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State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director

DEHNR

November 28, 1995

Commander, Atlantic Division
Naval Facilities Engineering Command
Code 1823-2
Attention: MCB Camp Lejeune, RPM
Ms. Katherine Landman
Norfolk, Virginia 23511-6287

Commanding General
Attention: AC/S, EMD/IRD
Marine Corps Base
PSC Box 20004
Camp Lejeune, NC 28542-0004

RE: Draft RI Report for Operable Unit 11 (Site 80), Marine Corps Base - Camp Lejeune.

Dear Ms. Landman:

Attached please find comments provided to the Superfund Section by our sister agencies for the above referenced documents. Please let me know if you have any questions about this.

Sincerely,

Patrick Watters

Patrick Watters
Environmental Engineer
NC Superfund Section

Attachment

cc: Preston Howard, DEHNR
Gena Townsend, US EPA Region IV
Neal Paul, MCB Camp Lejeune
Bruce Parris, DEHNR - Wilmington Regional Office

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SUPERFUND SECTION

DIVISION OF ENVIRONMENTAL MANAGEMENT

Groundwater Section

November 22, 1995

MEMORANDUM

TO: Arthur Mouberry

THROUGH: Rick Shiver 12 55

FROM: Charles Stehman

SUBJECT: Draft Remedial Investigation Report
Operable Unit No. 11, Site 80
Project No. 95-32
Marine Corps Base-Camp Lejeune
Onslow County

Bruce Parris with the Groundwater Section of the Wilmington Regional Office provided the comments that are offered below for your consideration. The review involves draft interim documents relating to the medial investigation at Operable Unit No. 11 (Site 80).

Site Summary

Site 80 (Paradise Point Golf Course Maintenance Area) is located behind a machine shop (Building 1916) and a maintenance wash area consisting of a concrete wash pad and sump. Golf course maintenance equipment is cleaned on the pad and wastewater travels to a sump and then to an oil/water separator located a few feet southeast of the pad.

As part of the investigation, surface and subsurface soil samples were collected. Soil samples included 58 surface soil samples and 51 subsurface soil samples which were collected from various parts of the subject site. Of the soil samples which were collected, 37 surface samples and 38 subsurface samples were taken to test for organic and inorganic contaminants. The remaining 21 surface soil samples and 13 subsurface soil samples were taken to test for pesticides.

Groundwater samples were collected from 8 monitoring wells that were screened in the surficial aquifer and from 1 monitoring well that was screened just above the Castle Hayne Aquifer. Organic and inorganic contaminants were targeted in all the wells except one of the shallow wells. The one shallow well which was excluded was sampled for pesticides.

The results of the investigation indicated that pesticides exist in the surface and subsurface soils. Polynuclear aromatic hydrocarbons at concentrations of less than 100 ug/kg were also detected in surficial soils. Only Phenanthrene was detected in one subsurface soil sample. Some inorganic constituents (arsenic, barium, chromium, manganese, mercury, and selenium) were detected above background levels in surface soils.

Low concentrations of pesticides were detected in groundwater from the one monitoring well (80-MW04) that was utilized for pesticides detection. Semivolatile constituents were detected in low levels in two of the other monitoring wells (80-MW02 and 80-MW03) that were screened in the surficial aquifer. Inorganics were detected in groundwater samples from all seven of the monitoring wells screened in the surficial aquifer. Although some of the inorganic concentrations were above the State and Federal allowable limits, the concentration were below previously exhibited background concentrations found at other portions of the base. There were no contaminants detected in groundwater taken from the monitoring well that was screened just above the Castle Hayne aquifer.

The report concludes that pesticides contamination found at the site likely results from spraying activities at the golf course. The report also concludes that the organic compounds, detected essentially in soils from an area where open burning of wood and leaves was conducted, probably resulted from the burning activities.

Air Quality Section Comments

No comments have been received from the Air Quality Section.

Water Quality Section Comments

No comments have been received from the Water Quality Section.

Groundwater Section Comments

The Remedial Investigation contained "risk factor" evaluation of the contaminants that were found in soil and groundwater. Based on those "risk factors" the report proposed that groundwater remediation should be considered in the Feasibility Study and soil remediation should be considered under a Time Critical Removal Action. The Remedial Investigation reported that there did not appear to be an aquitard between the surficial sediments and the Castle Hayne aquifer system. Given the potential for surficial soils and groundwater contamination to eventually impact the Castle Hayne aquifer system, the Groundwater Section encourages active remediation of soil and groundwater at this site.

If you have any questions, please do not hesitate to contact Bruce Parris or myself at (910) 395-3900.

RSS/CFS/BRP/gjg

cc: WiRO-AQS
WiRO-WQS
WiRO-GWS
Patrick Watters (DSWM Superfund)

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