# State of New Jersey

Department of Environmental Protection

Christine Todd Whitman
*Governor*

Robert C. Shinn, Jr.
*Commissioner*

JAN 26 1996

Kenneth Smith
Naval Air Warfare Center
Aircraft Division
P.O. Box 7176
Trenton, NJ 08628-0176

Re: Soil Sampling Analysis Report - Above Ground Tank Farm

Dear Mr. Smith

The New Jersey Department of Environmental Protection (NJDEP) is in receipt of the Soil Sampling Analysis report for the above ground tank farm dated May 22, 1995. This report presents the results of soil sampling and analyses conducted to characterize soils in the Above-Ground Storage Tank (AST) Farm at NAWCADTRN, in March 1995. Twenty-three soil samples were collected and analyzed for volatiles, semi-volatiles and total petroleum hydrocarbons.

Upon review of the subject report, NJDEP has a few comments. The comments have been enclosed for your convenience.

If you have any questions regarding this letter, please do not hesitate to contact me at (609) 633-1455.

Sincerely,

Donna L Gaffigan

Donna L. Gaffigan, Case Manager
Bureau of Federal Case Management

Enclosure

C. William Hanrahan, BGWPA
Steven Byrnes, BEERA

# Soil Sampling Analysis Report - Above Ground Tank Farm

May 22, 1995

## GENERAL COMMENTS

1. A revised document that address the following comments must be submitted.

2. Table Nos. 1 and 2 list inaccurate Impact to Ground Water Soil Cleanup Criteria (IGW-SCC) for numerous contaminants. The following IGW-SCC are listed in the most recent version of the NJDEP Soil Cleanup Criteria dated 2/3/94.

Anthracene - 100 ppm
Benzo(b) fluoranthene - 50 ppm
Bis(2-ethylhexyl)phthalate - 100 ppm
Fluoranthene - 100 ppm
Pyrene - 100 ppm
Methylene chloride - 1 ppm
Acetone - 100 ppm

3. In addition to the IGW-SCC, the data should also be compared to the Residential and Non-Residential Direct Contact Soil Cleanup Criteria. It is NJDEP's policy that the entire soil column meets the most stringent of the SCC. The sampling results are below all of the SCC, however, Table Nos. 1 and 2, as well as Section Nos. 3.1 and 3.2, require revision to address this issue.

## SPECIFIC COMMENTS

4. Section 2.1 Soil Sampling

a. The text states that one sample was collected at a depth of 3 feet around the tanks. In the area of the pumphouse samples from were collected from 2 depths, 3 and 6 feet at two locations. The sample labeling scheme is confusing as shown on Figure 2 where it appears that 2 samples were collected at each location (i.e., "A" *and* "B") instead of 1 as indicated in the text.

b. Building 26 drain pipe - It would have been much better to sample soil at the *end* of the 4" drain line, rather than from the side of the pipe. If something was drained from Building 26 and through the pipe, it wouldn't end up along side the pipe, unless of course the pipe had a hole in it. In the next round of sampling at NAWCADTRN, a soil sample should be obtained directly at the terminus of this drain line and analyzed for the same parameters as this round.

5. Section 4.0, Conclusions

a. In the second sentence, "three wells" should be changed to "three soil samples".

b. The laboratory *method blank(s)* (not the field blanks) should be checked for methylene chloride contamination. Since the IGW-SCC of 1 ppm is exceeded 20 times or more in some of the soil samples, there must be some explanation before a no further action recommendation can be accepted.

c. Previously (11/2/94), NJDEP commented on the presence of chlorinated organics in overburden monitoring well MW31S, immediately downgradient of the AST farm. Methylene chloride was detected in three locations in the AST Farm, however, it is not one of the compounds that was detected in MW 31S, so the source of contamination in this well remains unknown. Further investigation is necessary to address the contamination in MW31S.