

N60201.AR.000302  
NS MAYPORT  
5090.3a

ENVIRONMENTAL RESTORATION PROGRAM FACT SHEET 5 THE RESOURCE  
CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION NS MAYPORT FL  
3/1/1996  
NAVAL STATION MAYPORT



# NAVAL STATION MAYPORT

## Environmental Restoration Program

# 5

This fact sheet is one in a series informing interested citizens of the environmental cleanup at Naval Station Mayport. Fact sheets will be produced at regular intervals and in response to public interest. Distribution is coordinated through the Public Affairs Office at Naval Station Mayport, telephone: (904) 270-5226. Please call Cheryl Mitchell in the Staff Civil Engineering Office at Naval Station Mayport with further questions about the environmental cleanup, telephone: (904) 270-6730.

### FACT SHEET 5: The Resource Conservation and Recovery Act (RCRA) Facility Investigation

#### INSTALLATION RESTORATION PROGRAM

As described in earlier fact sheets, Naval Station (NAVSTA) Mayport is investigating and evaluating areas known as solid waste management units (SWMUs) where releases of chemicals and petroleum products may have occurred in years past. These environmental investigations are conducted under the Department of Defense's Installation Restoration (IR) program and meet the requirements of the Resource Conservation and Recovery Act (RCRA).

Under the IR program, environmental investigations and cleanups follow a step-by-step approach as required by law. In general, the steps are to:

- identify potential areas of contamination;
- determine the type and extent of contamination through detailed investigations;
- evaluate cleanup actions; and
- design and construct the selected action.

As shown on Figure 1, information from each step provides the basis for the next step or set of actions. Each area being investigated will go through all of the steps unless it is found to pose no threat to human health or the environment and, therefore, needs no further action (NFA). Decisions are made by the Navy, Florida Department of Environmental Protection (FDEP), and the U.S. Environmental Protection Agency

(USEPA). See Fact Sheets 1, 2, and 4 for more information on the RCRA and IR programs.

In Fact Sheet 4, the first step in the cleanup program, the RCRA Facility Assessment and Sampling Visit, was described. Based on that initial investigation, sites or areas may require further investigation to assess fully any suspected contamination. This fact sheet describes the next step in the cleanup process, known as the RCRA Facility Investigation (RFI), where detailed studies are conducted to determine the nature and extent of any contamination found at a site. At NAVSTA Mayport, RFIs have been conducted at the Group I and Group II SWMUs. This fact sheet summarizes the results of these investigations.

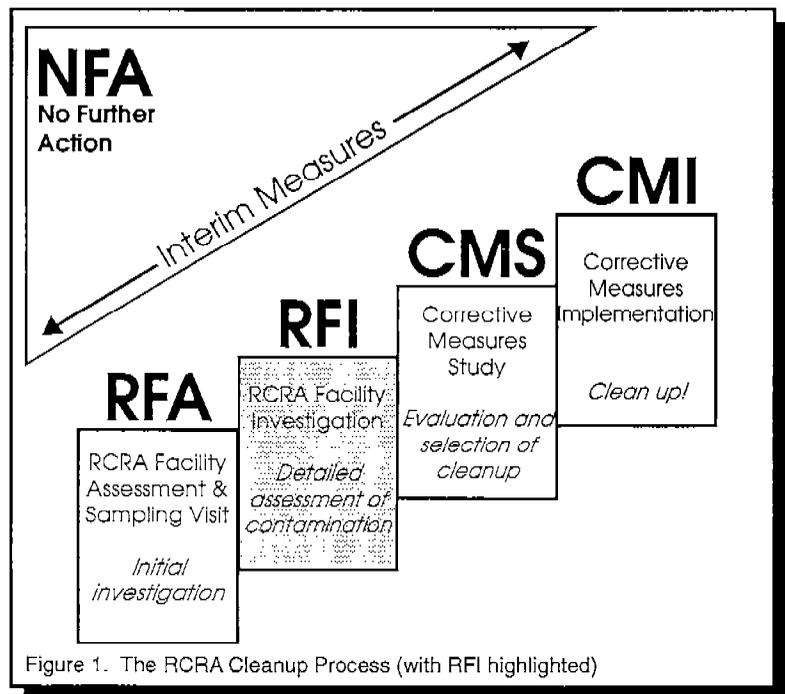


Figure 1. The RCRA Cleanup Process (with RFI highlighted)

## STATUS OF THE IR PROGRAM AT NAVSTA MAYPORT

Since 1989, NAVSTA Mayport has identified more than 50 areas with suspected releases of hazardous chemicals or petroleum products. RFIs have been initiated at areas where releases of chemicals and petroleum products have been confirmed.

The RFIs at NAVSTA Mayport are conducted in phases as outlined in the Corrective Action Management Plan (CAMP) (revised October 1995). Individual SWMUs are grouped together based on geographic location, similar waste management activities, and the potential for similar corrective measures. The CAMP outlines which groups will be investigated first, the proposed schedule for field investigations, and when reports will be submitted. The CAMP is available for review at the Information Repository, located in the Beaches Branch Public Library.

## WHAT HAPPENS DURING THE RFI?

The RFI is a detailed study during which a great deal of environmental data are collected and analyzed. The purpose of the RFIs at NAVSTA Mayport is to:

- determine the type and extent of contamination from SWMUs;
- identify potential pathways in the environment (soil, surface water, sediment and groundwater) where contaminants may travel;
- identify potential receptors (humans, wildlife, plants, etc.) that may be exposed to contaminants;
- determine if the areas pose a potential risk to human health or the environment; and
- determine if corrective measures or cleanup actions are required to reduce any potential risks.

A number of studies are conducted in the field to fully understand site conditions and determine the extent of contamination. The RFI field investigations at Groups I and II occurred from January 1992 through April 1992, December 1992 through February 1993, and March 1994 through December 1994. Figure 2 shows the locations of the Group I and II SWMUs.

Data were collected by installing groundwater wells; collecting soil, sediment, surface water, and groundwater samples; and performing various tests

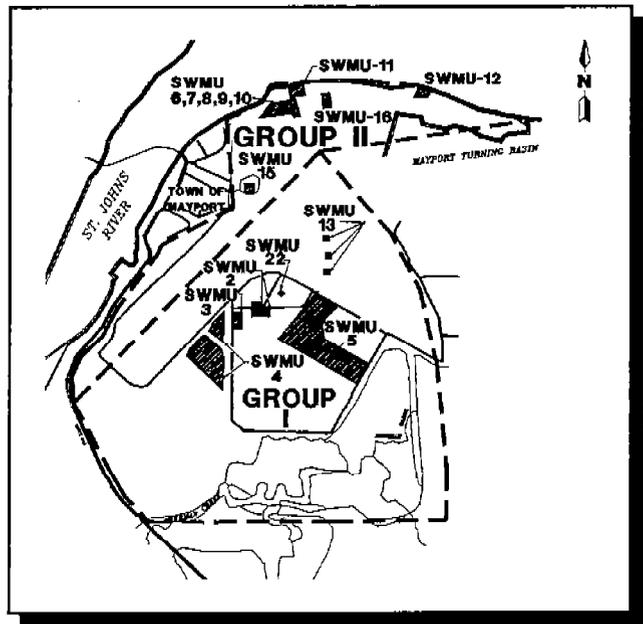


Figure 2. Group I and II SWMU locations

to evaluate groundwater and aquifer properties. Additional activities included surveying groundwater elevations, studying the tidal influence on groundwater levels, and conducting a biological inventory of terrestrial and aquatic habitats. The samples were then sent to a certified laboratory for chemical analysis to determine the presence and levels of suspected contaminants.

During the RFI, a Human Health Risk Assessment and an Ecological Risk Assessment were conducted. The main goal of these assessments was to evaluate whether contaminants present in the environment (i.e., surface and subsurface soil, surface water, and groundwater) present a current or potential future threat to human health or the environment. The data received from the RFI field investigations aided in assessing the risks associated with contaminants found at Groups I and II. The risk assessment results were then used to make decisions concerning the corrective measures, or cleanup alternatives, at Groups I and II.

A team of scientists, engineers, risk assessors, and other technical specialists have reviewed the data, evaluated site conditions and potential risks from exposure to chemicals at the sites, and have made recommendations for what further action is needed. FDEP and USEPA have reviewed the draft reports issued in 1995. Final reports have been submitted, and they will be available for public review at the Information Repository or by contacting Cheryl Mitchell, Staff Civil Engineer, at (904) 270-6730, ext. 31.

## RFI RESULTS

The results of Group I and II investigations indicate that two of the areas investigated require further engineering evaluation and cleanup. This recommendation was determined based on data reviewed during the risk assessments and the SWMUs' potential to pose a risk to human health or the environment. The next step at these sites is to conduct a Corrective Measures Study (CMS). The CMS develops, evaluates, and recommends alternatives or corrective measures for cleanup of the SWMU.

The table below summarizes the investigation and cleanup status of the SWMUs investigated during the RFIs. Some sites require no further action because there is little or no risk to human health or the environment from exposure to the contaminants, while others were recommended for more sampling or an interim measure (SWMUs 4, 6, and 7).

An interim measure is a cleanup action that can be started quickly to stabilize or remove known contamination while further evaluation continues. While the Oily Waste Treatment Plant (OWTP) has been recommended for a CMS, an interim measure is underway to recover free-phase petroleum products at SWMUs 6 and 7. Sumps were installed during July 1995 and continue to operate. Monitoring is conducted to evaluate the effectiveness of the interim measure.

The CMS for Group II (January 1996) is completed and available for public review. From the CMS, the Navy will recommend the preferred cleanup action and hold a public comment period. After all comments are considered, the design, construction, and actual cleanup will begin at the Group II SWMUs.

Group I SWMUs			
SWMU Number	SWMU Name	Results from RFI	Recommendation
2, 3, 4, 5, and 22	Landfill Area	Metals, including arsenic and beryllium, and organic chemicals (pesticides) were detected in soils and sediments above State and Federal standards. Organic compounds and metals were also detected in groundwater.	To avoid possible exposure to harmful sediments, an Interim Measure to fill the ditch in the vicinity of SWMU 4 and more ecological sampling is recommended. Since groundwater is not a current or potential drinking water source, no further action is proposed.
13	Old Firefighting Training Area	No contaminants associated with past training activities were detected in soils. Metals were detected in groundwater (antimony, iron, and manganese).	No further investigation.

Group II SWMUs			
SWMU Number	SWMU Name	Results from RFI	Recommendation
6, 7, 8, 9, 10, and 11	Oily Waste Treatment Plant Area	Oil and petroleum products have been released from SWMUs 6, 7, and 11 and are affecting groundwater quality. Free-phase petroleum products were detected in groundwater downgradient from the area. Metals, solvents, and petroleum products were detected in groundwater at SWMU 8, Percolation Ponds. No releases were detected at SWMUs 9 and 10.	Corrective Measures Study (CMS) for soil. An interim measure, initiated in July 1995, is recovering free-phase petroleum products from the groundwater at SWMUs 6 and 7. No further investigation is required at SWMUs 9 and 10.
12	Neutralization Basin	No releases were detected from the pond. However, a reported release of sodium hydroxide from a tank has possibly affected groundwater.	No further investigation. However, a separate assessment (soil sampling) of the reported sodium hydroxide release will be conducted.
15	Old Pesticide Storage Area	Pesticides were detected in soils and groundwater.	CMS for soil and groundwater.
16	Old Transformer Yard	Low concentrations of polychlorinated biphenyls (PCBs) were detected in soils. PCBs are often used in transformers and may have been stored at the site.	Soils were removed and area paved for a parking lot. No further investigation.

---

## For More Information...

The Navy is committed to keeping the channels of communication open and keeping you up to date on our cleanup activities.

Information about the cleanup is readily available to the public in the **Information Repository**. The Information Repository contains all the public documents related to the cleanup at Naval Station Mayport, including site information, program activities, and investigation results. The Information Repository is located at the following site:



Beaches Branch Public Library  
600 Third Street  
Neptune Beach, Florida 32233  
(904) 241-1141

For further information about the environmental cleanup program at Naval Station Mayport, or if you would like to be added to the mailing list to receive future fact sheets or our environmental newsletter *Navy Green*, contact:

Cheryl Mitchell, Code N4E4  
Staff Civil Engineer, Environmental  
Naval Station Mayport  
Mayport, Florida 32228-0067  
(904) 270-6730, extension 31

Information about the cleanup program at Naval Station Mayport is also presented in public meetings of the station's Restoration Advisory Board (RAB). The RAB meets regularly to discuss the status of cleanup activities, upcoming actions, and cleanup issues. The meetings are open to the public, and the public is encouraged to attend. Meetings are advertised in the Shorelines edition of the *Florida Times-Union*.

Contract No. N62467-89-D-0317

---

Public Affairs Officer  
P.O. Box 280032  
Naval Station Mayport  
Mayport, FL 32228-0032

Bulk Mail  
U.S. Postage  
**PAID**  
Permit #2256  
Jacksonville, FL