



Coastal Systems Station Panama City, Florida

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Installation Restoration (IR) Program

This fact sheet is one in a series informing interested citizens of the environmental investigations at Coastal Systems Station, Panama City, Florida. Fact sheets will be produced at program milestones and in response to other items of public interest. Distribution is coordinated through the Public Affairs Office at Coastal Systems Station, telephone: (904) 235-5107.

FACT SHEET 1: Introduction to the IR Program and Environmental Investigations at Coastal Systems Station

THE HISTORY AND MISSION OF COASTAL SYSTEMS STATION

Coastal Systems Station (CSS) is a major research, development, test, and evaluation laboratory of the Naval Surface Warfare Center, Dahlgren Division. The site was established in 1942 as a safe harbor for World War II convoy ships and later became an amphibious landing craft operations school. Research and development began in 1945 for the technology of mine and undersea countermeasures, amphibious warfare, diving, and other naval coastal missions.

These activities from the 1940s through the 1970s required the use and storage of industrial chemicals and petroleum products. These materials included solvents, degreasers, and waste oil. Years ago, little was known about the long-term effects of these chemicals and petroleum products on human health and the environment and their use and disposal were not appropriately regulated. Through spills, leaks, and conventional disposal practices of the past, these materials and waste products created environmental conditions unacceptable by today's standards.

THE INSTALLATION RESTORATION PROGRAM

Before Federal environmental cleanup laws were passed by Congress, the Department of Defense (DOD) developed a proactive program to address the environmental conditions created by releases of chemicals and petroleum products, or contaminants, from past spills and disposal practices. The Installation Restoration (IR) Program is an environmental program of investigation and cleanup being conducted at military installations nationwide.

RESOURCE CONSERVATION AND RECOVERY ACT

The Resource Conservation and Recovery Act of 1976 (RCRA) and the Hazardous and Solid Waste Amendments of 1984 (HSWA) provide a regulatory framework for the proper management of chemicals and petroleum products (i.e., hazardous wastes). This Federal law establishes a tracking system for these wastes from its generation through its ultimate disposal. It also provides for a permitting system for facilities that treat, store, and dispose of these materials to ensure proper operation.

The 1984 amendments greatly expanded the scope of RCRA to require cleanups, or corrective actions, at facilities that are seeking or are subject to a RCRA permit, whenever hazardous substances are released into the environment. The RCRA corrective action process identifies solid waste management units (SWMUs) and areas of concern (AOCs), determines the type and extent of contamination, and identifies and evaluates appropriate solutions, or corrective measures, to clean up the site.

Solid Waste Management Unit - A waste management unit from which chemical and petroleum wastes may migrate, even if the unit was not intended for the treatment, storage, or disposal of these wastes. Any spill area would be considered a SWMU.

Area of Concern - An area in which the available information is insufficient to determine if it is a SWMU. However, a release is suspected and further investigation is warranted.

Coastal Systems Station Installation Restoration (IR) Program

STRUCTURE OF THE IR PROGRAM AT CSS

Under the IR Program, Navy facilities conduct environmental cleanup activities through a proactive, step-by-step approach. The activities include an initial site identification and investigation, a detailed assessment of contamination, and an evaluation and selection of cleanup, or corrective actions.

The corrective action process has four main components or stages. Information from each stage provides the basis for the next stage or set of actions. Each area being investigated will go through all of the stages unless an area is found to pose no threat to human health or the environment and, therefore, needs no further action. Decisions are made on a case-by-case basis by the Navy and the regulatory agencies. The chart on the following page shows the progression of stages in the corrective action process.

At CSS, environmental investigations began in the early 1980s. After receipt of a RCRA permit in 1985, CSS has conducted activities according to the RCRA corrective action process outlined on Page 3. In 1987, a RCRA Facility Assessment (RFA) was conducted and identified 15 areas with suspected releases. This study recommended that seven SWMUs and two AOCs be further investigated during a RCRA Facility Investigation (RFI). The other six areas did not require further action.

STATUS OF THE PROGRAM AT CSS

Currently, an RFI is being conducted at CSS in two phases. The purpose of the RFI is to:

- determine the extent of groundwater contamination from known sources;
- define the boundaries of known source areas;
- verify existence of contamination at additional locations; and
- define background or baseline levels of contaminants in soil.

CSS conducted the Phase 1 RFI field program from April 1991 to September 1991 and investigated seven SWMUs and two AOCs. As a result of that field effort, it was determined that additional sampling and analysis were required to further define the nature and extent of contamination at eight of the locations.

Initiated in November 1993, the Phase 2 RFI included a program to take soil, sediment, surface water, and groundwater samples at specific locations to gather more data. The samples were then sent to a certified laboratory for chemical analysis to determine the presence and levels of contaminants. Based on new information, two sites, SWMU 10 and Building 455, were added to the Phase 2 investigation. A location map and a chart describing all SWMUs and AOCs (identified as of this writing) are provided on pages 4 and 5. The field work for the Phase 2 RFI was completed in February 1994. Data interpretation is currently underway. A final report is due by the end of 1994.

REGULATORY AGENCIES

The environmental program at CSS is coordinated through and approved by the U.S. Environmental Protection Agency (USEPA) and the Florida Department of Environmental Protection (FDEP). The Stations's RCRA permit defines the roles, responsibilities, procedures, and time frames for implementing the cleanup program. All aspects of the program are conducted in compliance with State and Federal regulations.

COMMUNITY RELATIONS

Citizens are encouraged to participate in the IR Program planning and decision making at CSS. Based on input from area interviews, a Community Relations Plan has been developed specifically for the CSS community. The Plan outlines the methods to communicate with the public in order to obtain valuable citizen input to the program. The plan includes press releases and public notices, public meetings, comment periods, this fact sheet series, site tours, and speaker programs.

Environmental Cleanup Process

Stage	Title	Purpose	Actions
1	RCRA Facility Assessment (RFA)	<ul style="list-style-type: none"> ■ To gather information on actual or potential releases from SWMUs; and ■ To determine the need for further investigation. <p>End Result: If further investigation is needed, conduct an RFI.</p>	<ul style="list-style-type: none"> ■ Search historical records; ■ Conduct interviews; ■ Identify potential SWMUs and AOCs; ■ Collect data on releases; and ■ Identify units or releases needing further investigation.
<p>Citizen participation is encouraged through the entire corrective action process.</p>			
2	RCRA Facility Investigation (RFI)	<ul style="list-style-type: none"> ■ To determine the presence or absence of hazardous substances; and ■ To obtain more information on the nature and extent of contamination. <p>End Result: Evaluate the need for corrective measures and determine cleanup levels.</p>	<ul style="list-style-type: none"> ■ Verify the existence and characterize the source of the release; ■ Identify contaminants of concern; ■ Identify locations and amounts of contaminants; ■ Characterize site conditions; and ■ Conduct a Health and Environmental Assessment.
3	Corrective Measures Study (CMS)	<ul style="list-style-type: none"> ■ To develop, evaluate, and recommend cleanup alternatives or corrective measures. <p>End Result: Begin cleanup.</p>	<ul style="list-style-type: none"> ■ Develop and evaluate specific measures that will stop the release(s); and ■ Recommend corrective measure(s).
<p>Public input is solicited on the proposed corrective measures. A cleanup strategy is then agreed upon by the Navy and the regulatory agencies.</p>			
4	Corrective Measures Implementation (CMI)	<ul style="list-style-type: none"> ■ To eliminate the threat to human health and the environment. 	<ul style="list-style-type: none"> ■ Design, construct, operate, maintain, and monitor selected corrective measures.
<p>Early cleanup actions, called Interim Corrective Measures, can be conducted at any time in the process when an expedited action is required to protect human health or the environment.</p>			

TECHNICAL REVIEW COMMITTEE

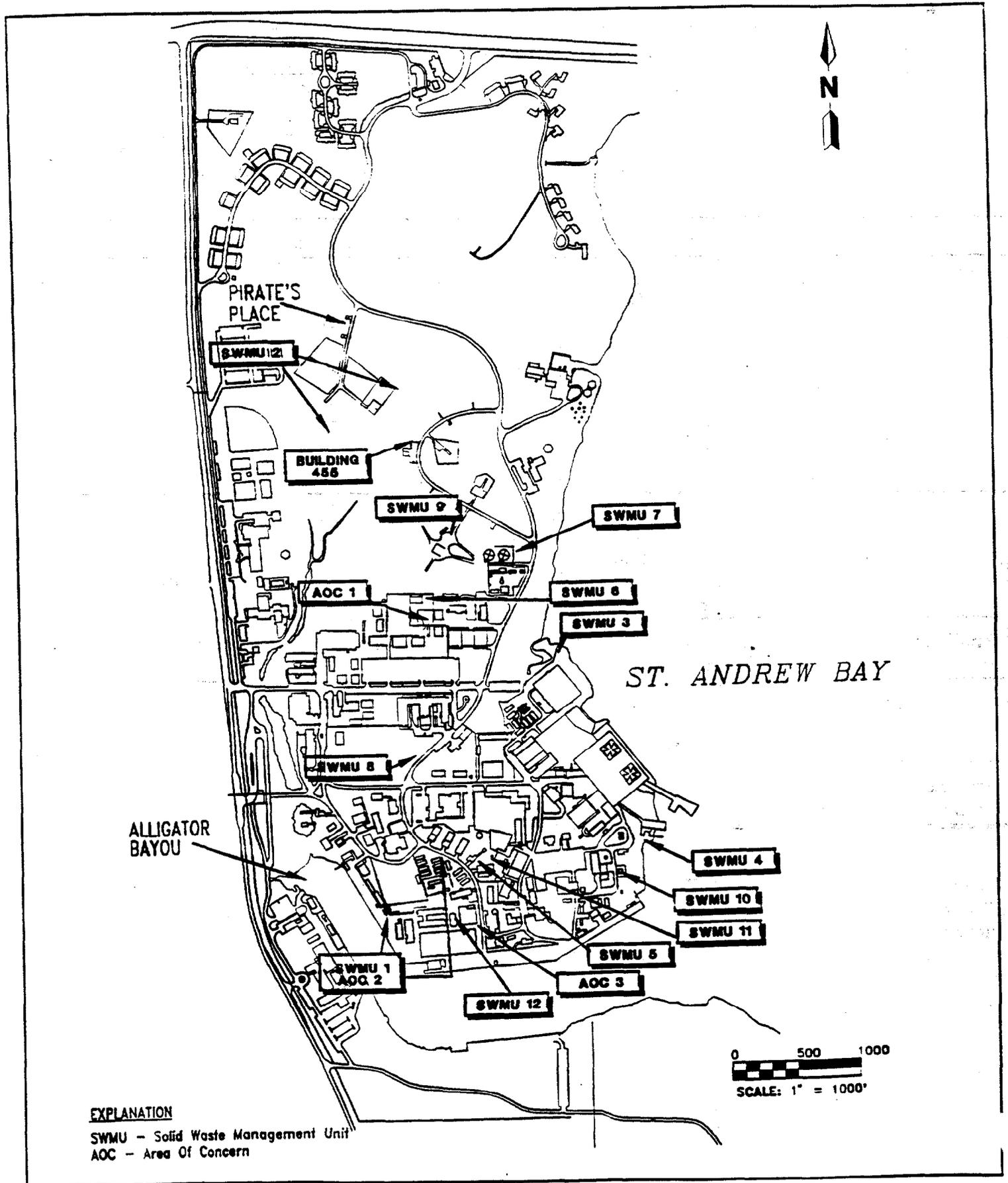
A Technical Review Committee (TRC) has been formed at CSS. It consists of Federal, State, and local regulatory agency representatives, a community representative, and military representatives. The committee guides the environmental cleanup program by reviewing documents, maintaining a dialogue with technical experts, and by prioritizing cleanup activities. The committee ensures that the studies and ultimate cleanup measures address all environmental and community concerns.

CONTACT PERSON FOR IR PROGRAM

For further information or to be added to the mailing list for future information, contact:

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Site Location Map



Site Description Chart

Site No.	Site Name	Site Description	Typical Wastes Present
SWMU 1	Original Disposal Area (Landfill A)	SWMU 1 covers approximately one acre along Alligator Bayou. From 1945 to 1953, the site was the main disposal area for the station.	General household garbage, battery acid, oil, solvents, chemicals, and lumber.
SWMU 2	Burn and Landfill Area (Landfill B)	Landfill B covers approximately 11 acres near Pirate's Place. The largest and longest-used disposal area on the facility, the landfill has five different areas that were used for disposal from the 1940s to 1970s.	Waste oil, red lead paint, cutting oil, transformer oil, solvents, bilge water, general household garbage, plastic resins, lumber, and acetone.
SWMU 3	Burn and Disposal Area (Landfill C)	Landfill C is approximately 150 feet long, by 50 feet wide, by 12 feet deep. It was a disposal and burn area on the beach near St. Andrew Bay from 1953 to 1959.	General household garbage, lumber, paint cans, concrete, paint thinner, solvent residue in cans, and waste oil, possibly transformer oil.
SWMU 4	Filled Gully (Landfill D)	Landfill D covers less than 1/4 acre along St. Andrew Bay. Originally a surface water drainage ravine, the site was used between 1954 and 1958 for the disposal of construction debris.	Rubble, broken concrete, hardened asphalt.
SWMU 5	Paint Shop Cleaning Area	A former sand pit that covers approximately 100 square feet behind the Paint Shop. Painting equipment was cleaned, and residues dumped on the ground, from the early 1950s to 1979.	Paint thinners, paints, mineral spirits, acetone, and methyl ethyl ketone.
SWMU 9	Fire Training Area No. 2	From 1980 to 1986, smoke and fire training exercises were conducted at an area southwest of Gull Circle. Two mobile homes, two dumpsters, and a trash pile were used for the training.	JP-5 fuel, diesel, gasoline, waste solvent.
SWMU 10	Oil/Water Separator	An oil/water separator system is located along the eastern boundary of the station approximately 120 feet from St. Andrew Bay. During the RFA in 1987, there was no evidence of release(s). Based on reports of two releases in 1992, SWMU 10 has been added to the Phase 2 RFI.	Petroleum products
AOC 1	Fire Training Area No. 1	From the mid-1950s to late 1970, fire fighting training was conducted using an unlined pit, approximately 140 feet west of Building 100. Fuels and solvents were ignited and extinguished for training purposes. The site was paved in 1979.	Diesel fuel, aviation gasoline
AOC 2	Underground Oil Contaminated Area	A 10,000 barrel storage tank and its distribution and supply lines were located at this site. Constructed in 1943, the tank received and distributed diesel fuel but also stored gasoline and aviation fuel. The tank system was removed in 1979.	Waste oil, paint thinner, paint, contaminated diesel fuel, JP-5 fuel, and gasoline.
Building 455	Paint Stripping Area	Building 455 is located on Gull Circle, and is approximately 500 feet east of the burn area at SWMU 2. This area was used for paint stripping activities for at least 15 years until June 1993. It was recently added to the Phase 2 RFI.	Methylene chloride and phenol.
SWMU 8	Classified Documents Incinerator	Prior to 1987, the station operated a natural gas-fired, solid waste incinerator for destroying classified materials.	None. During the Phase 1 RFI, it was determined that No Further Action was necessary at this site.
SWMU 6 SWMU 7 SWMU 11 SWMU 12 AOC 3	Building 361 Building 84 Building 40 Building 40	RCRA Hazardous Waste Storage Wastewater Treatment Facility Temporary Hazardous Waste Storage Temporary Hazardous Waste Storage Solvent Disposal	None. During the RFA, it was determined that No Further Action was necessary at these sites (no threat to human health and the environment existed).

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