

ASSISTANT CHIEF OF STAFF, FACILITIES  
HEADQUARTERS, MARINE CORPS BASE

DATE 9 Apr 86

TO:

BASE MAINT O

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COMM-ELECT O

BASE FIRE CHIEF

ATTN:

W. J. S.

1. Attached is forwarded for info/action.

2. Please initial, or comment, and return all papers to this office.

3. Your file copy

"LET'S THINK OF A FEW REASONS  
WHY IT CAN BE DONE"

MCBCL 5216/21 (REV. 2-81)

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DEPARTMENT OF THE NAVY

ATLANTIC DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
NORFOLK, VIRGINIA 23511-6287

II RZ  
TELEPHONE NO. Alex

(804) 444-1179  
IN REPLY REFER TO:  
6280  
1143CFB

6 FEB 1986

U.S. Environmental Protection Agency  
Attn: Arthur G. Linton, P.E.  
Regional Federal Facilities Coordinator  
Region IV  
345 Courtland Street  
Atlanta, GA 30365

Re: EPA's ltr 4 PMEA/WM of November 18, 1985

Gentlemen:

We requested comments on the Navy Assessment and Control of Installation Pollutants (NACIP) Phase I reports for the Marine Corps Air Station (MCAS), Cherry Point and the Marine Corps Base (MARCORB), Camp Lejeune in a letter dated October 31, 1985. We appreciate your timely response and would like to respond to the specific issues you raised.

1. General Comments

a. Concur. Although Phase I reports propose indicator parameters to confirm the presence of contaminants, we have expanded the parameter list in the Phase II studies to test for a variety of contaminants that could be present. For example, at sites such as landfills where a variety of wastes may have been disposed, we generally analyze samples for the 123 priority pollutants or combinations of priority pollutant classes such as volatile organics and pesticides. On the other hand, at former electrical transformer storage yards, we may test for only PCBs, and oil and grease, since these are the contaminants that would logically be present. Current sampling plans for both MCAS Cherry Point and MARCORB Camp Lejeune are enclosed for your review.

b. Concur. Again, at sites where a wide variety of materials have been disposed, background samples are tested for the priority pollutants or pollutant classes. At other sites such as fuel farms, background samples are only tested for specific contaminants. At least one upgradient well is installed at sites where groundwater is tested; upstream surface water and sediment samples are taken where possible; and background soil samples will be taken where needed to establish background levels.

c. Concur. The second step of the Phase II effort, Characterization, is designed to determine the levels and the vertical and horizontal distribution of contamination as well as site hydrogeology and specifics of site groundwater movement.

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d. Concur. The objective of the Phase II effort is to quantitatively determine whether contamination has the potential to or is presently affecting human health or the environment.

2. Comments Which Pertain Specifically to MCAS Cherry Point

a & b. Concur. Under the NACIP program, the landfill and the sludge pits are being studied as one site to confirm the presence of contaminants and determine the potential for migration from the site. The data being generated concurrently by the sludge pits post closure monitoring requirements will also be evaluated prior to any recommendations for remedial action. You will be given the opportunity to review our confirmation study efforts as each step is completed and to comment on the results and recommendations for remedial action.

3. Comments Which Pertain Specifically to MARCORB Camp Lejeune

a. This comment has been previously addressed.

b. Do not concur. We do not have any problem obtaining funding for NACIP efforts; therefore, inclusion of Camp Lejeune on the NPL will not enhance the funding priority. Instead, it will probably slow the progress toward cleanup, because of the additional time-consuming steps required for NPL sites. The public and the state are being kept informed; the state through meetings with Camp Lejeune personnel, and the public through articles in the local papers. We are proceeding as expeditiously as possible with the confirmation study and will forward you copies of the reports on the verification and characterization efforts as they become available.

4. If you have any additional questions or concerns, our point of contact for the NACIP Program is Ms. Cherryl Barnett.

Sincerely,

J. R. BAILEY, P.E.  
Head, Environmental Quality Branch  
Utilities, Energy and Environmental  
Division  
By direction of the Commander

Encl:

(1) Sampling Plans  
for MCAS Cherry Point  
& MARCORB Camp Lejeune

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1143CFB

Copy to:  
COMNAVFACENGCOM  
CNO (OP-45)  
NEESA (w/copy of ref. ltr)  
CMC (LFF-2) (w/copy of ref. ltr)  
MCAS Cherry Point  
MARCORB Camp Lejeune ←

Environmental Protection Agency  
Attn: LTC Warren Hall  
Office of Federal Activities  
401 M. Street, S.W.  
Washington, DC 20460

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ATTACHMENT D

CONFIRMATION STUDY VERIFICATION STEP (ROUND 2) SAMPLING AND ANALYSIS PROGRAM - MCB CAMP LEJEUNE

Site No.	Wells to be Installed	Total Wells to be Sampled	Surface Water	Sediments	Soil	Frequency	Analytical Parameters
1	-	6	2	2	-	1	* Cd; Cr; Cr <sup>+6</sup> ; Pb; Sb; O&G; VOA; T. Phenols; o,m,p-xylene; MEK; MIBK; EDB
2	-	1	2	2	4	1	OCP, OCH, dioxin, VOA
	4	4	-	-	-	2	OCP, OCH, dioxin, VOA
6	8	8	-	-	-	2	DDT-R, VOA
	-	-	4	4	-	1	DDT-R, VOA
9	-	2	-	-	-	1	Cd; Cr; Cr <sup>+6</sup> ; Pb; O&G; VOA; T. Phenols; o,m,p-xylene; MEK; MIBK; EDB
	1	1	-	-	-	2	Same as above
21	-	1	-	-	-	1	VOA, OCP, OCH, PCB, dioxin, xylene, MEK, MIBK, EDB, O&G
	-	-	-	-	32	1	OCP, OCH, PCB, dioxin
24	-	5	4	4	-	1	Metals A, Cr <sup>+6</sup> , VOA
	2	2	-	-	-	2	Metals A, Cr <sup>+6</sup> , VOA
28	-	3	7	7	-	1	Metals B; Cr <sup>+6</sup> ; OCP; PCB; O&G; VOA; dioxin; o,m,p-xylene; MEK; MIBK

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\*See Key to Constituent Abbreviations.

Site No.	Wells to be Installed	Total Wells to be Sampled	Surface Water	Sediments	Soil	Frequency	Analytical Parameters
30	1	1	-	-	-	2	Same as above
	-	1	1	1	-	1	Pb, OΔG, VOA, xylene, MEK, MIBK, EDB
35	1	1	-	-	-	2	Same as above
	3	3	-	-	-	2	Pb, VOA, EDB, xylene, OΔG
	-	-	2	2	-	1	Pb, VOA, EDB, xylene, OΔG
36	-	4	4	4	-	1	Cd; Cr; Cr <sup>+6</sup> ; Pb; OΔG; VOA; T. Phenols; o,m,p-xylene; MEK; MIBK; EDB
	1	1	-	-	-	2	Same as above
41	-	4	4	4	-	1	Cd; Cr; Cr <sup>+6</sup> ; Pb; VOA; OΔG; T. Phenols; Ordnance Compounds; dioxin; o,m,p-xylene; MEK; MIBK; OCP; Mirex
	1	1	-	-	-	2	Same as above
45	-	3	2	2	-	1	Pb, OΔG, VOA, EDB, xylene
	1	1	-	-	-	2	Pb, OΔG, VOA, EDB, xylene
	-	-	-	-	18	1	Pb, OΔG
54	-	1	3	3	-	1	Cd; Cr; Cr <sup>+6</sup> ; Pb; OΔG; VOA; T. Phenols; o,m,p-xylene; MEK; MIBK; EDB
	2	2	-	-	-	2	Same as above
68	-	3	-	-	-	1	VOA; o,m,p-xylene; MEK; MIBK; EDB
69	-	8	5	2	-	1	OCP; PCB; VOA; Hg; Residual Chlorine; dioxin; o,m,p-xylene; MEK; MIBK; EDB; PCP
73	1	4	3	3	-	1	Cd; Cr; Cr <sup>+6</sup> ; Pb; Sb; OΔG; VOA; T. Phenols; o,m,p-xylene; MEK; MIBK; EDB
	1	1	-	-	-	2	Same as above

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Site No.	Wells to be Installed	Total Wells to be Sampled	Surface Water	Sediments	Soil	Frequency	Analytical Parameters
74	-	2	-	-	-	1	OCP, OCH, PCB, dioxin, VOA
	1	1	-	-	-	2	Same as above
75	-	3	-	-	-	1	VOA, dioxin, chloropicrin
76	-	2	-	-	-	1	VOA, dioxin, chloropicrin
A	3	3	-	-	-	2	VOA, O&G, free chlorine
	-	-	1	-	-	1	Same as above
	-	-	-	1	-	1	O&G, VOA
Potable Wells	-	110	-	-	-	1	Priority pollutants, SDWA parameters, xylene, NEK, MIBK, EDB
	-	20	-	-	-	1	VOA
Soil Gas Wells	30	35	-	-	-	2	VOA, xylene, MEK, MIBK

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CONFIRMATION STEP CHARACTERIZATION STEP AT HADNOT POINT INDUSTRIAL AREA

SAMPLING AND ANALYSIS PROGRAM

Site No.	Wells to be Installed	Total Wells to be Sampled	Surface Water	Sediments	Soil	Frequency	Analytical Parameters
22	14	17	-	-	-	3	Pb, O&G, VOA, xylene, MEK, MIBK, EDB

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Key to Constituent Abbreviations:

Cd = Cadmium.  
Cr = Chromium.  
Cr<sup>+6</sup> = Hexavalent chromium.  
Pb = Lead.  
Sb = Antimony.  
O&G = Oil and grease.  
VOA = Volatile organic analysis.  
T. Phenols = Total phenols.  
OCP = Organochlorine pesticides.  
OCH = Organochlorine herbicides.  
DDT-R = o,p- and p,p'-isomers of DDD, DDE, and DDT.  
PCB = Polychlorinated biphenyls.  
Metals A = Arsenic, cadmium, chromium, copper, lead, nickel, selenium, and zinc.  
Metals B = Arsenic, cadmium, chromium, lead, mercury, nickel, and zinc.  
Ordnance Compounds = TNT, DNT, RDX, and white phosphorus (WP)  
PCP = Pentachlorophenol.  
Hg = Mercury.  
MEK = Methyl ethyl ketone.  
MIBK = Methyl isobutyl ketone.  
EDB = Ethylene dibromide.  
SDWA = Safe Drinking Water Act.

Organochlorine Pesticides (OCP)

Aldrin  
a-BHC  
b-BHC  
d-BHC  
g-BHC  
Chlordane  
4,4'-DDD  
4,4'-DDE  
4,4'-DDT  
Dieldrin  
Endosulfan I  
Endosulfan II  
Endosulfan Sulfate  
Endrin  
Endrin Aldehyde  
Heptachlor  
Heptachlor Epoxide  
Toxaphene

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Organochlorine Herbicides (OCH)

2,4-D  
2,4,5-T  
Silvex

DDT-R

o,p-DDD  
o,p-DDE  
o,p-DDT  
p,p'-DDD  
p,p'-DDE  
p,p'-DDT

Volatile Organic Analysis

VOA

Acrolein  
Acrylonitrile  
Benzene  
Bromomethane  
Bromodichloromethane  
Bromoform  
Carbon Tetrachloride  
Chlorobenzene  
Chloroethane  
Chloroform  
Chloromethane  
Dibromochloromethane  
Dichlorodifluoromethane  
1,1-Dichloroethane  
1,2-Dichloroethane  
1,1-Dichloroethylene  
T-1,2-Dichloroethene  
1,2-Dichloropropane  
Cis-1,3-dichloropropene  
T-1,3-dichloropropene  
Ethylbenzene  
Methylene Chloride  
1,1,2,2-Tetrachloroethane  
Tetrachloroethene  
1,1,1-Trichloroethane  
1,1,2-Trichloroethane  
Trichloroethene  
Trichlorofluoromethane  
Toluene  
Vinyl Chloride  
2-Chloroethylvinylether

Safe Drinking Water Act Analyses

Arsenic  
Barium  
Cadmium  
Chromium  
Lead  
Mercury  
Selenium  
Silver  
Nitrate  
Flouride  
Turbidity  
Endrin  
Lindane  
Methoxychlor  
Toxaphene  
2,4-D  
2,4,5-TP Silvex  
Radium 226 and 228  
Gross Alpha

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV  
345 COURTLAND STREET  
ATLANTA, GEORGIA 30365

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FEB 3 1986

REF: 4WD-ER

Commander  
Atlantic Division  
Naval Facilities Engineering Command  
Norfolk, Virginia 23511- 6287

Attention: J. R. Bailey, P.E.  
Environmental Quality Branch

Dear Sir:

On November 1, 1985, Messrs. Mathis and Holdaway of this Agency met with Facilities Engineering Staff at MCB Camp Le Jeune to review activities and progress in assessment of past waste disposal practices through the NACIP program. During the course of discussion, the subject of ground water quality, and particularly the quality of the water obtained from wells in the Hadnot Point Area of Camp Le Jeune, was reviewed at some length.

Both Messrs. Holdaway and Mathis became aware that there was evidence  
from sampling as early as 1983 or 1984, of diffuse contamination of the ground water with unspecified organic substances, and that as a result of detection of unspecified volatile organic compounds in raw potable water samples certain potable wells at Hadnot Point were taken out of service. In consideration of the fact that the major portion of the resident population of Camp Le Jeune, is dependent on the Hadnot Point well field as its potable water supply, the parties in the meeting agreed that any potential contamination of this resource should be investigated as expeditiously as practical. It was also established that there was no contamination detected in treated potable water distributed at Camp Le Jeune, however the extent and sensitivity of analytic procedures for specific organic substances was not fully discussed.

Mr. Mathis suggested it would be desirable to analyze ground water samples from the monitoring wells involved in the NACIP confirmation studies for the 129 priority pollutants (CFR261 Appendix 8), and that the same analysis should be performed on raw water from all potable wells to insure that there was no contamination of the Camp Le Jeune water supply. When EPA informally requested a copy of the analytical results from monitoring wells and potable wells, we were advised that these data were still in raw form and under review.

If these data are now available, please furnish us a copy. If these data have not been published yet, we would appreciate a brief description of what substances were analyzed, what substances were detected, and when the data will be available.

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This Agency is concerned that a potential for human exposure to hazardous substances and hazardous wastes via the Camp Le Jeune water supply may exist due to the presence of such materials in ground water in the general vicinity of the potable well field. The existence of such a potential exposure would warrant consideration of this area for inclusion on the National Priority List, with an attendant increase in the expediency of investigation and remediation.

We appreciate your assistance in obtaining these data in order that this potentially significant problem may be addressed.

If you have any questions, please do not hesitate to contact me at (404) 347-3776 or FTS 257-3776.

Sincerely,



Arthur G. Linton, P.E.  
Regional Federal Facilities Coordinator  
Environmental Assessment Branch  
Office of Policy and Management

cc: Commander, MCS Camp Le Jeune  
Lee Herwig  
Paul Hubble, Navy Department, Washington, DC

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