



ENVIRONMENTAL UPDATE

TUTU WELLS SITE ST. THOMAS, U.S. VIRGIN ISLANDS

March 1995

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Public Involvement:

EPA plans to hold an **informal availability session** in April 1995 to update the community on activities at the Tutu Wells Site. Tutu residents and all concerned members of the community are encouraged to attend. Technical experts will be there to discuss the investigations at Tutu and answer questions. EPA will announce the exact date and time in a few weeks.

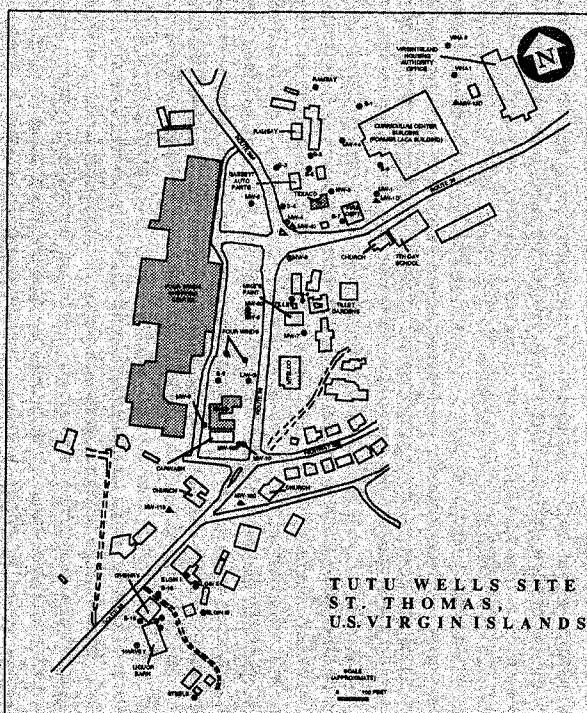
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EPA ADDRESSES COMMUNITY CONCERNS

During the week of October 31, 1994, EPA conducted interviews with community members and local officials to assist in updating the community relations plan for the Tutu Wells Site. In the course of these interviews, citizens expressed their concerns regarding several issues:

- The notification of additional potentially responsible parties (PRPs) and their liability
- The interpretation of sampling results and the continued use of well water
- The extent of contamination and the need for EPA to work quickly
- The restoration of the Island's natural resources.



EPA is currently evaluating methodologies for the cleanup of contaminated soils and groundwater and is considering a presumptive remedy for the cleanup of soils at the Tutu Wells site. When EPA considers presumptive remedies, the community, Territory of the Virgin Islands, and PRPs are notified as early as possible. EPA will present their preferred remedy at the public meeting in August 1995.

EPA has prepared this fact sheet to address specific concerns expressed during the October 1994 interviews and to inform concerned members of the community of the presumptive remedy. We have chosen to present this information in a question and answer format.

ISSUES AND CONCERNS

Q. Who are the potentially responsible parties or PRPs for the Tutu Wells Superfund site?

A. EPA conducted an extensive search for potential sources of contamination and identified potentially responsible parties by issuing CERCLA section 104(e) special notice letters. To date, EPA has identified at least **10 PRPs as known or potential sources of groundwater contamination**. These PRPs include ESSO Tutu Service Station, Four Winds Plaza, LAGA partners (Paul Lazare and Andrea Gals), O'Henry Cleaners, Ramsay Motors, Texaco Tutu Service Station, Tillett Gardens, VI Department of Education, the VI Housing Authority, Mr. and Mrs. Torinus, and Western Auto. Eight of these PRPs have formed the **Tutu PRP Committee**.

Q. Can residents or businesses use well water that has been found to be contaminated? If so, for what purposes?

A. EPA strongly **recommends that no one drink, shower, or bathe** in the well water that has been found to be contaminated to concentrations above maximum contaminant levels (MCLs) established by EPA. However, EPA has determined that the well water exhibits **acceptable risks for outdoor use**, such as to water lawns, wash cars, hose down pavement, and fight fires. The well water also is **acceptable for limited indoor uses** — to launder clothes or flush toilets, or for use in an automatic dishwasher for instance. DPNR **regulates** the use of well water in St. Thomas.

Q. Have **health risks** been established at the Tutu Wells site?

A. EPA has evaluated the contaminants and their respective concentrations and has calculated the risk potential of these contaminants. EPA considers risk to be **acceptable**

when the probability of contracting cancer because of site contamination is less than 1 in 10,000 persons.

Q. Have any health studies been conducted at the Tutu Wells site?

A. Yes. ATSDR, or the **Agency for Toxic Substances and Disease Registry**, conducted an assessment of public health concerns at the Site in December 1992. ATSDR also announced and held two public meetings in the Tutu community, but there was no attendance. ATSDR is working to prepare a draft health assessment report for release to the public in Spring 1995. Copies of the report will be included in the information repository which is kept at the Department of Education Curriculum Center.

Q. Has the contamination in the area of the Tutu Wells site moved or become larger?

A. Yes. A **remedial investigation**, which determines the nature and extent of contamination, has been completed. A draft report was submitted to EPA for review in September 1994. This report shows that the contamination has spread farther down **Turpentine Run**, where wells which initially tested clean have now been found to be contaminated. A final report is expected to be submitted to EPA very shortly.

Q. Why has the cleanup process at Tutu taken so long?

A. Although it seems like a long time has passed since 1987 when the problem was discovered, and the cleanup process has not yet begun, EPA has been working systematically to correct the problems at the Site.

- The first step EPA and DPNR took in 1987 was to **close the contaminated wells** to protect the health of the community.

- In 1988 EPA initiated a **removal action**. Cisterns were cleaned, home plumbing was modified, contaminated wells were disconnected.
- Once the well water use was restricted, EPA arranged through an Administrative Order in 1990 for **ESSO, Texaco, and O'Henry Cleaners** to 1) provide water to affected homes until these homes are connected to the public water main, 2) provide water to any additional affected homes until they are connected to public water, and 3) take over EPA's ground water monitoring of the drinking water wells in the Tutu aquifer.
- EPA entered into complex legal negotiations with ESSO and Texaco to sign an Administrative Order by Consent with EPA to conduct a **remedial investigation/feasibility study** at the Tutu Wells site. The Order was signed on February 19, 1992.
- Immediately following the Order, field work for the Phase I of the **remedial investigation** began in April 1992 and was concluded in July 1994. Phase II of the remedial investigation, which included numerous studies by several PRPs, commenced in February 1994 and was completed in July 1994. This investigation involved the installation and pumpage of monitoring wells and comprehensive groundwater sampling and analysis. The remedial investigation determined the extent and nature of the contamination at the Tutu Wells site.
- The next step in the Superfund process is the **feasibility study**, which will be conducted to evaluate potential remedial (cleanup) alternatives. EPA will select a remedial alternative and expects to publish the Record of Decision that documents that selection in the fall of 1995.
- Actual cleanup can begin once the clean-up system has been designed.

Q. Will the water in the Tutu Aquifer ever be available for public use?

A. Yes, once the remedial action is in place and operational. Although EPA has not selected a remedy at this time, EPA is evaluating methods to **pump** the contaminated water from the aquifer **and clean** it to federal drinking water standards and distribute it for use to the community. EPA will determine the exact cleanup and distribution methods in consultation with DPNR and other regulatory and government agencies in St. Thomas. Citizen acceptance is another evaluation criteria EPA will consider.

PRESUMPTIVE REMEDY

Q. What is a presumptive remedy?

A. A **presumptive remedy** is the use of cleanup technologies that have been proven in the past to be successful. EPA presumes that a particular remedy, or set of remedies, is appropriate for a specific site type based on evaluation of technologies that have been consistently selected at past sites where similar contamination was present.

Q. What are the benefits of choosing a presumptive remedy?

A. Presumptive remedies draw upon past experiences to **streamline** site investigations and the selection of cleanup actions. They can achieve cost and time savings by 1) identifying the presumed or likely remedy up front and allowing for a more focused collection of data on the extent of contamination, 2) eliminating the need for the initial step of screening alternatives during the feasibility study, and 3) streamlining the detailed screening portion of the feasibility study, where a remedial (cleanup) alternative is evaluated against the nine criteria in the National Contingency Plan.

Q. Why is EPA selecting a presumptive remedy at the Tutu site?

A. The Tutu Wells Superfund site involves the contamination of soils and rock with Volatile Organic Compounds or VOCs. VOCs are defined as any organic compound which readily dissipates into the air. EPA has developed several presumptive remedies (i.e. technologies that have been proven at numerous similar sites) for the cleanup of VOCs in soils. These are **soil vapor extraction (SVE)**, **thermal desorption**, and **incineration**.

Q. Which presumptive remedy will EPA choose for this particular site?

A. EPA intends to select **soil vapor extraction, or SVE**, as the presumptive remedy for contaminated soils and rock at the Tutu site for two reasons. First, this technology was chosen in over two-thirds of the Record of Decisions for Superfund sites where cleanup selection was driven by VOCs. And second, SVE effectively treats wastes in-place at a relatively low cost.

Q. What is Soil Vapor Extraction?

A. **Soil vapor extraction** is an **in-situ** process, which means the treatment or cleanup occurs **in-place**. SVE physically removes contaminants from **vadose zone** soils, the zone in soils and rock that lies above the permanent water table, by inducing air flow through the soil. The air strips volatile compounds from the solids and carries them to extraction wells.

Extraction wells are installed down to the water table and connected to a vacuum compressor. The vacuum draws the volatiles from the soils and rock and brings them to the surface for discharge or treatment.

Q. How can the public register concerns they may have about the selection of a presumptive remedy?

A. The public can register concerns about the presumptive remedy during the **public comment period** by commenting verbally at the public meeting on the proposed remedial action plan or writing to EPA.

Q. Where can I learn more about the Tutu Wells site?

A. EPA has established an information repository for the Tutu Wells Superfund Site at **the Department of Education Curriculum Center** at 44-46 Konges Gade, St. Thomas. EPA invites the public to go and read or copy materials related to the Site. The information repository contains the Community Relations Plan and fact sheets regarding the Tutu site and general EPA information prepared especially for community residents. Copies of more technical documents such as the remedial investigation/feasibility study Work Plan and the Sampling, Analysis, and Monitoring Plan are also available as well as copies of sampling reports, administrative orders, and the health and safety plan. The final remedial investigation/feasibility study reports, the risk assessment, the proposed remedial action plan, and the Record of Decision will be added as they become available. For more information, please contact Cynthia Richards at the Curriculum Center at (809) 775-2250.

EPA also has established two administrative records. One is located at the Department of Planning and Natural Resources, 8000 Nisky Center, Charlotte Amalie, St. Thomas. The other is at the EPA Caribbean Field Office, 1492 Ponce de Leon Avenue, Centro Europa Building, Room 417, Santurce, Puerto Rico, 00907. Contact Yvonne McCauley at (809) 775-2250 in St. Thomas or Aileen Sanchez at (809) 729-6951 extension 223 in Puerto Rico for more information.

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EPA encourages citizen questions about the Tutu Wells site and the remedial (cleanup) activity taking place there. If you have additional questions or concerns that you would like EPA to address, please indicate them on the form below and mail it to Caroline Kwan, EPA's Remedial Project Manager for the Site.

My question is: _____

Name: _____
Address: _____

Telephone: _____
