

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II**

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Tutu Wells Site - Phase II Draft Remedial Investigation: Air Programs Branch Review

FROM:

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TO:

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The Air Programs Branch has completed its review of the draft Phase II Remedial Investigation (RI) Report for the Tutu Wells Site located in St. Thomas, U.S. Virgin Islands.

Site Background:

The site is located in the Tutu area of St. Thomas, in the east-central part of the island at the Anna's Retreat Section. The area, which is located in the Turpentine Run drainage basin, is surrounded by high hills to the east, west and north; and, it is home to both residences and mixed industry. A number of water wells were sunk into the area to supply homes and industries.

Groundwater contamination was detected when a strong petroleum odor, coming from a public water supply well for the area, was reported. Subsequent investigations conducted by the Virgin Islands Department of Planning and Natural Resources, EPA and contractors indicate that chlorinated and petroleum-related volatile organic compounds (VOCs) had contaminated area soils and ground-water.

Certain commercial properties have been identified as the source of the area's contamination, including: the Texaco and Esso Service Stations. To these sources, an Administrative Order was issued requiring them to: assess the environmental impact from their operations and fuel storage facilities; and, to develop a feasibility study of remediation alternatives.

Comments:

- ♦ As stated in the draft report, the data gathered in the RI has not been used to perform an air pathway analysis for the area. Emission estimates for each of the VOCs identified must be made. The National Technical Guidance Study (NTGS) document entitled "Guideline for Predictive Baseline Emissions Estimation Procedures for Superfund Sites", is the recommended guide to use to perform the emissions estimation. Let me know if you need a copy of this document.

Air quality dispersion modeling would then be performed to determine the impacts of these VOC concentrations in the vicinity of the site. Thereafter an inhalation

path risk assessment analysis would be carried out to determine if the site's air quality poses a threat to human health. Air quality monitoring can be performed to supplement the emission estimate and dispersion modeling analyses.

If you have any questions, please call at X2517.