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LETTER TO RESIDENTS REGARDING FIRST ISSUE NEWSLETTER ENTITLED
ENVIROUPDATE NSB KINGS BAY GA
5/26/1994
NSB KINGS BAY



DEPARTMENT OF THE NAVY
NAVAL SUBMARINE BASE
1063 USS TENNESSEE AVENUE
KINGS BAY, GEORGIA 31547-2606

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IN REPLY REFER TO

26 May 1994

Dear Crooked River Plantation Subdivision Resident,

I am enclosing our first issue of Naval Submarine Base (NSB), Kings Bay's environmental newsletter, entitled EnviroUpdate. Suggestions received during our January 1994 community interviews indicated that citizens preferred receiving information on NSB Kings Bay environmental programs through regular mailouts. Based on that, we will begin sending quarterly program updates to you through this newsletter. After the mailing of this initial issue, we will forward subsequent issues to you of EnviroUpdate in June, September and December 1994. Of course, if significant developments occur in our program, we will issue an EnviroUpdate at that time to communicate that information.

We encourage you to direct any questions regarding the environmental investigations and cleanup activities to Mr. Bob Steller in our Public Affairs Office at 673-4714. We will publish questions and answers in this newsletter so information is effectively distributed to all community members.

Sincerely,

A handwritten signature in cursive script, appearing to read "L. P. Scullion".

L. P. Scullion
Captain, CEC, USN
Facilities & Environmental Director
Naval Submarine Base, Kings Bay

Enclosure:
EnviroUpdate (first edition)



ENVIROUPDATE

KINGS BAY, GEORGIA

Installation Restoration Program Newsletter

May 1994

This newsletter is the first in a series of newsletters which will be provided to the community on a quarterly basis or whenever significant developments in the program occur. A draft of this newsletter was available at the public information session held in March 1994. This revised version of EnviroUpdate provides a summary of that meeting and community concerns or questions that were raised during the community interviews conducted in January 1994. The next issue of EnviroUpdate will be mailed to community members in late June 1994 and will subsequently be available on a quarterly basis. For more information, contact Robert Steller, Public Affairs Office, (912) 673-4714.

UPCOMING EVENTS

The pilot scale test for the groundwater cleanup technologies was initiated in late March 1994 and will continue into early summer. Air stripping and biological treatment are the two technologies being tested to remove chemicals from the groundwater (see page 2 for more information). The next issue of *EnviroUpdate* will provide a status of the pilot scale test.

Field investigations in the landfill will begin in the summer of 1994. The purpose of these investigations is to locate the source(s) of contamination, if possible. The June 1994 issue of *EnviroUpdate* will provide additional information regarding this work including the schedule, description of activities and potential impacts to the surrounding area.

SIXTH PUBLIC INFORMATION SESSION

The Navy hosted their sixth public information session on March 22, 1994 to provide the status of the environmental investigations and cleanup activities at the Old County Landfill site. Interested citizens attended the open house from 4:00 to 8:00 p.m. at the Crooked River Elementary School.

The Navy, environmental engineers, regulators and other specialists were available to discuss, one-on-one, the status of the Old County Landfill site and answer questions about the Naval Submarine Base's

Installation Restoration Program. Informal discussion sessions with graphical displays covered the following topics:

- January 1994 Community Interview Results
- Installation Restoration Program
- Regulatory Process
- Status of Investigations
- Interim Cleanup Activities
- Human Health Screening Risk Evaluation

If you were unable to attend the public information session, this newsletter provides information presented at the session. For more information on the status of the environmental program, contact the Public Affairs Office, at (912) 673-4714.

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STATUS OF INVESTIGATIONS

RCRA Facility Investigation

The Final Interim RCRA Facility Investigation (RFI) Report for the Old County Landfill was completed in December 1993. This report presented the results of three phases of the RFI. The three phases have been ongoing since January 1992 and include:

- RFI field program and bimonthly (once every 2 months) groundwater sampling,
- Phase I Interim Investigation, and
- Interim Corrective Measure Screening Investigation

The community is encouraged to review this report for a complete status of the investigations to date. A copy will be available for review at the Information Repository (see page 6) or the Public Affairs Office.

Additional environmental investigations will be conducted during the summer and fall of 1994. The Supplemental RCRA Facility Investigation Workplan is scheduled to be approved during the spring of 1994. These investigations will include the following activities:

- collect surface water and sediment samples from Porcupine Lake;
- excavate test trenches in the landfill to determine the source of contamination, if possible;
- collect surface soil samples in the landfill;
- conduct air monitoring in the landfill and subdivision; and
- conduct two groundwater sampling events.

The next steps in the investigation will be:

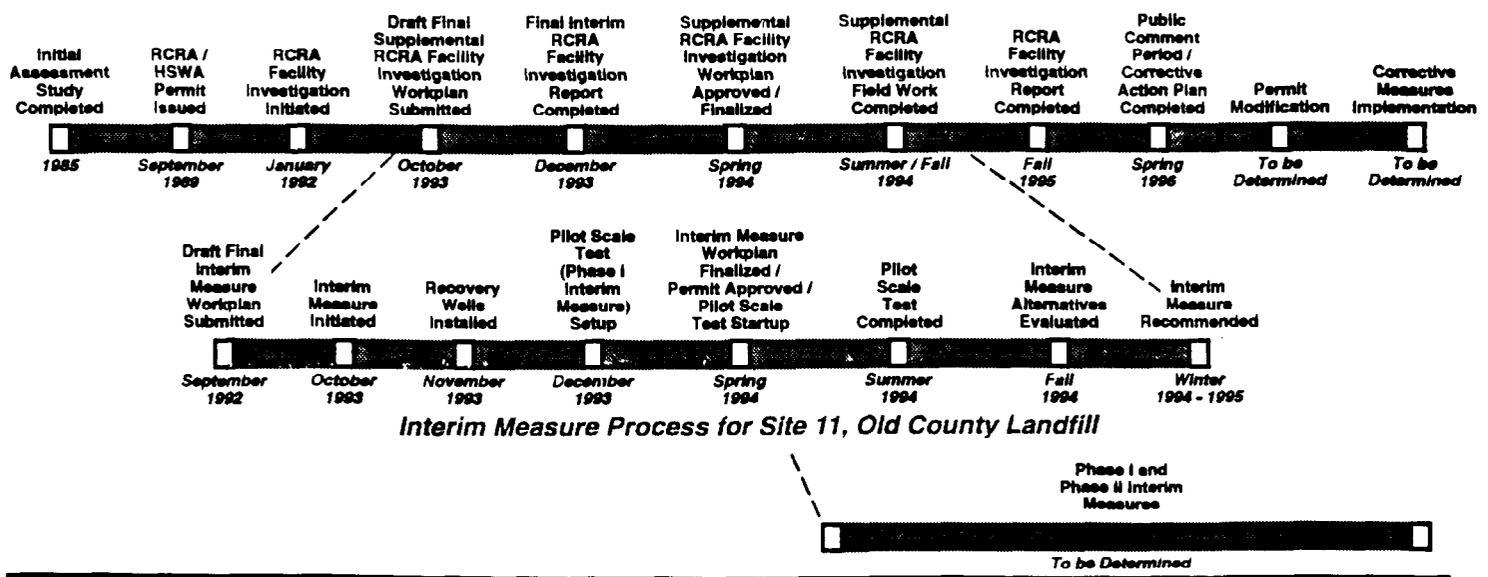
- to interpret data from the supplemental RFI field work to determine if contamination is present anywhere other than in the groundwater (e.g., soils, sediment, surface water, and air); and
- to support the development of the Health and Environmental Assessment and Corrective Measures Study/ Corrective Action Plan.

Interim Measure

A system is being designed and tested to clean up the affected groundwater. The first step, called an interim measure, consists of testing two technologies for stopping further movement of the affected groundwater and for reducing the level of chemicals found in the groundwater. The two technologies being tested are air stripping and biological treatment. For more information on these technologies and the interim measure, refer to the fact sheet entitled, *Containing and Cleaning Up Contaminated Groundwater from the Old County Landfill*, available from the Public Affairs Office.

The interim measure was initiated in October 1993 and recovery wells installed in November. Setup of the pilot scale test systems (Phase I Interim Measure) was completed in December 1993. The permit was approved and the pilot scale test initiated in late March 1994. The pilot scale test will be conducted over a two month period and is expected to be completed in the summer 1994. A timeline of the environmental cleanup activities, including the RFI and interim measure, is illustrated below.

RCRA Corrective Action Process for Site 11, Old County Landfill



Community Q&A

The Question and Answer column will be a regular feature in this Newsletter. In this issue the results of the community interviews are highlighted. Typical questions asked during the community interviews are presented below. We request the community to direct any questions regarding the environmental investigations and the Installation Restoration Program to Robert Steller at the Public Affairs Office, (912) 673-4714. Responses to these questions will be shared with the community in a future mailing of this Newsletter.

What is the Installation Restoration Program?

For several decades, the mission of the Navy has required the use, handling, storage, and disposal of chemicals and petroleum products. In the past, few regulations guided operations involving these materials and little was known about their long-term effects on human health and the environment.

Since 1975 the Department of Defense has given priority to properly managing chemicals and petroleum products. The Installation Restoration Program was established to identify and address contamination or potential contamination resulting from past practices, which do not meet today's environmental standards.

Under the Installation Restoration Program, environmental investigation and cleanups follow a step-by-step approach as required by law. In general, the steps are to:

- identify potential sites or contaminated areas,
- determine the type and extent of contamination through detailed investigations,
- evaluate cleanup actions or alternatives, and
- design and construct a suitable cleanup action.

These steps are conducted in accordance with two Federal environmental laws, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA). At Submarine Naval Base the environmental cleanup is following the RCRA regulations (the RCRA Corrective Action Process is shown on page 5).

Why is the surface water in the neighborhood ditches rust colored and is the Navy investigating this?

Yes, the Navy has investigated the rust colored water in the neighborhood ditches. Investigations indicate that rust color results from algae and iron in the water. This situation is quite common and not harmful. The investigation of the rust colored water is not related to the investigations in the landfill.

After the groundwater is cleaned up, will there be residual contamination in the soils?

Presently, the Navy knows that the groundwater is affected in the area of the landfill and in a west-northwest direction under the Crooked River Plantation Subdivision. The supplemental investigations described on page 2, are designed to determine if surface soils, subsurface soils, sediments, surface water, and air have been affected. The results of these investigations will be included in the RFI Report, expected to be completed in late 1995. Corrective measures will be discussed in the overall Corrective Action Plan for the site.

What is the location of the plume?

The location of the plume has not changed since the last public information session in September 1993. Results of the groundwater data collected to date are included in the Interim RCRA Facility Investigation Report (December 1993) which is available for review at the Information Repository (located at St. Marys Library) or the Public Affairs Office. Presently, data from groundwater monitoring events are being evaluated and interpreted. As new information is available, results will be communicated through this newsletter or other appropriate methods.

Community Q&A

(continued)

How do the risks associated with exposure to groundwater compare to other familiar life situations?

The Screening Risk evaluation was performed to quantify the risk to the residents of the Crooked River Plantation Subdivision from exposure to the chemicals in the groundwater. Using a methodology approved by the US Environmental Protection Agency (EPA), the cancer and non-cancer risks were evaluated for children and adults.

EPA suggests an acceptable risk range of 1 to 100 in a million people. Activities that increase risk of cancer by one chance in a million include the following:

- smoking 1.4 cigarettes
- flying 6,000 miles by jet
- taking one chest X-ray in a good hospital
- living 2 months with a cigarette smoker
- eating 100 charcoal-broiled steaks
- drinking 30 12-ounce cans of diet soda
- living 20 years near a polyvinyl chloride plant
- living 150 years within 20 miles of a nuclear power plant
- risk of accident by living within 5 miles of a nuclear reactor for 50 years

The source of this information is adapted from R. Wilson, *Analyzing the Risks of Daily Life, Technology Review*, 81 (1979). See also R. Wilson and E.A.C. Crouch, *Risk Assessment and Comparison: An Introduction, Science*, 236, 267-270 (1987).

What is the current schedule of anticipated activities?

The current schedule of anticipated activities in the RCRA Corrective Action process is illustrated in the timeline on page 2. The top timeline shows the activities for the overall cleanup process and the middle one shows the activities for the interim measure process. The bottom timeline illustrates that the interim measure or Phase I pilot scale test will start in the Spring of 1994 and will continue through the Phase II Interim Measure until cleanup is completed.

What technologies are being tested to clean up the groundwater?

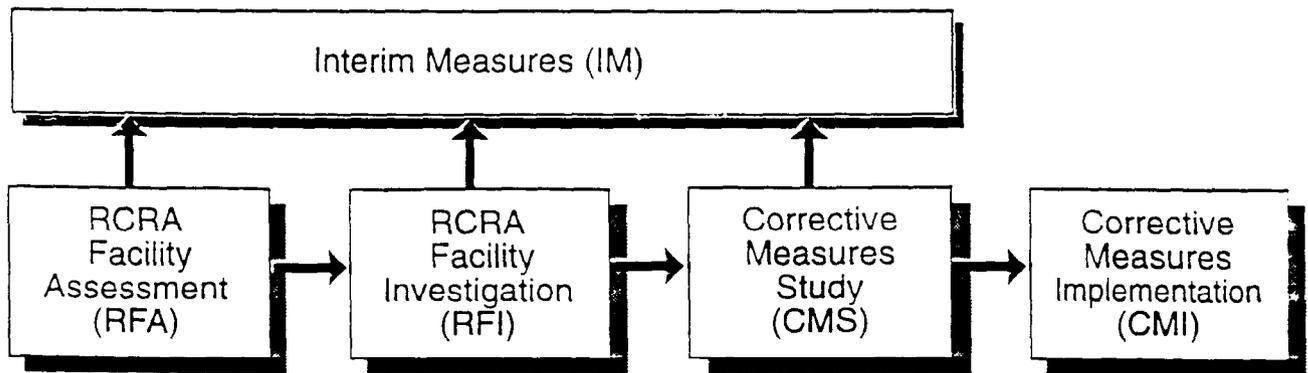
The following groundwater treatment technologies are being tested during the interim measure:

- Air Stripping - in a completely closed system, the air stripping process uses simple equipment to transfer chemicals from the water into air. The contaminants in the air will then be removed from the air with activated carbon. The activated carbon will then be treated offsite to remove the contaminants.
- Biological Treatment - the system will use harmless bacteria to destroy the contaminants, similar to how bacteria were used to clean up the Alaskan oil spill. The bacteria will be contained in an apparatus known as a rotating biological contactor. This unit will continuously expose the bacteria to the contaminated groundwater and to nutrients which will maximize the removal of contaminants.

The treated groundwater will meet all applicable local, Federal, and State requirements before it is discharged to the local land application system or publically-owned treatment works (POTW). For more information on the interim measure, see the fact sheet entitled *Containing and Cleaning Up Contaminated Groundwater from the Old County Landfill*, available from the Public Affairs Office.



The RCRA Corrective Action Process



INSTALLATION RESTORATION (IR) PROGRAM

Before federal environmental cleanup laws were passed by Congress, the Department of Defense developed a proactive program to address the environmental conditions created by releases of hazardous substances, or contaminants, from past spills and disposal practices. The Installation Restoration (IR) Program is the 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 solid and hazardous wastes. This federal law established a tracking system for hazardous wastes from its generation through its ultimate disposal. It also provides for a permitting system for facilities that treat, store, and dispose of hazardous waste 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 subject to a RCRA permit, whenever hazardous substances are released into the environment. The RCRA corrective action process identifies solid waste management units, determines

the type and extent of contamination, and identifies and evaluates appropriate solutions, or corrective measures to clean up the site.

Structure of the IR Program at Kings Bay

Under the IR Program, the Navy facilities conduct environmental cleanup activities through a proactive, step-by-step approach, from initial site identification through selection of cleanup actions. In accordance with RCRA regulations, the cleanup process follows the steps outlined above.

TECHNICAL REVIEW COMMITTEE (TRC)

The TRC consists of federal, state, and local regulatory agency representative, community representatives, and military representatives. The function of the TRC is to maintain a dialogue with technically-knowledgeable individuals to help ensure that the studies and ultimate cleanup measures address all environmental and community concerns during the corrective action process.



**INFORMATION REPOSITORY AND
ADMINISTRATIVE RECORD FILE**

The Information Repository and the Administrative Record are placed in a location to encourage public involvement in the IR Program. The Information Repository contains site information, program activities and findings. The Administrative Record includes documents which support site cleanup decisions. At Submarine Naval Base, the Information Repository is available at:

St. Marys Public Library
100 Herb Bauer Drive
St. Marys, Georgia 31558
Telephone: (912) 882-4800



Library Hours:

Monday, Wednesday, Friday: 10:00 to 5:00

Tuesday and Thursday: 10:00 to 8:00

Saturday: 10:00 to 12:00 noon

Sunday: CLOSED

**WHERE TO GO FOR ADDITIONAL
INFORMATION**

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

Robert Steller, Public Affairs Officer
Naval Submarine Base
Kings Bay, Georgia
(912) 673-4714

Public Affairs Office
Naval Submarine Base
Kings Bay, Georgia 31547