buried waste is still present at the site. Without any industrial exceedances, LUCs would provide adequate and cost-effective protection of human health and the environment.

PUBLIC PARTICIPATION

To make a final decision and incorporate corrective measures into the HSWA permit, the FDEP is soliciting

public review and comment on this SB for the proposed corrective action for SWMU 26 at NAVSTA Mayport. The 40 *Code of Federal Regulations* (CFR) 124.10(6) requires a 45-day comment period for a permit modification request made by the permittee under RCRA. The FDEP has undertaken the lead role on this request initiated by the Navy (the permittee). The comment period will begin on April 14, 2014, and will be published in the *Jacksonville Daily Record*.

Copies of the RFA-SV, CMS report, and the SB are available for public review at the Information Repository located at the Jacksonville Public Library – Beaches Branch, 600 3rd Street, Neptune Beach, FL, 32266, telephone (904) 241-1141.

A public hearing will be held if one is requested. To request a public hearing, to obtain more information about this SB, or to submit written comments, please contact Paul Malewicki or John Winters (contact information provided below).

All comments must be postmarked no later than May 30, 2014.

CONTACT

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Next Steps

Unless otherwise indicated, the FDEP will modify the HSWA permit to incorporate the final decision on the RCRA permit modification request when the permit is renewed. The final decision will detail the corrective measure chosen for SWMU 26 and will consider comments received during the **public comment period** in a **Response to Comments Summary**.

When the permit is modified, notice will be given to the Navy and to each person who has submitted written comments or who has requested notice of the final decision. The final permit decision shall become effective 30 days after the issuance of the notice of the decision unless a later date is specified or review is requested under 40 CFR 124.19. If no comments are received requesting a change in the draft permit, the final permit modification shall become effective immediately upon issuance.

KEY WORDS

BSV	Background Screening Value
CFR	Code of Federal Regulations
CMIP	Corrective Measures Implementation Plan
CMS	Corrective Measures Study
COC	Contaminant of Concern
FDEP	Florida Department of Environmental Protection
GCTL	Groundwater Cleanup Target Level
HSWA	Hazardous and Solid Waste Amendments
LTM	Long-term Monitoring
LUC	Land Use Control

NAVSTA	Naval Station
OSWER	Office of Solid Waste and Emergency Response
PCB	Polychlorinated Biphenyl
RCRA	Resource Conservation and Recovery Act
RFA-SV	RCRA Facility Assessment-Site Visit
SB	Statement of Basis
SVOC	Semivolatile Organic Compound
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

GLOSSARY

Aquifer: An underground layer of permeable rock, sediment, or soil capable of storing and transporting water within cracks and pore spaces or between grains.

Contaminant of Concern (COC): A chemical detected in environmental media at a concentration that may adversely affect human health or ecological receptors.

Corrective Measure: The actual construction or cleanup phase following the selection of cleanup alternatives.

Corrective Measures Implementation Plan (CMIP): A written plan normally developed after a decision document that required one or more LUCs or Engineering Controls for some particular area (operable unit, contaminated unit, and/or solid waste management unit). The CMIP (1) identifies each LUC/EC objective for that area (e.g., to restrict public access to the area for recreational use) and (2) specifies those actions required to achieve each identified objective (e.g., install/maintain a fence, post warning signs, record notice in deed records). CMIPs specify what must be done to impose and maintain the required LUCs/ECs and are therefore analogous to design and/or operation and maintenance plans developed for active remedies.

Corrective Measures Study (CMS): An engineering analysis and report that identifies, evaluates, and compares the most appropriate technical approaches for addressing contamination at a SWMU.

Florida Department of Environmental Protection (FDEP): The state agency responsible for implementing Florida environmental laws.

Groundwater: Water found within an **aquifer**.

Hazardous and Solid Waste Amendments (HSWA): Amendments to RCRA, passed in 1984, which greatly expand the nature and complexity of activities covered under RCRA.

GLOSSARY

Human Health Baseline Risk Assessment: Study to determine the likelihood that a given exposure or series of exposures may have damaged or will damage human health.

Information Repository: A public file containing technical reports, reference documents, and other materials relevant to the SWMU cleanup.

Land Use Control (LUC): Is broadly interpreted to mean any restriction or control arising from the need to protect human health and the environment, that limits use of and/or exposure to any portion of a given property, including water resources. This term encompasses institutional controls, such as those involving real estate interests, governmental permitting, zoning, public advisories, deed notices, and other legal restrictions. The term may also include restrictions on access, whether achieved by means of engineered barriers such as a fence or concrete pad, or by human means, such as the presence of security guards. Additionally, the term may involve both affirmative measures to achieve the desired restriction (e.g., night lighting of an area) and prohibitive directives (e.g., no drilling of drinking water wells).

No Action: Recommendation or decision indicating no contaminants above regulatory limits.

Permit: A RCRA permit, issued for NAVSTA Mayport, establishes the facility's operating conditions for managing hazardous waste.

Public Comment Period: A legally required opportunity for the community to provide written and oral comments on a proposed environmental action.

RCRA Facility Assessment-Site Visit (RFA-SV): A site investigation regulated under RCRA that is used to determine the nature and extent of contamination at a particular location.

Resource Conservation and Recovery Act (RCRA) of 1976: Requires each hazardous waste treatment, storage, and disposal facility to manage hazardous waste in accordance with a permit issued by the USEPA or a state agency that has a hazardous waste program approved by the USEPA.

Response to Comments Summary: A document summarizing the public comments received and the responses to the comments.

Statement of Basis (SB): A public participation document detailing the proposed corrective measure at an SWMU.

United States Environmental Protection Agency (USEPA): The federal agency responsible for implementing United States environmental laws.

**Comments on the Statement of Basis for
Solid Waste Management Unit 26**

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