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NAVAL AIR STATION KEY WEST ENVIRONMENTAL UPDATE 5 FOR INSTALLATION  
RESTORATION PROGRAM NAS KEY WEST FL  
1/1/1997  
NAS KEY WEST



# NAVAL AIR STATION KEY WEST

## Environmental Update

# 5

*This fact sheet is one in a series informing interested citizens of the Installation Restoration (IR) program being conducted at Naval Air Station (NAS) Key West. The IR program is the Department of Defense plan for environmental investigation and cleanup of military installations nationwide. The program is designed to address areas of contamination from past spills and waste disposal practices. Fact sheets will be produced at milestones and in response to other items of public interest. Community relations activities associated with the IR program, including distribution of fact sheets, are coordinated through the NAS Key West Public Affairs Office, (305) 293-2425.*

### ***What's Going On?***

The U.S. Navy has been working toward cleaning up the environment through many programs including the Installation Restoration (IR) program, which began in the early 1980s. By finding and cleaning up contamination from waste management and disposal activities in the past, we at NAS Key West can better protect public health and the environment today. We want you to know how far we've come in our cleanup efforts and how you can help direct future cleanup activities.

### ***What Federal Laws Must Be Considered?***

The Navy is currently investigating 15 sites at NAS Key West to see what kind of contamination potentially occurred and how far it has spread. The Navy is subject to two separate, but similar, sets of Federal laws:

- *Resource Conservation and Recovery Act (RCRA, pronounced "rek-ra") of 1976, as amended in 1984 by the Hazardous and Solid Waste Amendments.*
- *Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, pronounced "sirk-la"), as amended by the Superfund Amendments and Reauthorization Act of 1986.*

### ***Where Are the Sites?***

The Navy calls sites being investigated under RCRA Areas of Concern (AOCs) or solid waste management units (SWMUs). Studies at these sites are known as RCRA facility investigations (RFIs). Sites being investigated under CERCLA are called Installation Restoration (IR) sites. Studies at these locations are remedial investigations (RIs). Figure 1 shows the sites.

### ***What Contaminants Concern Us?***

Table 1 lists the sites, their known or suspected contaminants, and the remediation status. For sites where contaminants have been found to pose a threat to human health or the environment, the Navy has begun immediate cleanup measures called interim remedial actions. Table 2 lists those sites with specific activities completed. Table 3 lists the stage of each site within the overall IR program.

### ***What Is an Ecological Risk Assessment?***

As part of these investigations, the Navy will conduct an Ecological Risk Assessment (ERA). The goal of an ERA is to help protect the environment by defining conditions under which populations or communities of naturally occurring organisms could be harmed. Harmful conditions are defined and laboratory analyses are conducted to determine contaminant levels in soil, water, sediment, and organisms that inhabit the area. These test results play a key role in the determination of how much and what kind of cleanup is necessary.

**Table 1. Installation Restoration Program at NAS Key West**

Site Designation	Site Name	Known or Suspected Contaminants	Site Status
SWMU 1	Boca Chica Open Disposal Area	Household and construction debris, metal, solvents	Interim cleanup and final investigation completed in early 1996
SWMU 2	Boca Chica DDT Mixing Area Building 915	Pesticides	Interim cleanup and final investigation completed in early 1996
SWMU 3	Boca Chica Firefighting Training Area	Metals, petroleum	Interim cleanup and final investigation completed in 1995-96
SWMU 4	AIMD Building A-908	Metals, solvents	Final investigation will be completed in mid 1997
SWMU 5	AIMD Sandblasting Area (by Building A-990)	Metals	Further investigation and cleanup suspended pending operational improvements
SWMU 6	Wastewater Treatment Plant		Further investigation not required due to operating permit status
SWMU 7	Former Hazardous Waste Storage Building A-824	PCBs	Interim cleanup completed in 1995
SWMU 8	Current Hazardous Waste Storage Building	Solvents	Further investigation not required due to operating permit status
SWMU 9	Jet Engine Test Cell Building A-969	Petroleum, solvents	Interim cleanup and final investigation completed in 1996
IR 1	Truman Annex Refuse Disposal Area	Household and construction debris, metals, solvents	Interim cleanup completed in early 1996
IR 3	Truman Annex DDT Mixing Area	Pesticides	Interim cleanup completed in early 1996
IR 7	Fleming Key North Landfill	Household and construction debris, metals, solvents	Final investigation will be completed in mid 1997
IR 8	Fleming Key South Landfill	Household and construction debris, metals, solvents	Final investigation will be completed in mid 1997
AOC A	Demolition Key	Unexploded ordnance, metals	Continued use of site for emergency disposal of ordnance. Investigation completed in 1996
AOC B	Big Coppitt Key Abandoned Civilian Disposal Area	Discarded motor vehicles, metals	Interim measures completed in early 1996. Final investigation will be completed in mid 1997

**Notes:**

SWMU = Solid Waste Management Unit  
 DDT = Dichlorodiphenyltrichloroethane  
 AIMD = Aircraft Intermediate Maintenance Department

PCB = Polychlorinated biphenyls  
 IR = Installation Restoration  
 AOC = Area of concern

**Table 2. Status of Interim Remedial Actions**

Site	Specific Activity Completed	Highlights
SWMU 1	6,275 cubic yards (cy) of soils excavated and hauled away for treatment/disposal	Reduced highest lead concentration from 12,300 parts per million (ppm) to 436 ppm
SWMU 2	1,943 cy of DDT contaminated soil and sediments excavated and hauled away for treatment/disposal	Reduced DDT concentration in sediment from 1,400 ppm to less than 5 ppm
SWMU 3	835 cy of contaminated soil excavated and hauled away for treatment/disposal	
SWMU 7	26 cy of PCB contaminated soil excavated and hauled away for treatment/disposal	
SWMU 9	Groundwater pump and treat system installed July 1996	3 recovery wells with air stripper and oil/water separator and infiltration gallery
IR 1	4,878 cy of soil excavated and hauled away for treatment/disposal	Reduced highest lead concentration from 35,200 ppm to 680 ppm
IR 3	735 cy of DDT contaminated soil excavated and hauled away for treatment/disposal	Site soil reduced DDT from 60 to 11 ppm
IR 8	Subcontract awarded for beach erosion/shoreline protection system (1,800 linear feet)	Construction scheduled January - March 1997
IR7	Grading work completed to preclude ponding over landfill contents	
AOC B	993 cy of soil excavated and hauled away for treatment/disposal	

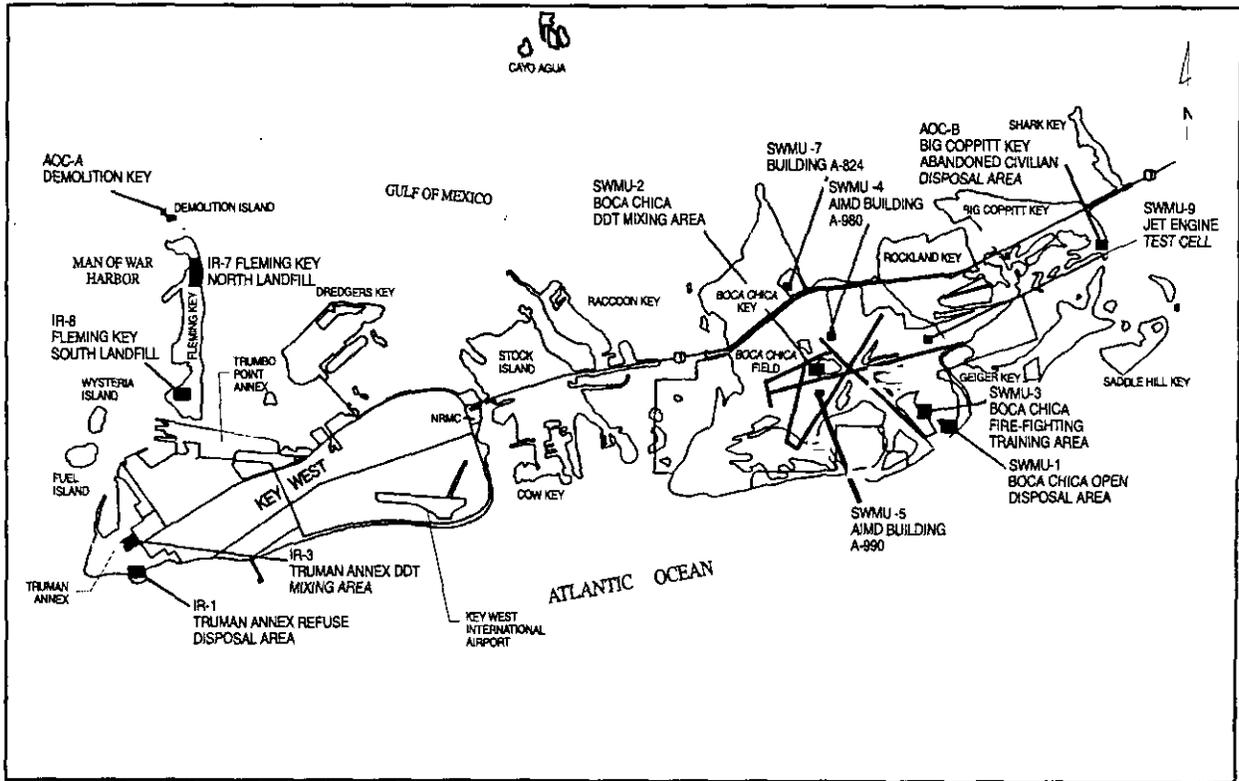


Figure 1. Location of site investigations and cleanups at NAS Key West.

Table 3. Remediation Status of NAS Key West Sites

Site	Identification		Investigation		Remedial Selection		Cleanup			Closeout
	PA/PR/VSI	SI	RI/RFI	FS/CMS	PP/DPM	ROD/FPM	IRA	RD	RA/CA	
SWMU 1	✓	✓	✓	IP			✓			
SWMU 2	✓	✓	✓	IP			✓			
SWMU 3	✓	✓	✓				✓			
SWMU 4	✓	✓	IP							
SWMU 5	✓	✓	IP							
SWMU 7	✓	✓	IP				✓			
SWMU 9	✓	✓	✓				IP			
IR 1	✓	✓	IP				✓			
IR 3	✓	✓	IP				✓			
IR 7	✓	✓	IP				✓			
IR 8	✓	✓	IP				IP			
AOC B	✓	✓	IP				✓			

✓ - Complete IP - In Progress

Notes:

PA = Preliminary Assessment

PR = Preliminary Review

VSI = Visual Site Inspection

SI = Site Investigation

RI = Remedial Investigation

RFI = RCRA Facility Investigation

FS = Feasibility Study

CMS = Corrective Measures Study

PP = Proposed Plan

DPM = Draft Permit Modification

ROD = Record of Decision

FPM = Final Permit Modification

IRA = Interim Remedial Action

RD = Remedial Design

RA = Remedial Action

CA = Corrective Action

## ***What Does the Future Hold?***

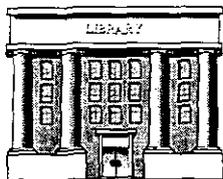
The Navy will complete the RFI and RI studies so that we know the type and extent of contamination at a site. Then the Navy chooses long-term cleanup methods and standards for each site, which we call a corrective measures study (CMS) under RCRA and a feasibility study (FS) under CERCLA. At this point, we will ask for public input -- your input -- on the best cleanup strategy.

## ***How Can I Participate?***

After consideration of public input and comments from other interested parties, the Navy will select a site cleanup alternative. The necessary design and engineering work for the selected alternative will then be performed, and the actual site cleanup activities undertaken.

**Community Relations Program:** In addition to this fact sheet, NAS Key West has established a comprehensive community relations program to encourage public involvement in the environmental cleanup process. Highlights of the program are presented below.

**Information Repository:** An Information Repository has been set up in the Local and State History Department at the Monroe County Library.



*700 Fleming Street  
Key West, Florida  
(305) 292 3595*

The Navy puts documents related to the IR program in our library for you to read. We will keep the library up to date and ready for you to visit throughout the course of the IR program.

**Community Relations Plan:** The Navy has created a Community Relations Plan that describes the surrounding community and the ways you can get involved. The Plan will evolve based on your concerns; the Navy has interviewed interested citizens, public officials, and community organizations as part of this process.

**Restoration Advisory Board:** The Navy started an advisory panel called the Restoration Advisory Board (RAB). The RAB, which includes members from the community, the Navy, and other government agencies, can improve communication between IR program decision makers and the community. Its regularly scheduled meetings are open to the public.

**Mailing Lists:** This list includes public officials, environmental, business, and civic organizations, local media, and community members like yourself. We update the list regularly to include others who are interested in NAS Key West cleanup activities.

If you would like your name added to or removed from the mailing list, please contact the Public Affairs Office at the address located below.

**Public Meetings and Comment Periods:** The Navy publishes in advance the dates of public meetings, formal hearings, and comment periods. We advertise in the *Key West Citizen*, send out press releases, and make public service announcements in the local media. You can read transcripts from these meetings in the Information Repository at the Fleming Street library.

For more information on the environmental cleanup program at NAS Key West please contact:

Public Affairs Office  
Code O1J, Naval Air Station  
Key West, Florida 33040-9001  
(305) 293-2425 or FAX (305) 293-2230



*Downstream from SWMU-5*

## How Can Contamination Affect the Environment?

The following questions were submitted by concerned citizens like you. The NAS Key West Public Affairs Office can answer questions sent by letter or phone.

*How does the groundwater flow under the Base? A common misconception is that a contaminated plume exists under every Base, including NAS Key West.*

Overall, the groundwater under the base flows toward the ocean. While there are small areas of affected groundwater, there is no large plume moving under the Base or off Base.

*How can the soil at NAS Key West be contaminated with DDT? I thought DDT was illegal.*

DDT has not been marketed in the U.S. since 1972. However, it was widely used before that time. Its persistence in the environment means that it will remain present for decades.

*Does wildlife live on the Air Station?*

Wildlife species at NAS Key West vary considerably depending on the habitat. In developed areas of the Base, wildlife is limited primarily to birds that are associated with urbanized areas. On the other hand, relatively undisturbed habitats (particularly mangrove swamps and lagoons) on the Base are used by a wide variety of wildlife species including some that are threatened or endangered.



*Queen Conch (protected species)*

## What Do the Abbreviations Mean?

AOC	Area of Concern
CA	Corrective Action
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CMS	Corrective Measures Study
DDT	Dichlorodiphenyl trichloroethane
DOD	United States Department of Defense
DPM	Draft Permit Modification
EBS	Environmental Baseline Survey
EIS	Environmental Impact Statement
ERA	Ecological Risk Assessment
FDEP	Florida Department of Environmental Protection
FPM	Final Permit Modification
FS	Feasibility Study
FTA	Fire Training Area
IR	Installation Restoration
IRA	Interim Remedial Action
IRP	Installation Restoration Program
NAS	Naval Air Station
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NFA	No Further Action
NFI	No Further Investigation
OU	Operable Unit
PA	Preliminary Assessment
PAHs	Polynuclear Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
PP	Proposed Plan
PR	Preliminary Review
RA	Remedial Action
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RFI	RCRA Facility Investigation
RI	Remedial Investigation
ROD	Record of Decision
SI	Site Investigation
SWMU	Solid Waste Management Unit
US EPA	United States Environmental Protection Agency
VSI	Visual Site Inspection

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### ***Who Do I Call?***

Mr. Phillip Williams  
Installation Restoration (IR) Coordinator

Mr. Dudley Patrick  
Remedial Project Manager

Ms. Martha Berry  
US EPA, Region IV (Atlanta)

Mr. Jorge R. Caspary, P.G.  
Florida Department of Environmental Protection  
(FDEP)

### ***Where Can I Find Them?***

Environmental Branch  
NAS Key West  
Key West, Florida  
Phone: (305) 293-2061  
Fax: (305) 293-2542

Naval Facilities Engineering Command  
Southern Division  
P. O. Box 190010  
North Charleston, SC 29419  
Phone: (803) 820-5541  
Fax: (803) 820-7465

US EPA, Region IV  
100 Alabama Street  
Atlanta, GA 30303  
Phone: (404) 562-8533  
Fax: (404) 562-8518

FL Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400  
Phone: (904) 488-3935  
Fax: (904) 922-4939

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Code 01J, Naval Air Station  
Key West, Florida 33040-9001

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**Public Response Card**

Does this newsletter provide the type of information about the environmental cleanup at NAS Key West that you would like to receive?

Yes

No

If not, what other information would you like? Do you have any other comments on the actions taking place?

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If you received this newsletter in the mail, you are on the mailing list. If you did not receive this newsletter in the mail but would like to be included on the mailing list, please complete the following:

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Address \_\_\_\_\_

City, State ZIP \_\_\_\_\_

Phone Number (optional) \_\_\_\_\_

Fax Number (optional) \_\_\_\_\_

Fold this page in thirds so that the address below is visible, staple or tape closed, stamp, and mail.

December 1996

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