

FROM: SUPERVISORY CHEMIST, WQCL, ENVIRONMENTAL BRANCH

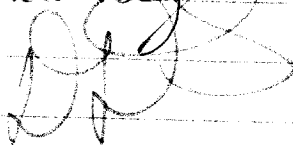
TO: SUPERVISORY ECOLOGIST, ENVIRONMENTAL BRANCH

SUBJ: EPA'S NACIP LETTER

1. I HAVE READ EPA'S 18 NOV 1985 LETTER ON OUR ~~NACIP~~ NACIP PROGRAM AND LANTDIV'S RESPONSE OF 6 FEB 1986. I AGREE WITH LANTDIV THAT WE DO NOT NEED TO BE ADDED TO THE NATIONAL PRIORITY LIST AT THIS TIME.

2. AS FOR THE SAMPLING AND ANALYSIS SCHEDULE, SINCE I DO NOT HAVE SITE MAPS OR THE ~~RESULTS~~ RESULTS OF ROUND 1 I CAN'T COMMENT ON IT. ~~I WOULD ASSUME LANTDIV~~

3. I ASSUME SITE NO. 22 IS IN THE AREA OF OUR EIGHT CONTAMINATED WELLS. I AM INTERESTED IN KNOWING THE LOCATIONS OF THE 14 NEW WELLS. I HOPE THEY ARE HEADED TOWARDS HP-651. PHASE I OF NACIP DID NOT FIND HP-651, THE WORSE WELL. HP-651 WAS NOT SAMPLED IN RELATION TO ANY NACIP SITE.

Elizabetha Bey


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Copy To Sup. Chemist
for review & Comment.
DPS

DEPARTMENT OF THE NAVY

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

II RZ
TELEPHONE NO.

(804) 444-1179

IN REPLY REFER TO:

6280
1143CFB

6 FEB 1986

NR EA

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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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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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 ⁺⁶ ; Pb; Sb; O&G; VOA; T. Phenols; o, m, p-xylene; MEK; MIBK; EDB
2	-	1	2	2	4	1	OCp, OCH, dioxin, VOA
6	4	4	-	-	-	2	OCp, OCH, dioxin, VOA
9	8	8	-	-	-	2	DDT-R, VOA
21	-	2	4	4	-	1	DDT-R, VOA
21	1	1	-	-	-	1	Cd; Cr, Cr ⁺⁶ ; Pb; O&G; VOA; T. Phenols; o, m, p-xylene; MEK; MIBK; EDB
21	-	1	-	-	-	2	Same as above
24	-	5	-	-	32	1	VOA, OCp, OCH, PCB, dioxin, xylene, MEK, MIBK, EDB, O&G OCp, OCH, PCB, dioxin
24	2	2	4	4	-	1	VOA, OCp, OCH, PCB, dioxin, xylene, MEK, MIBK, EDB, O&G
28	-	3	7	7	-	1	Metals A, Cr ⁺⁶ , VOA Metals A, Cr ⁺⁶ , VOA
28	-	3	7	7	-	1	Metals B; Cr ⁺⁶ ; OCp; PCB; O&G; VOA; dioxin; o, m, p- xylene; MEK; MIBK

*See Key to Constituent Abbreviations.

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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, O&G, VOA, xylene, MEK, EDB
35	1	1	-	-	-	2	Same as above
	3	3	-	-	-	2	Pb, VOA, EDB, xylene, O&G
	-	2	2	2	-	1	Pd, VOA, EDB, xylene, O&G
36	-	4	4	4	-	1	Cd; Cr; Cr ⁺⁶ ; Pb; O&G; VOA; T. Phenols; o, m, p-xylene; MEK; MIBK; EDB
	1	1	-	-	-	2	Same as above
41	-	4	4	4	-	1	Cd; Cr; Cr ⁺⁶ ; Pb; VOA; O&G; T. Phenols; Ordinance Compounds; dioxin; o, m, p-xylene; MEK; MIBK; OCP; Mirex
	1	1	-	-	-	2	Same as above
45	-	3	2	2	-	1	Pb, O&G, VOA, EDB, xylene
	1	1	-	-	-	2	Pb, O&G, VOA, EDB, xylene
	-	-	-	-	18	1	Pb, O&G
54	-	1	3	3	-	1	Cd; Cr; Cr ⁺⁶ ; Pb; O&G; 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 ⁺⁶ ; Pb; Sb; O&G; 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	1	2	-	-	-	1	OCP, OCH, PCB, dioxin, VOA Same as above
75	-	3	-	-	-	1	VOA, dioxin, chloropicrin
76	-	2	-	-	-	1	VOA, dioxin, chloropicrin
A	3	3	-	-	-	2	VOA, O&G, free chlorine
Potable Wells	-	110	-	-	-	1	Priority pollutants, SDWA parameters, xylene, MEK, MIBK, EDB 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⁺⁶ = 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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ROUND 2 SAMPLING
 MARINE CORPS AIR STATION, CHERRY POINT, NORTH CAROLINA

Wells Total Number of Samples

ISL (b)

CONSTITUENTS

Site No.	Well No.	Exist.	Well Water			Soil	ISL (b)						EP(d)		TCDD	GACI(e)	Metals(f)	GC(g) Fuel	
			Water	Surface Water	Sed.		Full	Org.	VONA	pH	Cr(6+)	CN	EDB	Asbestos					PCB
1 & 2	2	5	7				X			X	X	X							
4	5	5	5	1		5	X			X	X	X							
5	1	6	7	1				X	X	X	X	X	X	X	X				Pb
6	4	4	4					X	X										X, AS
7	1	2	3	3			X		X	X	X	X							
10	23(h)	23	5		5		X			X	X	X							
13	8	8	8					X				X							Pb
15	6	6	3		8		X	X	X	X	X	X							X
16	2	4	6				X		X	X	X	X							
17	7	7	8		3								X						
19&21	1	1	8		5		X		X	X	X	X							
21																			

- (a) New Well recommended for Round 2 sampling.
- (b) Hazardous Substances List.
- (c) Oil and grease concentration levels and measurement of petroleum, oil, and lubricant layer.
- (d) Cd, Cr, Pb
- (e) Groundwater Contaminant Indicators: specific conductance, pH, total organic halogens, total organic carbon, metals: (Cu, Cr, Pb, Zn, Cd, Ni, Ag), unless otherwise noted.
- (f) Fuel characterization by gas chromatograph. Standards to include heating oil.
- (g) Includes 13 existing monitoring wells and 10 potable wells.

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From: Paul Hubbell
To: Julian Wooten

Per our phone con
the attached letter is
forwarded. I am
surprised there has
been no response on
this by LAWDIV nor
additional action by
either Camp Lejeune or
EPA Region III. I will be
following up. Paul

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NOV 18 1985

4PM-EA/UM

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

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

Re: 6280/1143CFB

Dear Sir:

We have received your letter dated October 31, 1985, pertaining to Navy Assessment and Control of Installation Pollutants (NACIP) Phase I reports pertaining to Marine Corps Air Station, Cherry Point (NEESA 13-009) and Marine Corps Base, Camp Lejeune (NEESA 13-011), which you transmitted in May and August 1983, respectively.

Personnel of the U.S. Environmental Protection Agency (USEPA) have recently (October 31, to November 1, 1985) had the opportunity to visit these two installations for the purpose of familiarization with the proposed NACIP sites, and the following comments and observations are offered for your consideration in pursuing the NACIP Phase II Confirmation Studies. We hope that the delay in providing this input will not preclude its consideration.

1. General Comments Applicable to Both Studies

- a. Phase I reports generally propose analytical protocol which are heavily dependent on use of indicator parameters such as Total Valuable Organics, Total Organic Carbon and Total Organic Halides, and other physico-chemical measures in addition to specific chemical species suspected to be present from the available information on past operations. While the USEPA recognizes that such analyses are useful for preliminary screening, or detection of pollutant plumes, or for siting sampling locations, principally due to economic considerations, we feel strongly that they should not be the basis for conclusive decisions that no releases of pollutant exist at a given location.

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EPA recommends that at some point in the NACIP Phase II Study, an optimally collected sample(s) of groundwater, soil and/or surface water from each site under investigation be analyzed for all 123 priority pollutants before a final decision is made in the presence or absence of any environmental release from that site.

- b. In designing any confirmatory survey to identify and/or characterize environmental releases from potential uncontrolled hazardous materials disposal sites it is necessary to identify and sample representative background levels of the 123 priority pollutants at representative locations for each environmental media, soil, groundwater and surface water.
- c. The NACIP Phase II studies should contain, or make reference to, sufficient geologic and hydrological data to support conclusions regarding the hydrogeology and drainage of the general area, and to provide a valid assessment of the probable direction of horizontal migration or potential for vertical migration of releases from the sites under investigation. Likewise, where vertical migration in groundwater is contemplated, the design of sampling schemes should take this into consideration.
- d. Where studies indicate significant potential for release, or detect migration of pollutants, it is desirable to collect and include data on potential receptors or populations at risk of exposure in the confirmatory report.

2. Comments Which Pertain Specifically to MCAS Cherry Point

- a. The proposals contained in the NACIP Phase I Study Report (NEESA 13-009) are acceptable, subject to the preceding general comments, however it would be highly desirable to consider the effects of pending RCRA regulation in evaluating future work at Site 10, the Old Sanitary Landfill.
- b. It may prove impractical to attempt to separate the environmental effects of the sludge pits at Site 10 from the effects of other disposals throughout this landfill. Consequently, if the total area of the landfill will be regulated under a RCRA permit or post-closure order, it may be desirable to defer remedial action as the sludge pits alone until the required action for the surrounding area is defined.

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3. Comments Pertaining Specifically to MCS Camp Lejeune

- a. The proposals contained in the NACIP Phase I Study Report (NEESA 13-011) are acceptable, subject to the preceding general comments.
- b. Based on information and preliminary data presented by MCS Camp Lejeune staff during a November 1, 1985, meeting, USEPA believes that there is sufficient data

indicating potential extensive contamination of groundwater in several areas of Camp Lejeune to warrant immediate consideration of this site for inclusion on the National Priority List (NPL). Because of the potential risk to the population dependent on groundwater as a potable water supply at Camp Lejeune, USEPA recommends that further investigation at Camp Lejeune commence as expeditiously as practical; we wish to emphasize that inclusion on the NPL, if supported by available data, should enhance the priority for funding assigned to this facility.

If you have any questions, please do not hesitate to contact me at (404) 881-3776 or FTS 257-3776.

Sincerely yours,

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

cc: Commander, MCAS Cherry Point
Commander, MCS Camp Lejeune
Mr. Carl Zillig, Chief of Naval Operations
LTC Warren Hull, OPA

bc: Wayne Mathis, ERRB, WMD

WMathis:mld:11/15/85

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