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NOTICE OF PUBLIC INFORMATION SESSION 5-13-1993 NSB KINGS BAY
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**NOTICE OF PUBLIC INFORMATION SESSION
CROOKED RIVER ELEMENTARY SCHOOL
THURSDAY, MAY 13, 1993**

Submarine Base Kings Bay and the city of St. Marys will be holding the next public information session concerning the "plume" of contaminated ground water which appears to be emanating from the old Camden County landfill.

The primary purpose of the May 13 information session will be to discuss the nature and extent of volatile organic compound contamination in groundwater, and the attendant risk assessment. Also to be discussed are upcoming plans for additional monitoring and initial remediation.

Please plan to attend the May 13 public information session. Your cooperation continues to be key to the success of this effort.



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Public Information Session
Risk Evaluation Fact Sheet
SUBASE Kings Bay
May 1993

Introduction

In environmental programs, the concept of "risk" is complicated, yet very important for communities to understand. Once techniques, such as sampling and analysis, identify contaminants and their locations, the potential risk associated with exposure to the contaminants must be assessed to decide what, if anything, to do next. **The potential risk associated with the contaminated groundwater in the vicinity of the old County Landfill will be the topic of the next public information session scheduled for Thursday May 13th, 7 pm, at Crooked River Elementary School.** Prior to the session, SUBASE Kings Bay is providing this fact sheet to help familiarize you with the topic of risk.

What's happened so far?

In August 1992, a Navy study confirmed a "plume" of groundwater contaminated with volatile organic compounds (VOCs, which are solvent by-products) in the vicinity of the old County Landfill on the base. Further sampling showed the plume had crossed Spur 40 and was moving slowly to the west. City and County leaders, local residents, and regulatory agencies were immediately notified. Public drinking water use was not affected; however, Crooked River Plantation residents were asked, as a precaution, to stop using their private irrigation wells. With residents' permission, sampling was conducted on some private properties. Results showed plume contaminants had migrated in the groundwater under the subdivision. Regular public information sessions, news releases, and fact sheets have kept the community informed. Most recently, the Navy has been conducting a Screening Risk Evaluation to evaluate the potential immediate risk associated with exposure to the plume's VOC contaminants.

What exactly do we mean by Risk?

Risk is the likelihood that exposure to a contaminant will cause health problems. It is a calculated estimate based on what is known about a contaminant (such as its chemical behavior and related health effects) and assumptions about the amounts, ways, and length of time a person may be exposed. These assumptions range from a very conservative, worst-case exposure scenario to a more likely, real-life scenario. Since risk calculations are based on assumptions, they only represent a *potential* for risk and are not exact. The amount of risk is estimated by conducting a Risk Evaluation.

How is the Risk Evaluation conducted?

A Risk Evaluation is conducted in four parts:

- Data Collection and Evaluation** identify the contaminants, their quantities, and locations.
- An **Exposure Assessment** estimates how people may come in contact with the contaminants, how much they may encounter, and for how long.
- A **Toxicity Assessment** looks at the harmfulness of the contaminant based on studies of health effects due to various exposures.
- Risk Characterization** uses the toxicity and exposure data to calculate the risk estimate:
(Risk = Toxicity x Exposure).

In each estimate, there must be three factors to have a potential risk: a contaminant, someone who may come in contact with the contaminant, and a way for the contaminant to reach them. The Navy is conducting a Screening Risk Evaluation to assess these factors and the potential immediate risk to subdivision residents due to the plume's VOC contaminants.

Who figures out how much risk is too much? Isn't any amount of risk unsafe?

Federal and state regulatory agencies, the U.S. Environmental Protection Agency and the Georgia Environmental Protection Division, set exposure standards for many chemicals to protect human health and the environment. They base these standards on research and exposure studies. As some chemicals occur naturally, zero risk is unattainable. And, since most cause little or no harm under controlled conditions, zero risk is unnecessary. What is necessary is to develop risk estimates that, as accurately as possible, predict the health effects due to exposure and to make sure that cleanup actions are effective in reducing the risk to levels which protect human health.

What do you mean by cleanup actions?

Cleanup actions, often called remedial actions, are methods to reduce risk, either by reducing exposure to the contaminant or its concentration (toxicity).

What happens next?

The Navy has nearly completed their evaluation of potential risk associated with the plume's VOC contaminants. Their work currently is being reviewed by the state and federal regulatory agencies. **A public information session will be held Thursday May 13, 7pm, at Crooked River Elementary School to discuss the results of the evaluation.** Should the evaluation find that exposure to plume VOC contaminants results in an unacceptable risk to human health, methods of cleanup and/or reducing exposure will be discussed. In the meantime, subdivision residents, as a precaution, are being encouraged to continue not using their private irrigation wells.

Questions?

If you have questions prior to the public information session, please contact Bob Steller, Public Affairs Office, SUBASE Kings Bay, telephone: 673-4714.