N62661 AR 000297
NAVSTA NEWPORT RI
5090 3a

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

March 3, 1993

received
3-9-93

Louise House, Senior Regional Representative
ATSDR - Region I (EPA Building)
60 Westview Street
Lexington, MA 02173-3185

RE: Initial Release Public Health Assessment for the Naval Education/Training Center in Newport County, Rhode Island, dated February 1, 1993

Dear Ms. House:

The purpose of this letter is to transmit comments on the Initial Release Public Health Assessment for the Naval Education/Training Center in Newport, Rhode Island.

Attached you will find comments from the US Environmental Protection Agency - Region I (EPA). EPA's comments consist of both general and specific comments; these comments have been numbered for future reference.

I have attached data summary sheets for some of the units currently under investigation through the Remedial Investigation (RI) process. You should note that the Melville North Landfill is not part of the Federal National Priorities List (NPL). Therefore, all references to this area should be deleted until a formal listing on the NPL. The Melville North Landfill is classified by the Navy and EPA as a Formerly Used Defence Site (FUDS).

If there are any questions regarding any of these comments, you should feel free to call me at 617/573-9614.

Sincerely,

Andrew F. Miniuks, Remedial Project Manager
Federal Facilities Superfund Section

Attachment

cc. Paul Kulpa, RI DEM
Franco Lavgreca, NORTHDIV
Ted Bazenas, ATSDR

PRINTED ON RECYCLED PAPER

General Comments

1. The report, as currently written, references inconsistent units of volume throughout the descriptions of the tank farms. More specifically, the report describes the volume of the tanks as 60,000 barrel underground storage tanks, yet all other volume measurements are described in gallons.

   Revise the report to describe the tank volumes within each of the tankfarm in terms of gallons. Each of the 60,000 barrel capacity tanks within the tankfarms are approximately 116 feet in diameter, 33.5 feet deep, and have a capacity of 2,520,000 gallons.

2. The McAllister Point Landfill has been inaccurately described as about six acres in size. As described in the Phase I Draft Final Report (November 1991), the landfill is approximately 11.5 acres in size. In addition, the report incorrectly states that the field work and investigation of this landfill has been completed; this is not correct. Additional characterization of the extent of contamination within this unit is continuing.

   Revise the report accordingly.

3. Revise the report to reflect the attached data sheets which summarize the concentrations of constituents detected at the McAllister Point Landfill, Tank Farm Four and Tank Farm Five. These attached sheet are from the Phase I Draft Final Report (November 1991), and summarize the detection of constituents, if available at this time, within the groundwater, soils (both surface and subsurface), surface water and sediments.

Specific Comments

4. Table 2 - As described in the Phase I Draft Final Report (November 1991), the maximum contaminant concentrations in On-site Subsurface Soil Samples at the Fire Fighting Training Area should be revised to reflect higher detected concentrations of arsenic and lead. More specifically, the maximum concentration for arsenic and lead is 8.6 ppm and 529 ppm respectively.

5. Table 4 - As described in the Phase I Draft Final Report (November 1991), the maximum contaminant concentrations in On-site Groundwater Samples at the Fire Fighting Training Area should be revised to reflect higher detected concentrations of arsenic, magnesium and lead. More specifically, the maximum concentrations for arsenic, magnesium and lead is 16.6 ppb, 8270 ppb and 4120 ppb respectively.

SITE 13 - TANK FARM 5
CONSTITUENTS DETECTED IN SURFACE SOIL SAMPLES

SAMPLE IDENTIFICATION:	SS-56	SS-57	TB-051090
**** VOLATILE ORGANICS (PPB) ***			
METHYLENE CHLORIDE.....	13 U*	17 U*	6
ACETONE.....	10 U**	14 U*	
BENZENE.....			
4-METHYL-2-PENTANONE.....			
TETRACHLOROETHENE.....	2 J	5 J	
TOLUENE.....		2 J	
XYLENE.....		2 J	
TOTAL VOLATILE ORGANICS.....	2	9	6
** BASE NEUTRAL / ACIDS (PPB) **			
BENZOIC ACID.....			N/A
PHENANTHRENE.....	240 J	72 J	|
ANTHRACENE.....	45 J		|
DI-N-BUTYLPHTHALATE.....	46 J	50 J	|
FLUORANTHENE.....	370 J	180 J	|
PYRENE.....	440 U**	470 U*	|
BUTYLBENZYLPHTHALATE.....			|
BENZO(a)ANTHRACENE.....	160 J	84 J	|
CHRYSENE.....	190 J	100 J	|
BIS(2-ETHYLHEXYL)PHTHALATE.....	560 U*	480 U*	|
BENZO(b)FLUORANTHENE.....	140 J		|
BENZO(k)FLUORANTHENE.....		70 J	|
BENZO(a)PYRENE.....	140 J	69 J	N/A
TOTAL BNA'S.....	1331	625	
TOTAL PAH'S.....	1285	575	
TOTAL CARCINOGENIC PAH'S.....	630	323	
**** PESTICIDES/PCB'S (PPB) ****			
4,4'-DDE.....	32 J	25 J	N/A
4,4'-DDT.....	74	31 J	|
******* INORGANICS (PPM) *******			
SILVER.....		0.7	N/A
ALUMINUM.....	9060	9550	|
ARSENIC.....	6.6 J*	10.1 J*	|
BARIUM.....	19.9 J*	17.3 J*	|
BERYLLIUM.....			|
CALCIUM.....	854	786	|
CADMIUM.....			|
COBALT.....	15.1 J*	12.1 J*	|
CHROMIUM.....	14 J*	12 J*	|
COPPER.....	24.3 J*	19.6 J*	|
IRON.....	25500	21700	|
MERCURY.....	54 J**	2 J*	|
POTASSIUM.....	182	250	|
MAGNESIUM.....	2960	2540	|
MANGANESE.....	445 J*	376 J*	|
SODIUM.....			|
NICKEL.....	21 J*	19.5 J*	|
LEAD.....	56.6	29.2	|
ANTIMONY.....		5.4 J*	|
SELENIUM.....			|
VANADIUM.....	21 J*	20.3 J*	|
ZINC.....	83	55.5	|
CYANIDE.....			N/A
PETROLEUM HYDROCARBONS (PPM)....	24	7.5	N/A

NOTE: ** - INDICATES THAT THE CONTAMINANT VALUE HAS CHANGED ACCORDING TO DATA VALIDATION
@ - INDICATES THAT THE COMPOUND IS A POLYNUCLEAR AROMATIC HYDROCARBON (PAH).
N/A - INDICATES THAT THE COMPOUND WAS NOT ANALYZED FOR.

SITE 13 - TANK FARM 5
CONSTITUENTS DETECTED IN SURFACE SOIL SAMPLES

SAMPLE IDENTIFICATION:	SS-49	SS-49D	SS-50	SS-60 DUP SS-50	SS-50D	SS-51	SS-51D	SS-52
PETROLEUM HYDROCARBONS..(PPM)...	870	35	14000	15000	60000	4900	19	48
LEAD (PPM).....	205	52.7 J*	61.3	57.8	28.9 J*	40.6	15.1 J*	70.9

SAMPLE IDENTIFICATION:	SS-52D	SS-53	SS-61 DUP SS-53	SS-53D	SS-54	SS-54D	SS-55	SS-55D
PETROLEUM HYDROCARBONS..(PPM)...	6.7	16	31		69	3.6 J	100	13
LEAD (PPM).....	19.6 J*	16.2 J*	17.9 J*	9 J*	45.7	14.7 J*	31.3	21 J*

SAMPLE IDENTIFICATION:	SS-56D	SS-57D	SS-58	SS-58D	SS-59	SS-59D	FB-061490
PETROLEUM HYDROCARBONS..(PPM)...	9.5	51	21		48	8.6	
LEAD (PPM).....	8.6 J*	23.3 J*	13.1	16.6 J*	25.1	16.7 J*	

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
D - DISCRETE SOIL SAMPLE LOCATION.

SITE 13 - TANK FARM 5
CONSTITUENTS DETECTED IN SOIL BORING SAMPLES
MONITORING WELL BORINGS

SAMPLE IDENTIFICATION:	M01-1	M02-1	M03-1	M04-1	M05-1	M06-1	FB-052390	TB-052290
SAMPLE DEPTH (FT):	12-14	10-12	6-8	16-18	12-14	0-2		
**** VOLATILE ORGANICS (PPB) ***								
METHYLENE CHLORIDE.....	18 U*	4 U*	20 U*	19 U*	19 U*	19 U*	5 *	6
ACETONE.....		8 U*	61 U*	9 U*		2 U*	21 J*	20 J*
BENZENE.....								
TETRACHLOROETHENE.....		1 J						
TOLUENE.....		3 J						
XYLENE.....								
TOTAL VOLATILE ORGANICS.....	0	4	0	0	0	0	26	26
** BASE NEUTRAL / ACIDS (PPB) **								
BENZOIC ACID.....	95 J							N/A
PHENANTHRENE.....@								|
ANTHRACENE.....@								|
DI-N-BUTYLPHTHALATE.....					2600 J*	120 J		|
FLUORANTHENE.....@								|
PYRENE.....@								|
BUTYLBENZYLPHTHALATE.....					2000 J*			|
BENZO(a)ANTHRACENE.....@@								|
CHRYSENE.....@@								|
BIS(2-ETHYLHEXYL)PHTHALATE.....	71 U*	380 U**	44 U*	82 U*	61 U*			|
BENZO(b)FLUORANTHENE.....@@								|
BENZO(k)FLUORANTHENE.....@@								|
BENZO(a)PYRENE.....@@								N/A
TOTAL BNA'S.....	95	0	0	0	4600	120	0	
TOTAL PAH'S.....	0	0	0	0	0	0	0	
TOTAL CARCINOGENIC PAH'S.....	0	0	0	0	0	0	0	
**** PESTICIDES/PCB'S (PPB) ****								
4,4'-DDE.....			3.6 J					N/A
4,4'-DDT.....			17 J*					|
AROCLOR-1254.....	23 U*			69 U*	32 U*	230 U*		N/A
******* INORGANICS (PPM) *******								
SILVER.....	0.87		0.77	0.98	1.7			N/A
ALUMINUM.....	4750 J*	5370	9420 J*	15000 J*	11300 J*	6090 J*		|
ARSENIC.....	11.2	22.6 J*	23.7	31.3	10	7		|
BARIUM.....	9.9 J*	6.5	7 J*	6.8 J*	15.1 J*	14.5	0.005 J*	|
BERYLLIUM.....		0.35		0.56	0.31			|
CALCIUM.....	642	986	1310	1720	2660	969	0.269	|
CADMIUM.....								|
COBALT.....	21.9 J*	27.2 J*	42.5 J*	12.3 J*	31.1 J*	7.7		|
CHROMIUM.....	10.6	9.9	13.8	16.5	15.7	7.1		|
COPPER.....	28.4 J*	15.6	41 J*	27.5 J*	35.8 J*	12.8		|
IRON.....	27000 J*	26300	25600 J*	41100 J*	50700 J*	16000 J*	0.126	|
MERCURY.....								|
POTASSIUM.....					201			|
MAGNESIUM.....	1470	1870	3190	5010	4390	1300	0.144	|
MANGANESE.....	601	510	417	224	715	306	0.0029 J*	|
SODIUM.....					18.9		0.54	|
NICKEL.....	29.5	27.8	22.8	16.4	43.6	16.1		|
LEAD.....	4.8	8.4	2.7	13.9	11.7	6.2		|
ANTIMONY.....	(6.2)	7.7 J*	(6.2)	10.1 J*			0.0304	|
SELENIUM.....		0.41 J*						|
VANADIUM.....	(13.8)	11 J*	(11)	40.6 J*	(22)	15		|
ZINC.....	57	49.5	37.4	63.4	93.3	42.3	0.0541 J*	|
CYANIDE.....								N/A
PETROLEUM HYDROCARBONS (PPM)...	N/A		N/A	N/A	N/A	N/A	N/A	N/A

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
** - INDICATES THAT THE CONTAMINANT VALUE HAS CHANGED ACCORDING TO DATA VALIDATION
() - INDICATES THAT THE SAMPLE RESULTS HAVE BEEN REJECTED ACCORDING TO DATA VALIDATION.
@ - INDICATES THAT THE COMPOUND IS A POLYNUCLEAR AROMATIC HYDROCARBON (PAH).
@@ - INDICATES THAT THE COMPOUND IS A CARCINOGENIC POLYNUCLEAR AROMATIC HYDROCARBON.
N/A - INDICATES THAT THE COMPOUND WAS NOT ANALYZED FOR.

SITE 13 - TANK FARM 5
CONSTITUENTS DETECTED IN GROUND WATER SAMPLES
SAMPLES COLLECTED ON 7/20/90

SAMPLE IDENTIFICATION:	MW-1	MW-2	MW-3	MW-4	MW-5	MW-7 DUP MW-5	MW-6
**** VOLATILE ORGANICS (PPB) ***							
CHLOROMETHANE.....							
VINYL CHLORIDE.....							
CHLOROETHANE.....							
METHYLENE CHLORIDE.....	13 U*	13 U*	7 U*	7 U*	13 U*	13 U*	13 U*
ACETONE.....				10 U**		10 U**	
CARBON DISULFIDE.....							
1,2-DICHLOROETHANE.....				4 J			
1,2-DICHLOROETHENE (TOTAL).....				17			
CHLOROFORM.....				3 J	7	6	
1,1,1-TRICHLOROETHANE.....				10 J*			
CARBON TETRACHLORIDE.....							
TRICHLOROETHENE.....				4 J			
BENZENE.....							
4-METHYL-2-PENTANONE.....							
TETRACHLOROETHENE.....							
TOLUENE.....							
ETHYLBENZENE.....							
XYLENE.....							
TOTAL VOLATILE ORGANICS.....	0	0	0	38	7	6	0
** BASE NEUTRAL / ACIDS (PPB) **							
PHENOL.....							
2-METHYLPHENOL.....							
4-METHYLPHENOL.....							
ISOPHORONE.....							
2,4-DIMETHYLPHENOL.....							
NAPHTHALENE.....@							
2-METHYLNAPHTHALENE.....@							
ACENAPHTHENE.....@							
DIBENZOFURAN.....							
FLUORENE.....@							
PHENANTHRENE.....@							
DI-N-BUTYLPHTHALATE.....			10 U**				
PYRENE.....@							
BIS(2-ETHYLHEXYL)PHTHALATE.....	10 U**						
TOTAL BNA'S.....	0	0	0	0	0	0	0
TOTAL PAH'S.....	0	0	0	0	0	0	0
TOTAL CARCINOGENIC PAH'S.....	0	0	0	0	0	0	0

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
** - INDICATES THAT THE CONTAMINANT VALUE HAS CHANGED ACCORDING TO DATA VALIDATION
@ - INDICATES THAT THE COMPOUND IS A POLYNUCLEAR AROMATIC HYDROCARBON (PAH).

SITE 13 - TANK FARM 5
CONSTITUENTS DETECTED IN GROUND WATER SAMPLES
SAMPLES COLLECTED ON 7/20/90

SAMPLE IDENTIFICATION:	MW-1	MW-2	MW-3	MW-4	MW-5	MW-7	MW-6
**** PESTICIDES/PCB'S (PPB) ****				N/A	N/A		
******* INORGANICS (PPB) *******							
SILVER		24.5	20.6	N/A	22.2	20.3	12.6
ALUMINUM	9480	161000	107000		190000	158000	88000
ARSENIC	44.6 J*	154 J*	73.7 J*		265 J*	204 J*	31.6 J*
BARIUM	38.2 J*	307 J*	277 J*		489 J*	424 J*	345 J*
BERYLLIUM		10.2	7.2		9.4	7.9	5.5
CALCIUM	23000	83900	76000		89700	85100	44900
CADMIUM		5					
COBALT	38.5 J*	209 J*	199 J*		295 J*	240 J*	210 J*
CHROMIUM	32.5	271	183		384	312	116
COPPER	52.4	182	67.3		304	254	297
IRON	101000	679800 **	452000		787100 **	471000	288000
MERCURY							
POTASSIUM	2670	6460	3900		9270	8440	5370
MAGNESIUM	11700	85600	70200		108000	97400	51300
MANGANESE	1240 J*	8440 J*	10200 J*		5430 J*	4470 J*	7650 J*
SODIUM	39600	9290 J*	7540 J*		8150 J*	8430 J*	8650 J*
NICKEL	78.9	474	341		530	447	341
LEAD	66.4 J*	630 J*	170 J*		94 J*	135 J*	108 J*
ANTIMONY			22 U**				
SELENIUM	2.6 J*						
VANADIUM		104 J*	92.3 J*		108 J*	86.1 J*	63.9 U*
ZINC	152	957	1190		1630	1400	708
CYANIDE				N/A			

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
** - INDICATES THAT THE CONTAMINANT VALUE HAS CHANGED ACCORDING TO DATA VALIDATION
N/A - INSUFFICIENT SAMPLE VOLUME FOR ANALYSIS.

SITE 13 - TANK FARM FIVE
CONSTITUENTS DETECTED IN GROUND WATER SAMPLES
COLLECTED ON 7/20/90

SAMPLE IDENTIFICATION:	MW-53W	MW-53E	MW-56W	MW-56E	MW-86-1	MW-86-2	MW-86-4
* VOLATILE ORGANIC COMPOUNDS (PPB) *							
CHLOROMETHANE		N/A		N/A	N/A	N/A	N/A
VINYL CHLORIDE							
CHLOROETHANE							
METHYLENE CHLORIDE	47 U*		6 U*				
ACETONE	10 U**						
CARBON DISULFIDE							
1,2-DICHLOROETHANE	23 J						
1,2-DICHLOROETHENE (TOTAL)	630						
CHLOROFORM							
1,1,1-TRICHLOROETHANE	190 J*						
CARBON TETRACHLORIDE	25 U**						
TRICHLOROETHENE	38						
BENZENE							
4-METHYL-2-PENTANONE							
TETRACHLOROETHENE	7 J						
TOLUENE	38						
ETHYLBENZENE	47						
XYLENE	100	N/A		N/A	N/A	N/A	N/A
TOTAL VOLATILE ORGANICS	1073		0				
* BASE NEUTRAL / ACID EXTRACTABLE COMPOUNDS (PPB) *							
PHENOL		N/A		N/A	N/A	N/A	N/A
2-METHYLPHENOL							
4-METHYLPHENOL							
ISOPHORONE							
2,4-DIMETHYLPHENOL							
NAPHTHALENE@	27 J						
2-METHYLNAPHTHALENE@	71 J						
ACENAPHTHENE@							
DIBENZOFURAN							
FLUORENE@	45 J						
PHENANTHRENE@	42 J						
DI-N-BUTYLPHTHALATE							
PYRENE@	21 J						
BIS(2-ETHYLHEXYL)PHTHALATE	100 U**	N/A		N/A	N/A	N/A	N/A
TOTAL BNA'S	206		0				
TOTAL PAH'S	206		0				
TOTAL CARCINOGENIC PAH'S	0		0				

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
** - INDICATES THAT THE CONTAMINANT VALUE HAS CHANGED ACCORDING TO DATA VALIDATION
@ - INDICATES THAT THE COMPOUND IS A POLYNUCLEAR AROMATIC HYDROCARBON (PAH).
N/A - INDICATES THAT THE COMPOUND WAS NOT ANALYZED FOR IN SAMPLE.

SITE 13 - TANK FARM FIVE
CONSTITUENTS DETECTED IN GROUND WATER SAMPLES
COLLECTED ON 7/20/90

SAMPLE IDENTIFICATION:	MW-53W	MW-53E	MW-56W	MW-56E	MW-86-1	MW-86-2	MW-86-4
**** PESTICIDES/PCB'S (PPB) ****							
		N/A		N/A	N/A	N/A	N/A
******* INORGANICS (PPB) *******							
SILVER.....		N/A	6.3	N/A	N/A	N/A	N/A
ALUMINUM.....	3900		39800				
ARSENIC.....	21.4 J*		43.2 J*				
BARIUM.....	24 J*		120 J*				
BERYLLIUM.....			2.4				
CALCIUM.....	44200		34500				
CADMIUM.....							
COBALT.....	22.8		116 J*				
CHROMIUM.....	2.4		6.7				
COPPER.....	14.4 U*		92.6				
IRON.....	34700		144000				
MERCURY.....							
POTASSIUM.....	1790		3540				
MAGNESIUM.....	29900		26700 **				
MANGANESE.....	4720		7600 J*				
SODIUM.....	15700		10500 J*				
NICKEL.....	46 U*		210				
LEAD.....	13.4 J*	115 J*	44.5 J*	80.5 J*	21.6 J*		20.2 J*
ANTIMONY.....							
SELENIUM.....							
VANADIUM.....	10.7 U*		24.8 U*				
ZINC.....	69.8		1250				
CYANIDE.....		N/A		N/A	N/A	N/A	N/A
PETROLEUM HYDROCARBONS (PPM)....	230	4600					

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
** - INDICATES THAT THE CONTAMINANT VALUE HAS CHANGED ACCORDING TO DATA VALIDATION
N/A - INDICATES THAT THE COMPOUND WAS NOT ANALYZED FOR IN SAMPLE.

SITE 13 - TANK FARM 5
CONSTITUENTS DETECTED IN GROUND WATER SAMPLES

FIELD BLANK AND TRIP BLANK DATA

SAMPLE IDENTIFICATION:	FB-072090 TEFLON BAILER	FB2-072090 STEEL BAILER	TB1-072090	TB2-072090	TB3-07209	TB4-072090	TB5-072090	TB6-072090
**** VOLATILE ORGANICS (PPB) ***								
CHLOROMETHANE.....								
VINYL CHLORIDE.....								
CHLOROETHANE.....								
METHYLENE CHLORIDE.....	45 J*	6 J*	15 J*	12 J*	7 J*	8 J*	6 J	7 J*
ACETONE.....								
CARBON DISULFIDE.....								
1,2-DICHLOROETHANE.....								
1,2-DICHLOROETHENE (TOTAL).....								
CHLOROFORM.....								
1,1,1-TRICHLOROETHANE.....								
CARBON TETRACHLORIDE.....								
TRICHLOROETHENE.....								
BENZENE.....								
4-METHYL-2-PENTANONE.....								
TETRACHLOROETHENE.....								
TOLUENE.....								
ETHYLBENZENE.....								
XYLENE.....								
TOTAL VOLATILE ORGANICS.....	45	6	15	12	7	8	6	7
** BASE NEUTRAL / ACIDS (PPB) **								
PHENOL.....			N/A	N/A	N/A	N/A	N/A	N/A
2-METHYLPHENOL.....			|	|	|	|	|	|
4-METHYLPHENOL.....			|	|	|	|	|	|
ISOPHORONE.....			|	|	|	|	|	|
2,4-DIMETHYLPHENOL.....			|	|	|	|	|	|
NAPHTHALENE.....@			|	|	|	|	|	|
2-METHYLNAPHTHALENE.....@			|	|	|	|	|	|
ACENAPHTHENE.....@			|	|	|	|	|	|
DIBENZOFURAN.....			|	|	|	|	|	|
FLUORENE.....@			|	|	|	|	|	|
PHENANTHRENE.....@			|	|	|	|	|	|
DI-N-BUTYLPHTHALATE.....			|	|	|	|	|	|
PYRENE.....@			|	|	|	|	|	|
BIS(2-ETHYLHEXYL)PHTHALATE.....		12	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL BNA'S.....	0	12						
TOTAL PAH'S.....	0	0						
TOTAL CARCINOGENIC PAH'S.....	0	0						

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
@ - INDICATES THAT THE COMPOUND IS A POLYNUCLEAR AROMATIC HYDROCARBON (PAH).
N/A - INDICATES THAT THE COMPOUND WAS NOT ANALYZED FOR.

SITE 13 - TANK FARM 5
CONSTITUENTS DETECTED IN GROUND WATER SAMPLES

FIELD BLANK AND TRIP BLANK DATA

SAMPLE IDENTIFICATION:	FB-072090 TEFLON BAILER	FB2-072090 STEEL BAILER	TB1-072090	TB2-072090	TB3-07209	TB4-07209C	TB5-072090	TB6-072090
**** PESTICIDES/PCB'S (PPB) ****								
			N/A	N/A	N/A	N/A	N/A	N/A
******* INORGANICS (PPB) *******								
SILVER			N/A	N/A	N/A	N/A	N/A	N/A
ALUMINUM								
ARSENIC								
BARIUM								
BERYLLIUM								
CALCIUM	170	527						
CADMIUM								
COBALT								
CHROMIUM								
COPPER	5.3							
IRON	103 J*	325						
MERCURY								
POTASSIUM								
MAGNESIUM	82.9	332						
MANGANESE		31.4						
SODIUM	458 J*	836 J*						
NICKEL	10.2	11.7						
LEAD								
ANTIMONY								
SELENIUM								
VANADIUM	6.9	9.4						
ZINC	24.8	57.8						
CYANIDE			N/A	N/A	N/A	N/A	N/A	N/A
PETROLEUM HYDROCARBONS (PPM)								

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
N/A - INDICATES THAT THE COMPOUND WAS NOT ANALYZED FOR.

SITE 13 - TANK FARM 5
CONSTITUENTS DETECTED IN SEDIMENT SAMPLES

SAMPLE IDENTIFICATION: SAMPLE DEPTH (FT):	SD-1	SD-2	SD-6 DUP OF SD-2	SD-3	SD-4	SD-5	FB-060190
PETROLEUM HYDROCARBONS..(PPM)...	220	41	28	29	13	110	
LEAD (PPM).....	24.6	5.7 J*	4.2 J*	19.6 J*	25.8	155 J*	
PCB'S.....							

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.

SITE 01 - MCALLISTER POINT LANDFILL
CONSTITUENTS DETECTED IN GROUND WATER SAMPLES

SAMPLE IDENTIFICATION:	MW-1D	MW-3S	MW-3D	MW-4S	MW-5S	MW-5D	MW-6S	MW-7S
**** VOLATILE ORGANICS (PPB) ****								
METHYLENE CHLORIDE.....							18 U*	15 U*
ACETONE.....								
BENZENE.....		6	1 J	5				
TOLUENE.....		1 J		1 J				
CHLOROBENZENE.....				11				
ETHYLBENZENE.....		2 J		12	3 J			
XYLENE.....		6 J*		44 J*	160 J*			
TOTAL VOLATILE ORGANICS.....	0	15	1	73	163	0	0	0
** BASE NEUTRAL / ACIDS (PPB) ***								
1,4-DICHLOROBENZENE.....				6 J				
4-METHYLPHENOL.....				5 J				
2,4-DIMETHYLPHENOL.....		7 J		1 J	5 J			
BENZOIC ACID.....				7 J				
NAPHTHALENE.....@		240 J**		3 J	15			
4-CHLORO-3-METHYLPENOL.....				4 J	2 J			
2-METHYLNAPHTHALENE.....@		43		1 J	25			
ACENAPHTHENE.....@		45			3 J			
DIBENZOFURAN.....		19						
DIETHYLPHTHALATE.....		1 J		4 J	3 J			
FLUORENE.....@		25			3 J			
PHENANTHRENE.....@		21			3 J			
ANTHRACENE.....@		3 J						
DI-n-BUTYLPHTHALATE.....	10 U**	10 U**	10 U**	10 U**	10 U**	10 U**		
FLUORANTHENE.....@		2 J						
PYRENE.....@		1 J						
BIS(2-ETHYLHEXYL)PHTHALATE....	10 U**	10 U**	10 U**	10 U**	10 U**	10 U**		
TOTAL BNA	0	407	0	31	59	0	0	0
TOTAL PAH'S.....	0	380	0	4	49	0	0	0
TOTAL CARCINOGENIC PAH'S.....	0	0	0	0	0	0	0	0
***** PESTICIDES/PCB (PPB) *****								
AROCLOR-1254.....					0.73 J			
******* INORGANICS (PPB) ******								
SILVER.....		126					26.6 J*	22.5 U*
ALUMINUM.....	130000 J*	205000 J*	6890 J*	69500 J*	284000 J*	412 J*	112000 J*	176000 J*
ARSENIC.....	18 J*	85.8 J*	6.4 J*	26.9 J*	71.4 J*	2.1 J*	15 J*	84.4 J*
BARIUM.....	153 J*	1770 J*	200 U**	212 J*	895 J*		245	305
BERYLLIUM.....	3 B	9.5		2	12.8		4.9	7.1
CALCIUM.....	22400 J*	139000 J*	40000 J*	76000 J*	49600 J*	9030 J*	23200	65200
CADMIUM.....		57.1 J*		4.9 J*	5.6 J*		8 J*	3.7 J*
COBALT.....	(160)	243	29.9	(130)	(339)		426 J*	737 J*
CHROMIUM.....	(224)	(446)	16.9 J*	(121)	(348)	10 U**	136 J*	248 J*
COPPER.....	(269)	3160 J*	47.6 U*	(333)	(599)	25 U**	880 J*	429 J*
IRON.....	327000 J*	500000 J**	40300 J*	339000 J*	537000 J*	702 J*	399000	374000
MERCURY.....		8.4		0.79	1.3		1.3	
POTASSIUM.....	5180 J*	22700 J*	1600 J*	11300 J*	25600 J*	2060 J*	4640 J*	9060 J*
MAGNESIUM.....	54300 J*	89200 J*	17500 J*	33500 J*	70300 J*	4890 J*	39700	70800
MANGANESE.....	2910 J*	13500 J*	2090	6550 J*	4760 J*	57.8	13700 J*	21000 J*
SODIUM.....	34000	74500	42900	13100	29500	9750	10600 J*	26800
NICKEL.....	306	517	70.6	190	658	16.7	524	678
LEAD.....	60 J*	4800 J*	25.7 J*	197 J*	4.3 J*		1000 J*	260 J*
ANTIMONY.....	41.3 J*	259 J*		64.2 J*	101 J*		30.4 U*	
SELENIUM.....		2.5 J*						
VANADIUM.....	(259)	(1330)	50 U**	(270)	(689)	50 U**	109 J*	102 U*
ZINC.....	588 J*	12100 J*	200 J*	1260 J*	2100 J*	20.5 U*	1630	1140
CYANIDE.....					10			

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANDED ACCORDING TO DATA VALIDATION.
**- INDICATES THAT THE CONTAMINANT VALUE HAS CHANGED ACCORDING TO DATA VALIDATION.
() - INDICATES THAT THE SAMPLE RESULTS HAVE BEEN REJECTED ACCORDING TO SAMPLE VALIDATION.
@ - INDICATES THAT THE COMPOUND IS A POLYNUCLEAR AROMATIC HYDROCARBON (PAH).

IE 01 - MCALLISTER POINT LANDFILL
CONSTITUENTS DETECTED IN GROUND WATER SAMPLES
(EXISTING WELLS)

SAMPLE IDENTIFICATION:	MP-MW21	MP-MW25 DUP MW21	MP-MW22	MP-MW23
**** VOLATILE ORGANICS (PPB) ****				
METHYLENE CHLORIDE.....				
ACETONE.....				
BENZENE.....				
TOLUENE.....				
CHLOROBENZENE.....				
ETHYLBENZENE.....				
XYLENE.....	2 J*	3 J*		
TOTAL VOLATILE ORGANICS.....	2	3	0	0
** BASE NEUTRAL / ACIDS (PPB) ***				
1,4-DICHLOROBENZENE.....				
4-METHYLPHENOL.....				
2,4-DIMETHYLPHENOL.....				
BENZOIC ACID.....				
NAPHTHALENE.....@				
4-CHLORO-3-METHYLPENOL.....				
2-METHYLNAPHTHALENE.....@				
ACENAPHTHENE.....@				
DIBENZOFURAN.....				
DIETHYLPHTHALATE.....	2 J	1 J		
FLUORENE.....@				
PHENANTHRENE.....@				
ANTHRACENE.....@				
DI-n-BUTYLPHTHALATE.....	10 U**	10 U**	10 U**	10 U**
FLUORANTHENE.....@				
PYRENE.....@				
BIS(2-ETHYLHEXYL)PHTHALATE.....	10 U**	10 U**	10 U**	10 U**
TOTAL BNA	2	1	0	0
TOTAL PAH'S.....	0	0	0	0
TOTAL CARCINOGENIC PAH'S.....	0	0	0	0
***** PESTICIDES/PCB (PPB) *****				
AROCLOR-1254.....				
******* INORGANICS (PPB) ********				
SILVER.....				
ALUMINUM.....	4340 J*	1880 J*	3270 J*	4030 J*
ARSENIC.....	89.4 J*	64.8 J*	54.2 J*	97.2 J*
BARIUM.....	200 U**	200 U**	200 U**	200 U**
BERYLLIUM.....			1	
CALCIUM.....	147000 J*	31400 J*	10100 J*	162000 J*
CADMIUM.....				
COBALT.....	22.3	25.2	44.2	20
CHROMIUM.....	21.6 J*	10 U**	10 U**	15.9 J*
COPPER.....	64.7	49.9 U*	31.4 U*	64.7
IRON.....	16000 J*	34100 J*	58800 J*	14900 J*
MERCURY.....		0.44		23100 J*
POTASSIUM.....	31700 J*	6270 J*	1070 J*	65900 J*
MAGNESIUM.....	63900 J*	14100 J*	9420	970 J*
MANGANESE.....	906 J*	5190	1140	230000
SODIUM.....	238000	41800	14900	34
NICKEL.....	30.6	12	40	45.2
LEAD.....	53.6 J*	44.4 J*	42.8 J*	
ANTIMONY.....	36.7 J*			
SELENIUM.....				
VANADIUM.....	50 U**	50 U**	50 U*	50 U**
ZINC.....	275 J*	110 J*	105 J*	226 J*
CYANIDE.....				

* - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
** - INDICATES THAT THE CONTAMINANT VALUE HAS CHANGED ACCORDING TO DATA VALIDATION.
@ - INDICATES THAT THE COMPOUND IS A POLYNUCLEAR AROMATIC HYDROCARBON (PAH).
N/A - INDICATES THAT THE COMPOUND WAS NOT ANALYZE FOR.

SITE 12 - TANK FARM 4
CONSTITUENTS DETECTED IN SOIL BORING SAMPLES
MONITORING WELL BORINGS

SAMPLE IDENTIFICATION:	M01-1	M01-2	M02-1	M03-1	M04-1	M05-1	FB-052390	TB-05249
SAMPLE DEPTH (FT):	2-4	DUP M01-1	14-16	16-18	2-4	16-18		
**** VOLATILE ORGANICS (PPB) ***								
METHYLENE CHLORIDE.....	13 U*	10 U*	14 U*	11 U*	15 U*	12 U*	5 *	6 B
ACETONE.....	6 U*	25 U*	23 U*	11 U*	7 U*	6 U*	21 J*	
TETRACHLOROETHENE.....					2 J			
TOLUENE.....			2 J	1 J	2 J			
TOTAL VOLATILE ORGANICS.....	0	0	2	1	4	0	26	6
** BASE NEUTRAL / ACIDS (PPB) **								N/A
PENTACHLOROPHENOL.....			2100 U**	2000 U**		1900 U**		
PHENANTHRENE.....@								
DI-N-BUTYLPHTHALATE.....					3300 J*			
FLOURANTHENE.....@								
PYRENE.....@								
BENZO(a)ANTHRACENE.....@@								
CHRYSENE.....@@								
BIS(2-ETHYLHEXYL)PHTHALATE.....	410 U**	410 U**	420 U**	410 U**	380 U**	380 U**		
BENZO(b)FLUORANTHENE.....@@								
BENZO(a)PYRENE.....@@								N/A
TOTAL BNA'S.....	0	0	0	0	3300	0	0	
TOTAL PAH'S.....	0	0	0	0	0	0	0	
TOTAL CARCINOGENIC PAH'S.....	0	0	0	0	0	0	0	
**** PESTICIDES/PCB'S (PPB) ****								N/A
4,4'-DDE.....								
4,4'-DDT.....						5.6 J		N/A
******* INORGANICS (PPM) *******								
SILVER.....	0.75							N/A
ALUMINUM.....	6050	4680	11700	1920	8150	1010		
ARSENIC.....	18 J*	14.2 J*	18.7 J*	16.4 J*	3.2 J*	12.1 J*		
BARIUM.....	8.8	8.9	7.7	7.1	21.9	5.6	0.005 J*	
BERYLLIUM.....	0.39	0.35	0.33	0.28	0.47	0.27		
CALCIUM.....	1670	1370	1370	197	143	291	0.269	
CADMIUM.....								
COBALT.....	20.2 J*	17.8 J*	16.3 J*	20.6 J*	11.7 J*	22 J*		
CHROMIUM.....	9.3	7.3	19.1	3.8	10.9	7.3		
COPPER.....	14.1	13.7	22.1	21.6	13.8	35.2		
IRON.....	39600	31000	37400	41000	18400	35300	0.126	
MERCURY.....								
POTASSIUM.....					428			
MAGNESIUM.....	4030	2890	4460	639	2110	409	0.144	
MANGANESE.....	693	592	441	574	308	577	0.0029 J*	
NICKEL.....	36.9	30.2	21.4	37	14.6	37.7		
SODIUM.....		15.8 U*			19.3 U*		0.54	
LEAD.....	7.1	7.1	6	11.9	6	4.1		
ANTIMONY.....	7.4 J*	3.8 J*	8.7 J*	6.3 J*	6.1 J*	7.2 J*	0.0304	
SELENIUM.....	0.39 J*	0.3 J*	0.34 J*	0.34 J*	0.31 J*	0.41 J*		
VANADIUM.....	15.9 J*	13.1 J*	20.7 J*	11.1 J*	15.4 J*	12.7 J*		
ZINC.....	87	73.7	77.4	103	43.9	92.9	0.0541 J*	
CYANIDE.....								N/A
PETROLEUM HYDROCARBONS (PPM)....	150	160	N/A	N/A	N/A	N/A	N/A	N/A

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
**- INDICATES THAT THE CONTAMINANT VALUE HAS CHANGED ACCORDING TO DATA VALIDATION.
@ - INDICATES THAT THE COMPOUND IS A POLYNUCLEAR AROMATIC HYDROCARBON (PAH).
@@ - INDICATES THAT THE COMPOUND IS A CARCINOGENIC POLYNUCLEAR AROMATIC HYDROCARBON.
N/A - INDICATES THAT THE COMPOUND WAS NOT ANALYZED FOR.

SITE 12 - TANK FARM 4
CONSTITUENTS DETECTED IN GROUND WATER SAMPLES

SAMPLE IDENTIFICATION:	MW-1S	MW-1D	MW-2	MW-3S	MW-6 DUP MW-3S	MW-3D	MW-4	MW-5S
**** VOLATILE ORGANICS (PPB) ***								
CHLOROMETHANE.....								
METHYLENE CHLORIDE.....	7 U*	5 U*	8 U*	8 U*	8 U*	8 U*	7 U*	6 U*
ACETONE.....		3 U*	2 U*					
TOTAL VOLATILE ORGANICS.....	0	0	0	0	0	0	0	0
** BASE NEUTRAL / ACIDS (PPB) **								
PHENOL.....							N/A	
2-METHYLPHENOL.....							|	
4-METHYLPHENOL.....							|	
2,4-DIMETHYLPHENOL.....							|	
NAPHTHALENE.....@							|	
2-METHYLNAPHTHALENE.....@							|	
ACENAPHTHENE.....@							|	
DIBENZOFURAN.....							|	
FLUORENE.....@							|	
PHENANTHRENE.....@							|	
DI-N-BUTYLPHTHALATE.....						2 U*	|	
BUTYLBENZYLPHTHALATE.....							|	
BIS(2-ETHYLHEXYL)PHTHALATE.....			30 J*				N/A	
TOTAL BNA'S.....	0	0	30	0	0	0		0
TOTAL PAH'S.....	0	0	0	0	0	0		0
TOTAL CARCINOGENIC PAH'S.....	0	0	0	0	0	0		0
**** PESTICIDES/PCB'S (PPB) ****								
******* INORGANICS (PPB) *******								
SILVER.....			22.6 J*	28.1 J*			N/A	30.8
ALUMINUM.....	22300		251000	251000	39300	2320	|	57900
ARSENIC.....	10 J*		448 J*	284 J*	260 J*		|	24.6 J*
BARIUM.....	84.5 J*	44.7 J*	404 J*	391 J*	41.4 J*	10.9 J*	|	676
BERYLLIUM.....			8.5	7.5			|	7.2
CALCIUM.....	28400	33600	65500	86600	8050	19500	|	58100
CADMIUM.....				5.8 J*			|	8.5 J*
COBALT.....	38.3	8.6	380 J*	669 J*	74.1 J*	14.4	|	335 J*
CHROMIUM.....	27.9		391	372	55.8	4	|	213
COPPER.....	50.3	6.8	133 J*	569 J*	67.2 J*	9.3	|	153 J*
IRON.....	57800	9250	71600	64300	96200	12400	|	87900
MERCURY.....							|	
POTASSIUM.....	5040 J*	4730 J*	7960 J*	7770 J*		1080 J*	|	12800 J*
MAGNESIUM.....	29700	37900	96200	85600	14100	18200	|	91900
MANGANESE.....	1100	1570	6680 J*	9740 J*	1180 J*	2260	|	11500 J*
SODIUM.....	9940 J*	12900 J*	8690 J*	27400 J*	2280 J*	24700 J*	|	27700 J*
NICKEL.....	66.9 U*	17.7 U*	749	590	81.5	54.2 U*	|	447
LEAD.....	22 J*		55 J*	20 J*	156 J*		|	136 J*
ANTIMONY.....				(22.3)			|	
SELENIUM.....							|	
VANADIUM.....	32.2 U*	7.6 U*	114	168	27.5 U*	6 U*	|	35.6 U*
ZINC.....	152	18 U*	1450	1340	212	60.6	|	1390
CYANIDE.....							N/A	

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
() - INDICATES THAT THE SAMPLE RESULTS HAVE BEEN REJECTED ACCORDING TO SAMPLE VALIDATION.
@ - INDICATES THAT THE COMPOUND IS A POLYNUCLEAR AROMATIC HYDROCARBON (PAH).
N/A - INSUFFICIENT SAMPLE VOLUME FOR ANALYSIS.

SITE 12 - TANK FARM 4
CONSTITUENTS DETECTED IN GROUND WATER SAMPLES

SAMPLE IDENTIFICATION:	MW-5D	MW-10	MW-11	FB-72090	TB1-71990	TB2-71990	TB3-71990	TB4-71990
**** VOLATILE ORGANICS (PPB) ***								
CHLOROMETHANE.....								
METHYLENE CHLORIDE.....	8 U*	7 U*	8 U*	45 J*	10	9	10	9
ACETONE.....								
TOTAL VOLATILE ORGANICS.....	0	0	0		10	9	10	9
** BASE NEUTRAL / ACIDS (PPB) **								
PHENOL.....					N/A	N/A	N/A	N/A
2-METHYLPHENOL.....					|	|	|	|
4-METHYLPHENOL.....					|	|	|	|
2,4-DIMETHYLPHENOL.....					|	|	|	|
NAPHTHALENE.....@					|	|	|	|
2-METHYLNAPHTHALENE.....@					|	|	|	|
ACENAPHTHENE.....@					|	|	|	|
DIBENZOFURAN.....					|	|	|	|
FLUORENE.....@					|	|	|	|
PHENANTHRENE.....@					|	|	|	|
DI-N-BUTYLPHTHALATE.....					|	|	|	|
BUTYLBENZYLPHTHALATE.....					|	|	|	|
BIS(2-ETHYLHEXYL)PHTHALATE.....	18 J*				N/A	N/A	N/A	N/A
TOTAL BNA'S.....	18	0	0	0				
TOTAL PAH'S.....	0	0	0	0				
TOTAL CARCINOGENIC PAH'S.....	0	0	0	0				
**** PESTICIDES/PCB'S (PPB) ****					N/A	N/A	N/A	N/A
******* INORGANICS (PPB) *******								
SILVER.....					N/A	N/A	N/A	N/A
ALUMINUM.....	513 J*	177 J*	186 J*		|	|	|	|
ARSENIC.....	2.1 J*				|	|	|	|
BARIUM.....	10.9 J*	10.9 J*			|	|	|	|
BERYLLIUM.....					|	|	|	|
CALCIUM.....	14000	14600	14700	0.17	|	|	|	|
CADMIUM.....					|	|	|	|
COBALT.....	9.7 B1	27.3	10		|	|	|	|
CHROMIUM.....	8 B1				|	|	|	|
COPPER.....	18.4 B1	5.1	7.8	0.0053	|	|	|	|
IRON.....	19000	7530	3450	0.103 J*	|	|	|	|
MERCURY.....					|	|	|	|
POTASSIUM.....					|	|	|	|
MAGNESIUM.....	23400	9220	52100	0.0829	|	|	|	|
MANGANESE.....	1240	1640	565		|	|	|	|
SODIUM.....	26100 J*	9690 J*	13200 J*	0.458 J*	|	|	|	|
NICKEL.....	33.7 U*	27.7 U*	26.7 U*	0.0102	|	|	|	|
LEAD.....		27.2 J*			|	|	|	|
ANTIMONY.....					|	|	|	|
SELENIUM.....					|	|	|	|
VANADIUM.....	7.9 U*	5.8 U*	16.5 U*	0.0069	|	|	|	|
ZINC.....	66.4	42.7 U*	61	0.0248	|	|	|	|
CYANIDE.....					N/A	N/A	N/A	N/A

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
@ - INDICATES THAT THE COMPOUND IS A POLYNUCLEAR AROMATIC HYDROCARBON (PAH).
N/A - INDICATES THAT THE COMPOUND WAS NOT ANALYZED FOR.

SITE 12 - TANK FARM 4
CONSTITUENTS DETECTED IN SURFACE WATER SAMPLES

SAMPLE IDENTIFICATION:	SW-1	SW-2	SW-4	SW-6	FB-53190	TB1-53190	TB2-53190	TB3-53190	TB1-60190
**** VOLATILE ORGANICS (PPB) ***									
METHYLENE CHLORIDE.....	2 U*	2 U*		3 U*	4 J*	4 J*	4 J*	4 J*	4 J*
ACETONE.....			7 U*	6 U*	17 J*	13 J*			12 J*
CARBON DISULFIDE.....	26 J*		2 U*				1 J*		
CARBON TETRACHLORIDE.....			3 J						
TOTAL VOLATILE ORGANICS.....	26	0	3	0	21	17	5	4	16
** BASE NEUTRAL / ACIDS (PPB) **									
BIS(2-ETHYLHEXYL)PHTHALATE.....		1 U*	1 U*		3 J	N/A	N/A	N/A	N/A
TOTAL BNA'S.....	0	0	0	0	3				
TOTAL PAH'S.....	0	0	0	0	0				
TOTAL CARCINOGENIC PAH'S.....	0	0	0	0	0				
**** PESTICIDES/PCB'S (PPB) ****						N/A	N/A	N/A	N/A
******* INORGANICS (PPB) *******									
SILVER.....			7.9 U*			N/A	N/A	N/A	N/A
ALUMINUM.....	383 U*	236 U*			851 J*				
ARSENIC.....									
BARIUM.....	12.4 J*	10.9 J*	11.7 J*	10.8 J*					
BERYLLIUM.....									
CALCIUM.....	20300	19500 J*	19100	19400	72.3 J*				
CADMIUM.....			3.3 J*						
COBALT.....									
CHROMIUM.....		4 J*							
COPPER.....	15.3 U*	8.8 U*	28.5 U*	11.8 U*	5.4 J*				
IRON.....	1680	657	639	365					
MERCURY.....									
POTASSIUM.....	3800 J*	3090 J*	3030 J*	2920 J*					
MAGNESIUM.....	11800 J*	7580 J*	7530 J*	5820 J*	179 J*				
MANGANESE.....	112 J*	80.3 J*	78.8 J*	22.6 J*					
SODIUM.....	46200	15800	15300	15000 J*	332 J*				
NICKEL.....	11 U*	18.5 U*	13.4 U*	10.2 U*	94.3 J*				
LEAD.....	3.6								
ANTIMONY.....			30.8 U*						
SELENIUM.....			3.1						
VANADIUM.....	11.2 U*	12.5 U*	10.3 U*	11.9 U*	10.9 J*				
ZINC.....	325	24.7 U*	37.5 U*	24 U*	18.6 J*				
CYANIDE.....						N/A	N/A	N/A	N/A

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
@ - INDICATES THAT THE COMPOUND IS A POLYNUCLEAR AROMATIC HYDROCARBON (PAH).
N/A - INDICATES THAT THE COMPOUND WAS NOT ANALYZED FOR.

SITE 12 - TANK FARM 4
CONSTITUENTS DETECTED IN SEDIMENT SAMPLES

SAMPLE IDENTIFICATION:	SD1-1	SD1-2	SD2-1	SD7-1	SD2-2	SD3-1	SD3-2	SD4-1	SD4-2
SAMPLE DEPTH (FT):	0-1	1-2	0-1	DUP SD2-1	1-2	0-1	1-2	0-1	1-2
** VOLATILE ORGANICS (PPB) **									
METHYLENE CHLORIDE.....	9 U*	12 U*	12 U*	8 U*	6 U*	11 U*	14 U*	13 U*	9 U*
ACETONE.....	28 U*	45 U*	46 U*	56 U*	34 U*	29 U*	110 U*	29 U*	26 U*
CARBON DISULFIDE.....	4 U*			4 U*	2 U*	2 U*	21	3 U*	2 U*
TOTAL VOLATILE ORGANICS.....	0	0	0	0	0	0	21	0	0
* BASE NEUTRAL / ACIDS (PPB) *									
1,2-DICHLOROBENZENE.....									270 J
BENZOIC ACID.....		250 J		110 J					200 J
DI-N-BUTYLPHTHALATE.....				670					
BIS(2-ETHYLHEXYL)PHTHALATE...						140 U*			110 U*
TOTAL BNA'S.....	0	250	0	780	0	0	0	0	470
TOTAL PAH'S.....	0	0	0	0	0	0	0	0	0
TOTAL CARCINOGENIC PAH'S.....	0	0	0	0	0	0	0	0	0
*** PESTICIDES/PCB'S (PPB) **									
4,4'-DDT.....							5.9 J	2.8 J	5.3 J
***** INORGANICS (PPM) ******									
SILVER.....	1.1 U*	1.1 U*		1.2 U*	1.1 U*		1.2 U*		1.1 U*
ALUMINUM.....	6370 J*	5060 J*	9920 J*	8750 J*	10100 J*	10300 J*	10300 J*	9280 J*	9100 J*
ARSENIC.....	21.1 J*	6.03 J**	13 J*	7 J*	5.91 J**	10.3 J*	5.77 J*	7.1 J*	5.26 J**
BARIUM.....	5.6 J*	6.9 J*	15 J*	12.9 J*	20.3 J*	28.9 J*	19.8 J*	19.5 J*	11.7 J*
BERYLLIUM.....	0.46 B1								
CALCIUM.....	386 J*	524 J*	666 J*	549 J*	428 J*	492 J*	552 J*	768 J*	728 J*
CADMIUM.....		0.78 J*							
COBALT.....	13.6 J*	13.6 J*	16.1 J*	12.6 J*	16.3 J*	15.9 J*	14.1 J*	14.7 J*	14.3 J*
CHROMIUM.....	25.9	11.6	15.2	11.9	14.7	12.8	14.6	12.1	11.9
COPPER.....	16.1 J*	11.8 J*	13.8 J*	17.3 J*	6.4 U*	11.6 J*	9.7 J*	6.9 U*	12.6 J*
IRON.....	41100	32800	32000	27300	24500	28000	26400	19700	26800
MERCURY.....									
POTASSIUM.....				262 J*	262 J*	253 J*		214 J*	
MAGNESIUM.....	2110 J*	1550 J*	3210 J*	2830 J*	3180 J*	2520 J*	2820 J*	2570 J*	2790 J*
MANGANESE.....	236 J*	225 J*	396 J*	220 J*	146 J*	178 J*	162 J*	177 J*	132 J*
SODIUM.....	203 U*	556 U*	314 U*	243 U*	94.2 U*	45.9 U*	43.8 U*		32.6 U*
NICKEL.....	35.5 U*	21.2 U*	26.4 U*	23.8 U*	27.7 U*	21.2 U*	22.9 U*	24.3 U*	27.2 U*
LEAD.....	12.1 J*	6.9 J*	8 J*	5.6 J*	9.7 J*	16.4 J*	8.4 J*	8 J*	6 J*
ANTIMONY.....									
SELENIUM.....	0.66 J*				0.78 J*		0.63 J*		
VANADIUM.....	26.5 U*	20.4 U*	22.8 U*	22.1 U*	18.6 U*	19.3 U*	19.4 U*	16.4 U*	16.6 U*
ZINC.....	104 U*	82	75.8 U*	58.7 U*	60.2	56.1	61.4	62	78.6
CYANIDE.....									

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
**- INDICATES THAT THE CONTAMINANT VALUE HAS CHANGED ACCORDING TO DATA VALIDATION.

SITE 12 - TANK FARM 4
CONSTITUENTS DETECTED IN SEDIMENT SAMPLES

SAMPLE IDENTIFICATION:	SD5-1	SD5-2	SD6-1	SD6-2	FB-53190	TB1-53190	TB2-53190	TB3-53190
SAMPLE DEPTH (FT):	0-1	1-2	0-1	1-2				
**** VOLATILE ORGANICS (PPB) ***								
METHYLENE CHLORIDE.....	8 U*	13 U*	6 U*	16 U*	4 J*	4 J*	4 J*	4 J*
ACETONE.....	28 U*	17 U*	9 U*	39 U*	17 J*	13 J*		
CARBON DISULFIDE.....	2 U*						1 J*	
TOTAL VOLATILE ORGANICS.....	0	0	0	0	21	17	5	4
** BASE NEUTRAL / ACIDS (PPB) **								
1,2-DICHLOROBENZENE.....						N/A	N/A	N/A
BENZOIC ACID.....						|	|	|
DI-N-BUTYLPHTHALATE.....						|	|	|
BIS(2-ETHYLHEXYL)PHTHALATE.....			74 U*		3 J	|	|	|
						N/A	N/A	N/A
TOTAL BNA'S.....	0	0	0	0	3			
TOTAL PAH'S.....	0	0	0	0	0			
TOTAL CARCINOGENIC PAH'S.....	0	0	0	0	0			
**** PESTICIDES/PCB'S (PPB) ****								
						N/A	N/A	N/A
4,4'-DDT.....								
******* INORGANICS (PPM) *******								
SILVER.....	1.1 U*	1.3 U*	1.1 U*	1.4 U*		N/A	N/A	N/A
ALUMINUM.....	9020 J*	10900 J*	9350 J*	9230 J*	0.851 J*	|	|	|
ARSENIC.....	8.89 J**	19.5 J**	9.48 J**	12.8 J**		|	|	|
BARIUM.....	14.3 J*	27 J*	9.2 J*	9.3 J*		|	|	|
BERYLLIUM.....						|	|	|
CALCIUM.....	550 J*	791 J*	533 J*	677 J*	0.0723 J*	|	|	|
CADMIUM.....						|	|	|
COBALT.....	15.1 J*	25 J*	12.5 J*	13.5 J*		|	|	|
CHROMIUM.....	13.4	16.3	12.4	11.5		|	|	|
COPPER.....	14.8 J*	12.8 J*	13.3 J*	17.8 J*	0.0054 J*	|	|	|
IRON.....	27700	24200	35100	33500		|	|	|
MERCURY.....						|	|	|
POTASSIUM.....	275 J*			212 J*		|	|	|
MAGNESIUM.....	2900 J*	2750 J*	3250 J*	3150 J*	0.179 J*	|	|	|
MANGANESE.....	192 J*	215 J*	248 J*	224 J*		|	|	|
SODIUM.....		54.9 U*		31.6 U*	0.332 J*	|	|	|
NICKEL.....	24.1 U*	30.3 U*	24.3 U*	26.4 U*	0.0943 J*	|	|	|
LEAD.....	7.3 J*	12 J*	5.2 J*	5.2 J*		|	|	|
ANTIMONY.....						|	|	|
SELENIUM.....		0.83 J**				|	|	|
VANADIUM.....	18.7 U*	19.9 U*	19.8 U*	18.2 U*	0.0109 J*	|	|	|
ZINC.....	72.7	78.2	67	68.5	0.0186 J*	|	|	|
CYANIDE.....						N/A	N/A	N/A

NOTE: * - INDICATES THAT THE QUALIFIER HAS CHANGED ACCORDING TO DATA VALIDATION.
**- INDICATES THAT THE CONTAMINANT VALUE HAS CHANGED ACCORDING TO DATA VALIDATION.
@ - INDICATES THAT THE COMPOUND IS A POLYNUCLEAR AROMATIC HYDROCARBON (PAH).
@@ - INDICATES THAT THE COMPOUND IS A CARCINOGENIC POLYNUCLEAR AROMATIC HYDROCARBON.
N/A - INDICATES THAT THE COMPOUND WAS NOT ANALYZED FOR.