

RECEIVED

JUN 6 1986

GROUNDWATER SECTION
WILMINGTON REGIONAL OFFICE

RECEIVED

JUN 6 1986

WILMINGTON REGIONAL OFFICE
DEM

DIVISION OF ENVIRONMENTAL MANAGEMENT

GROUNDWATER SECTION

June 5, 1986

MEMORANDUM

TO: Ted Taylor, Ph.D., Toxicologist
Environmental Epidemiology Branch

FROM: Douglass Dixon *WDD*
Groundwater Section

RE: Risk Assessment For Contaminants Detected In Soils
And Groundwater At Tarawa Terrace I, Camp Lejeune
Marine Corps Base, Onslow County

We have received a risk assessment request from our Wilmington Regional Office (WRO) in reference to contaminants initially detected in several community water supply wells at the above referenced location. Use of contaminated wells was discontinued during February 1985 and after a four month period of imposed water conservation measures, an emergency water line was extended to the area.

Subsequent investigation revealed the presence of several organic compounds in groundwater underlying the general site area. Please refer to Table 4 (attached) for identification and detected concentrations of these compounds.

Sampling of septic tank sludge and soils under and around a nearby dry cleaning facility also revealed the presence of several organic compounds associated with dry cleaning operations. These compounds and related concentrations are shown in the attachment identified as Appendix A.

The WRO has recommended that the responsible party undertake to remove the contaminated waste, soil, and soil absorption system to an authorized disposal site so as to reduce or eliminate any potential health threat and minimize additional environmental degradation. In order to assist us in establishing the scope or magnitude of cleanup (risk management procedures) required, please provide a risk assessment for the identified contaminants.

CLW

0000004947

If you should have any questions or need additional information, please contact me.

Attachments

WDD/bjg

cc: Incident Management Files w/attachments
Chuck Wakild/Rick Shiver w/attachments
Bill Meyer w/attachments

CLW

0000004948

TABLE 4: ORGANIC ANALYSIS RESULTS ON WATER SAMPLES COLLECTED FROM WELLS X-24, b1 - b6, TARAWA TERRACE I, CLMCB, ONSLOW COUNTY

PARAMETER	UNIT RESULTS FOR WELL b1					
		1-16-85	2-19-85	4-9-85	9-25-85	
TETRACHLOROETHYLENE	ug/l	1580	64	630	1100	
TRICHLOROETHYLENE	ug/l	57	--	18	----	
1,2 - TRANS-DICHLOROETHYLENE	ug/l	92	--	1.4	----	
VINYL CHLORIDE	ug/l	27	--	---	----	
METHYL CYCLOPENTANE	ug/l	----	--	---	----	
	ug/l	----	--	---	----	
	ug/l	----	--	---	----	
PARAMETER	UNIT RESULTS FOR WELL b2					
		1-16-85	2-19-85	3-11-85	4-9-85	9-25-
TETRACHLOROETHYLENE	ug/l	132	26	41	NONE	4.0
TRICHLOROETHYLENE	ug/l	---	53	--	NONE	0.2
1,2 - TRANS-DICHLOROETHYLENE	ug/l	---	--	--	NONE	---
VINYL CHLORIDE	ug/l	---	--	--	NONE	---
	ug/l	---	--	--	----	---
	ug/l	---	--	--	----	---
	ug/l	---	--	--	----	---
PARAMETER	UNIT RESULTS FOR WELL b3					
		4-9-85	9-25-85			
TETRACHLOROETHYLENE	ug/l	NONE	0.43			
TRICHLOROETHYLENE	ug/l	NONE	----			
1,2 - TRANS-DICHLOROETHYLENE	ug/l	NONE	----			
VINYL CHLORIDE	ug/l	NONE	----			
	ug/l	----	----			
	ug/l	----	----			
	ug/l	----	----			
PARAMETER	UNIT RESULTS FOR WELL b4					
		9-25-85				
TETRACHLOROETHYLENE	ug/l	2.2				
TRICHLOROETHYLENE	ug/l	---				
1,2 - TRANS-DICHLOROETHYLENE	ug/l	---				
VINYL CHLORIDE	ug/l	---				
METHYL BENZENE	ug/l	2.3				
	ug/l	---				
	ug/l	---				

CLW

0000004949

TABLE 4: ORGANIC ANALYSIS RESULTS ON WATER SAMPLES COLLECTED FROM WELLS X-24, b1 - b6, TARAWA TERRACE I, CLMCB, ONSLOW COUNTY

PARAMETER	UNIT RESULTS FOR WELL b5	
	UNIT	RESULTS
TETRACHLOROETHYLENE	ug/l	4.9
TRICHLOROETHYLENE	ug/l	0.98
1,2 - TRANS-DICHLOROETHYLENE	ug/l	----
VINYL CHLORIDE	ug/l	----
BENZENE	ug/l	2.3
	ug/l	----
	ug/l	----

PARAMETER	UNIT RESULTS FOR WELL b6	
	UNIT	RESULTS
TETRACHLOROETHYLENE	ug/l	12,000
TRICHLOROETHYLENE	ug/l	2.7
1,2 - TRANS-DICHLOROETHYLENE	ug/l	-----
VINYL CHLORIDE	ug/l	-----
	ug/l	-----
	ug/l	-----

CLW

0000004950

LAW & COMPANY
Consulting and Analytical Chemists

APPENDIX A

ESTABLISHED 1903

Main Office
 1711 Castle Street
 P.O. Box 629
 Wilmington, N.C. 28402

RICHARD SPIVEY, President
 919-762-7082 919-762-8956
 TWX 510-937-0280

REPORT DATE: 4-22-86

LAW ENGINEERING TESTING COMPANY
 P.O. BOX 278
 WILMINGTON, NORTH CAROLINA 28402
 ATTN: CHARLES F. STEHMAN

DATE RECEIVED: 4-08-86
 DATE COLLECTED: 4-08-86
 COLLECTED BY: CUSTOMER
 LAB I.D. # EW 3845

LETCO Job No: J-473-86-1623

SAMPLE DESCRIPTION: SEPTIC TANK SLUDGE

TESTS/SAMPLES		WATER		SEPTAGE	
		ABC TOP	ABC BOTTOM	ABC #1	ABC #2
1,1 DICHLOROETHYLENE	PPM	<.1	24	<.1	<.1
1,2 DICHLOROETHYLENE	PPM	<.1	15	11.3	.4
TRICHLOROETHYLENE	PPM	22	9.5	4.0	.1
TETRACHLOROETHYLENE	PPM	1.0	1402	85	1.4
TESTS/SAMPLES		ABC #3	ABC #4	ABC #5	ABC #6
1,1 DICHLOROETHYLENE	PPM	<.1	<.1	<.1	<.1
1,2 DICHLOROETHYLENE	PPM	.9	7.3	2.3	.9
TRICHLOROETHYLENE	PPM	.5	2.3	.4	.5
TETRACHLOROETHYLENE	PPM	2.3	18.4	2.0	1.4
TESTS/SAMPLES		ABC #7	ABC #8	ABC #9	
1,1 DICHLOROETHYLENE	PPM	<.1	<.1	<.1	
1,2 DICHLOROETHYLENE	PPM	<.1	8.1	3.9	
TRICHLOROETHYLENE	PPM	.9	14	.4	
TETRACHLOROETHYLENE	PPM	1.2	404	<.1	

CLW
 000000495

RECEIVED

MAY 14 1986

CHEMIST: Jolly Bidwan

TOTAL AMOUNT: 805.00