



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-831-5508

16 April 1998

Mr. Philip Otis, P.E., Remedial Project Manager
US Department of the Navy, Northern Division
Code 18, Mail Stop #82
10 Industrial Highway
Lester, PA 19113-2090

RE: Draft Technical Memorandum - Interim Summary of the
Natural Attenuation Study Results for Site 03/NIKE
NCBC Davisville, Rhode Island
Submitted 9 March 1998, Dated March 1998

Dear Mr. Otis;

The Rhode Island Department of Environmental Management, Office of Waste Management (RIDEM) has reviewed the above referenced document and comments are attached.

If you have any questions or require additional information please call me at (401) 222-2797 ext. 7138.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Gottlieb".

Richard Gottlieb, P.E.
Principal Sanitary Engineer

Attachment:

cc: W. Angell, DEM OWM
C. Williams, EPA Region 1
H. Cohen, RIEDC
S. Licardi, ToNK
W. Davis, CSO NCBC
J. Shultz, EA Eng.

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RIDEM Comments For:

**Draft Technical Memorandum
Interim Summary of the Natural Attenuation
Study Results for Site 03/NIKE**

Submitted 9 March 1998, Dated March 1998

**1. Page 3, Daughter Products Analysis;
Paragraph 2.**

This paragraph notes that the ratio of various compounds to one another has remained fairly constant over two sampling events during 1995 and 1996. While the ratio of one compound to another have remained relatively constant over the two measurements, in general, it appears as though the concentrations of the various compounds evaluated have increased in concentration from 1995 to 1996, based on the results contained in Figure 5. Based on these results, it does not appear as though "attenuation" is occurring to any significant degree. Given the relative stable chemical ratio, increased chemical concentrations from 1995 and 1996, and the slow movement of groundwater (602 years to travel one mile) RIDEM does not feel that a "trend" showing attenuation has been established. A longer time frame would be necessary to establish that the VOCs are naturally attenuating.

Given Rhode Island's anti-degradation policy, the Navy would not only have to demonstrate that the plume is naturally attenuating, but that it is attenuating at an acceptable rate. If this cannot be done then it is suggested the Navy, in conjunction with the Army Corps of Engineers for the NIKE Site, consider active forms of remediation.

2. Page 4, Recommended Wells and Parameters for Future Sampling.

Five wells are proposed to be omitted from future sampling events: MW-Z4-1, MW-Z3-2, RMW-01D, RMW-02D, and EA-108. Wells MW-Z3-2, MW-Z4-1, and RMW-01D should be retained as these can serve as compliance wells. Well MW01-14D could be deleted from further sampling.