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INSTALLATION RESTORATION PROGRAM NEWSLETTER SEPTEMBER 1995 NSB KINGS  
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# ENVIROUPDATE

## KINGS BAY, GEORGIA

### Installation Restoration Program Newsletter

### September 1995

Volume 1, Number 6

*This newsletter is provided to the community on a quarterly basis or when significant developments occur in the environmental program. Copies of previous editions of EnviroUpdate can be obtained through the Public Affairs Office. For more information, contact Robert Steller, Public Affairs Office, (912) 673-4714.*

## CLEANUP GOALS

During the Restoration Advisory Board (RAB) meeting in July, community members expressed interest in learning more about how SUBASE is establishing the appropriate level of cleanup for the affected groundwater under the landfill and subdivision.

Working together throughout the environmental cleanup, SUBASE and the regulatory agencies review information on specific chemicals of concern, the media affected (i.e., air, soil, surface water, and groundwater), and potential exposure to the chemicals in order to propose a set of cleanup goals or target levels that are deemed protective of human health and the environment. The completed cleanup actions must then attain those acceptable levels for these chemicals.

Cleanup goals are initial guidelines for cleanup of contaminated media. They are developed early in the cleanup process based on available information and revised, if needed, as additional information is collected and evaluated during the risk assessment and engineering analysis of cleanup alternatives.

Cleanup goals must consider the overall protection of human health and the environment and be in compliance with Federal and State requirements. A cleanup goal will be considered final and referred to as a media cleanup standard (MCS) after the Corrective Action Plan is finalized. Once goals are set, all subsequent cleanup activities will strive to attain, or prevent exposure above, the levels set forth in these standards.

Cleanup goals are established according to the Superfund or the Resource Conservation and Recovery Act (RCRA) regulations that guide the cleanup actions and may be based on:

- 1) **Federal and State environmental standards** (i.e, drinking water or groundwater protection)
- 2) **risk assessment** results and what is protective for the specific site conditions
- 3) **"background" levels** of chemicals found to be naturally occurring in areas unaffected by contamination

The most conservative cleanup goal for a chemical is commonly that chemical's "background" concentration (the chemical concentration which occurs naturally in the environment). Some of the chemicals found at the landfill are man-made; therefore, a background cleanup goal would be a concentration of zero. Achieving such a conservative cleanup goal for these chemicals is often technically impracticable with today's cleanup methods. Therefore, other ways of setting cleanup goals involve scientific calculations of risk. These risk-based cleanup goals are designed to be protective of human health and the environment.

Georgia Department of Natural Resources (GADNR) and SUBASE are discussing approaches to setting acceptable cleanup goals for the landfill. In the coming months, *become involved* and work with SUBASE and GADNR to establish risk-based standards that will facilitate timely, cost-effective, and technically feasible cleanup methods that protect human health and the environment. For more information attend the October RAB meeting or contact the Public Affairs Office at (912) 673-4714.

## WORK BEGINS...SUBASE'S Community Advisory Board is Up and Running!



Richard King, resident of Crooked River Subdivision, was elected as the RAB Community Co-Chair by his fellow community members.

He has been a member of SUBASE's Technical Review Committee since 1992 and is very familiar with SUBASE's environmental cleanup activities. Mr. King will work closely with LTJG Burbage, the Navy Co-Chair, to help guide the RAB and ensure that community concerns and issues are addressed by the board.

RAB meetings will be held quarterly unless project milestones require additional meetings. The last meeting was held on July 19th from 7:00 - 9:00 p.m. at the Crooked River Elementary School. SUBASE presented information to the RAB to help orient new members to the cleanup activities. Presentations covered the following topics:

- Overview of Installation Restoration Program & Regulatory Framework for Cleanup;
- Cleaning Up: Contracting and Funding; and
- Overview of Cleanup Activities at the Landfill.

At the meeting, community members expressed interest in receiving more information about cleanup goals, understanding the overall time frame for cleanup, and defining what constitutes a hazardous waste. If you would like more information about certain aspects of our cleanup, contact Bob Steller or one of your community RAB members. Also, attend one of our RAB meetings. They are announced in our local newspapers - the *Camden County Tribune*, *Southeast Georgian*, and the *Periscope* - and over our local radio stations.

The next meeting will be held October 26, 1995, at 10:00 am at the St. Mary's Library. The Georgia Department of Natural Resources, the state agency overseeing the cleanup, will provide an overview of cleanup goals. A tour of the landfill and groundwater treatment area for RAB members and any interested citizens will follow the meeting. If you are interested attending the meeting and site tour, please contact Bob Steller at (914) 673-4714 before October 19 so transportation arrangements may be made.

## NEWS FROM THE FIELD

There is not much "new" news to report from the field. Most activities for the landfill cleanup are focused on reviewing and interpreting data and preparing draft reports. However, the Phase I Interim Measure activities still continue. Groundwater is being pumped from the ground and treated using an air stripping technology. SUBASE's engineers and technical staff maintain the system to ensure effective operation. This system limits the movement of the affected groundwater under the subdivision while it strips away or treats the chemicals in the water.

Over the next three months, our team of engineers and scientists will be conducting several activities in their offices (not in the field) to move us closer towards cleanup decisions. Activities will include the following.

- Analytical results from our November 1994 field program and preparing the Supplemental RCRA Facility Investigation Report will be evaluated. Groundwater data will be evaluated over the next several weeks by our risk assessment specialists. A report is scheduled for 1st quarter 1996.
- Media cleanup standards with the Georgia Department of Natural Resources will be discussed.
- Draft Long-Term Remedial Option Pre-Evaluation (ROPE) Plan which assesses feasible long-term cleanup options will be prepared.
- Data collection activities associated with the treatability study for bioremediation will be prepared.



The affected groundwater is moved from underground pipes to the treatment pad and through a passing air stream. Chemicals are transferred from the water into the air, which is then treated with activated carbon.

# Community Q&A

## *How much money is the Navy spending on the cleanup?*

Environmental cleanup at Navy bases is funded through the Defense Environmental Restoration Account (DERA). Available funding is allocated based on what environmental work is needed at each base. For each fiscal year, funding is then budgeted for the two components of typical cleanup actions:

- **Environmental Investigation and Remedial Design** (scientific study of the site to determine the location and extent of any contamination and develop a plan for cleaning up the site), and
- **Corrective Measures Implementation** (construction of the selected cleanup alternative).

Since the beginning of the Installation Restoration Program, the Navy has committed \$6 million in environmental investigation and cleanup efforts at SUBASE, half of which has been spent to date. The budget for the upcoming fiscal year (September 1995 through October 1996) includes \$1.7 million for investigation and cleanup. Activities for the next year will continue to focus on evaluating engineered cleanup options and their eventual implementation.

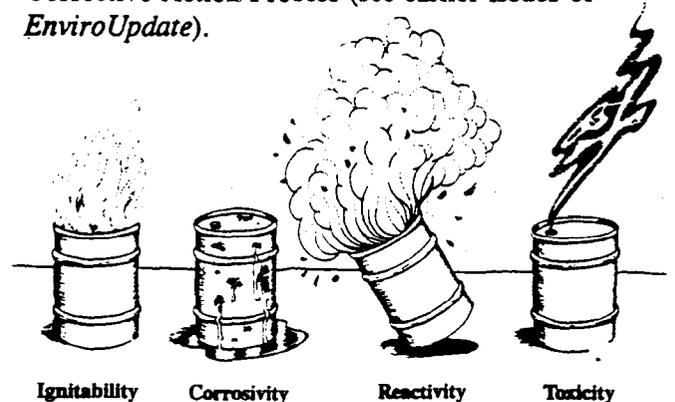
## *What is a hazardous waste?*

The Resource Conservation and Recovery Act (RCRA) is designed to protect human health and the environment from the effects of improper management of solid and hazardous waste. RCRA regulations identify hazardous wastes based on their characteristics or properties and also provide a list of specific wastes that are determined to be hazardous. Hundreds of wastes from industrial processes are listed in the regulations and must be managed according to RCRA.

In addition, a waste may be determined to be hazardous if it has one or more of the following characteristics.

- **Ignitability** - wastes that can create fires under certain conditions.
- **Corrosivity** - those wastes that are acidic and those that are capable of corroding metal.
- **Reactivity** - wastes that are unstable under normal conditions. They can create explosions and/or toxic fumes, gases, and vapors when mixed with water.
- **Toxicity** - wastes that are harmful to human health and the environment when ingested or absorbed. Toxicity is identified through a laboratory procedure.

SUBASE has a RCRA permit to use and handle any materials that are determined to be hazardous. These materials are handled properly, according to permit conditions, from the moment they are generated, through storage, and to ultimate disposal. SUBASE's permit also requires the cleanup of any releases of chemicals to the environment according to the RCRA Corrective Action Process (see earlier issues of *EnviroUpdate*).



*A waste is hazardous if it exhibits any of these four characteristics. Many household items (i.e., paint thinners, gasoline) are hazardous.*

## **Questions & Answers**

### **Naval Submarine Base Kings Bay - Who To Call**

For general questions or information about SUBASE and the environmental program, contact:



**Robert Steller**  
**Public Affairs Officer**  
**(912) 673-4714**



An Information Repository containing documents related to the environmental cleanup activities at SUBASE is also available to the public.

The Information Repository is located at:

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

**Become involved in the environmental program at SUBASE. attend a RAB meeting!**

**These meetings are held quarterly and are open to the public.**

**Mark your calendars for the next meeting scheduled for October 26th at 10:00 a.m.**

**Public Affairs Office**  
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**1063 USS Tennessee Avenue**  
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