



03.01.12/30/92-00862

State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

December 30, 1992

Return Receipt Requested

Commander, Atlantic Division
Naval Facilities Engineering Command
Code 1822
Attention: MCB Camp Lejeune, RPM
Ms. Linda Berry
Norfolk, Virginia 23511-6287

Commanding General
Attention: AC/S, Environmental Management
Building 1, Marine Corps Base
Camp Lejeune, North Carolina 28542-5001

RE: MCB Camp Lejeune; Review and Comment, Draft Final Remedial Design
Project Plans for the Shallow Aquifer at the Hadnot Point Industrial Area.

Dear Ms. Berry:

The NC DSWM Superfund Section has completed our review of the referenced document. Our comments are attached.

I am pleased to see that the change to the Work Plan regarding Treatability Study, Sewer Lines, Aquifer Pump Testing and Operational Test Data are in conformance with requirements of the state of North Carolina without additional comment. These topics were a major concern to the NC DEHNR and I appreciate the cooperation that was demonstrated in addressing these issues by you, Baker Environmental, and MCB Camp Lejeune.

Ms. Berry
12-30-92
Page 2

If you have any questions please contact me at (919) 733-2801.

Sincerely,

A handwritten signature in cursive script that reads "E. Peter Burger".

E. Peter Burger, PE
Environmental Engineer
Superfund Section

PB/dk/62

cc: Michelle Glenn, US EPA Region IV
George Radford, MCB Camp Lejeune

Comments
Draft Final Remedial Design Project Plans for the Shallow Aquifer
at the Hadnot Point Industrial Area
30 December 1992

Comments, Work Plan

Specific

Section 3.3, Test Objectives

Do not specify "Division of Environmental Management". (Although DEM has significant input in developing goals, all goals established are under the authority of the NC DEHNR).

Table 3-1

Please refer to the attached table.

**TABLE 3-1
FEDERAL AND STATE CRITERIA FOR THE
CONTAMINANTS OF CONCERN IDENTIFIED
FOR THE SHALLOW AQUIFER**

Contaminant of Concern	North Carolina* Water Quality Criteria for Groundwater(ug/l)	Federal Drinking Water MCLs (ug/l)	North Carolina* Water Criteria for Fresh Surface Water (ug/l) Class C Waters	North Carolina* Water Quality Criteria for Tidal Salt Waters (ug/l) Class SC Waters
TCE	2.8	5	92.4 ⁽⁴⁾	92.4 ⁽⁴⁾
1,2-DCE	--	70	--	--
Benzene	1	5	71.4 ⁽⁴⁾	71.4 ⁽⁴⁾
Antimony	--	6	--	--
Arsenic	50	50	50 ⁽¹⁾	50 ⁽¹⁾
Beryllium	--	4	.117 ⁽⁴⁾ 6.5 ⁽¹⁾	.117 ⁽⁴⁾
Chromium	50	100	50 ⁽¹⁾	20 ⁽¹⁾
Iron	300	--	1000 ⁽⁵⁾	--
Lead	50	15 ⁽³⁾	25 ⁽¹⁾	25 ⁽¹⁾
Manganese	50	--	--	--
Mercury	1.1	2	0.012 ⁽¹⁾	.025 ⁽¹⁾
Nickel	150	100	88 ⁽¹⁾	--

*From NC Administrative Code 15A NCAC 2B.0200

(1) Protection of Aquatic Life

(2) --=No standard established.

(3) MCL is action level for public eater supply systems

(4) Protection of Human Health through consumption of fish/shell fish

(5) NC Action Level for discharge to fresh waters.

My apologies for not being more specific when requesting surface water standards on this table.

Section 3.4.1.1, Sample Characterization 1st paragraph.

Please indicate that samples will be taken from areas known to be highly contaminated.

Page 3.9, 1st sentence at top page

Correct to read "levels of lead removal".

Table 3-5

Regarding EPA testing procedure 602 for Purgeable Aromatics. Total Xylenes have been omitted on the table.

Section 3.5.3, Data Analysis and Interpretation, page 3-19, last paragraph, 2nd sentence.

I would like this sentence to be changed to read in part "...to meet the federal MCLs, NC groundwater and surface water criteria established by the NC DEM regarding the HPIA Sewage Treatment Plant NPDES Permit.

Section 4.0 Aquifer Pump Test, 1st paragraph

Please provide justification for performing the Aquifer Pump Test in the 900 Building Area, as the Treatability Testing will also be performed simultaneously at the same location. The plume at the 900 Building area has different characteristics than the plume at the 1600 Building areas. Which plume would be the most representative and why?

Section 4.2, Installation of Observation Piezometers. 5th Bullet. Why not "develop" observation piezometers.

Section 6.2, Description Remedial Design Process , 2nd sentence

Change the 2nd sentence to read in part, "... and 3) Final (100 percent) Design".

Section 6.2.2, Pre Final Design, page 6-4, last paragraph

Please add NC DEHNR to list of agency requirements.

Comments, Health and Safety Plan

Page 39, it is recommended that a portable eyewash station be located in all areas in which there is the potential for chemical/splash exposure.