

TABLE II
SUMMARY OF ANALYTICAL RESULTS FOR SOIL
SEWER PUMP STATION
HAMDEN, CONNECTICUT

PARAMETER	Residential Direct Exposure Criteria	GA/GAA Pollutant Mobility Criteria	Sample ID:	SPS-HA201 S1	SPS-HA201 S2	SPS-HA201 S3	SPS-HA201 S4
			Sample Date:	11/11/2004	11/11/2004	11/11/2004	11/11/2004
			Sample Depth (ft bgs):	0-2	2-3.6	4-6	6-8
			Soil Type:	EF	EF	DRF	GD
Volatile Organic Compounds (ug/kg):				--	ND	--	--
Semi-Volatile Organic Compounds (ug/kg):							
2-Methyl Naphthalene	474,000	980		ND	ND	ND	ND
Acenaphthene	1,000,000	8,400		ND	ND	ND	ND
Acenaphthylene	1,000,000	8,400		2300	1500	ND	ND
Anthracene	1,000,000	40,000		2200	ND	ND	ND
Benzo[a]anthracene	1,000	1,000		6400	4000	ND	ND
Benzo[a]pyrene	1,000	1,000		6200	4400	ND	ND
Benzo[b]fluoranthene	1,000	1,000		7700	5600	ND	ND
Benzo[g,h,i]perylene	1,000,000	4,200		3300	3000	ND	ND
Benzo[k]fluoranthene	8,400	1,000		2700	1900	ND	ND
bis(2-Ethylhexyl)phthalate	44,000	1,000		ND	ND	ND	ND
Carbazole	31,000	1,000		1400	ND	ND	ND
Chrysene	84,000	1,000		7500	4700	ND	ND
Dibenz[a,h]anthracene	1,000	1,000		ND	ND	ND	ND
Dibenzofuran	270,000	1,000		ND	ND	--	--
Di-n-octylphthalate	1,000,000	100,000		ND	ND	--	--
Fluoranthene	1,000,000	5,600		14000	7300	ND	ND
Fluorene	1,000,000	5,600		ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	1,000	1,000		2900	2500	ND	ND
Naphthalene	1,000,000	5,600		ND	ND	ND	ND
Phenanthrene	1,000,000	4,000		11000	4500	ND	ND
Pyrene	1,000,000	4,000		15000	8100	ND	ND
Extractable Total Petroleum Hydrocarbons (mg/kg):	500	500		450	76	ND	ND

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			Sample Date:	11/11/2004	11/11/2004	11/11/2004	11/11/2004
			Sample Depth (ft bgs):	0-2	2-3.6	4-6	6-8
			Soil Type:	EF	EF	DRF	GD
Total Metals (mg/kg):							
Arsenic	10	--		9.8	7.5	2.5	1.6
Barium	4,700	--		120	390	74	16
Cadmium	34	--		ND	ND	ND	ND
Chromium	100*	--		11	18	7.6	4.9
Lead	400	--		200	2200	62	4
Mercury	20	--		0.55	0.67	ND	ND
Selenium	340	--		ND	ND	ND	ND
Silver	340	--		ND	ND	ND	ND
Zinc	20,000	--		230	530	220	12

Notes:

- This table includes only those compounds which were detected.
- RSR criteria means Remedial Standard Regulation criteria established by the Connecticut Department of Environmental Protection (CTDEP)
- ND means the compound was not detected above the normal minimum laboratory detection limit.
- NE means no criteria established by CTDEP for listed compound.
- indicates not analyzed for or not applicable
- ug/kg means micrograms per kilogram
- mg/kg means milligrams per kilogram
- Analytical results as reported above the GAPMC are presented in bold type. Values in a box exceed RDEC.
- RSR DEC for lead (400 mg/kg) is based on a proposed revision to the current 500 mg/kg DEC for lead.
- * RSR DEC for hexavalent chromium is 100. Criteria for total chromium has not been established.
- The above 'Soil Type' was described by Haley & Aldrich, Inc. as the following:
 - EF:** Earthen Fill: Soil fill, including topsoil which typically does not contain man-made artifacts but at some locations may contain variable amounts of root matter, cobbles, boulders and construction/demolition debris such as concrete, asphalt and brick
 - DRF:** Domestic Refuse Fill: Soil intermixed with products associated with household and/or on-site burning of paper/wood/coal (ash/cinders), intermixed with rusted metal cans and numerous whole bottles and broken glass, various broken ceramic items and brick.
 - GD:** Glaciodeltaic Deposits: Glacial meltwater deposits consisting primarily of sand and silt.

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PARAMETER	Residential Direct Exposure Criteria	GA/GAA Pollutant Mobility Criteria	Sample ID:	SPS-HA202 S1	SPS-HA202 S2	SPS-HA203 S1	SPS-HA204 S1	SPS-HA204 S2
			Sample Date:	11/11/2004	11/11/2004	11/11/2004	11/11/2004	11/11/2004
			Sample Depth (ft bgs):	0-2	2-4	0-2	0-2	2-4
			Soil Type:	EF	EF/DRF	EF	EF	EF
Volatile Organic Compounds (ug/kg):			--	--	--	--	--	--
Semi-Volatile Organic Compounds (ug/kg):								
2-Methyl Naphthalene	474,000	980	ND	ND	ND	ND	ND	ND
Acenaphthene	1,000,000	8,400	ND	ND	ND	ND	ND	ND
Acenaphthylene	1,000,000	8,400	ND	500	430	ND	ND	ND
Anthracene	1,000,000	40,000	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	1,000	1,000	640	1000	1100	ND	ND	ND
Benzo[a]pyrene	1,000	1,000	810	1400	1500	420	ND	ND
Benzo[b]fluoranthene	1,000	1,000	1100	2100	2000	560	ND	ND
Benzo[g,h,i]perylene	1,000,000	4,200	600	1200	1100	330	ND	ND
Benzo[k]fluoranthene	8,400	1,000	330	630	620	ND	ND	ND
bis(2-Ethylhexyl)phthalate	44,000	1,000	ND	ND	ND	ND	ND	ND
Carbazole	31,000	1,000	ND	ND	ND	ND	ND	ND
Chrysene	84,000	1,000	680	1100	1200	ND	ND	ND
Dibenz[a,h]anthracene	1,000	1,000	ND	ND	ND	ND	ND	ND
Dibenzofuran	270,000	1,000	--	--	--	--	--	--
Di-n-octylphthalate	1,000,000	100,000	--	--	--	--	--	--
Fluoranthene	1,000,000	5,600	990	2100	2400	600	ND	ND
Fluorene	1,000,000	5,600	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	1,000	1,000	710	1500	1300	410	ND	ND
Naphthalene	1,000,000	5,600	ND	ND	ND	ND	ND	ND
Phenanthrene	1,000,000	4,000	470	980	1600	340	ND	ND
Pyrene	1,000,000	4,000	1100	1800	2200	550	ND	ND
Extractable Total Petroleum Hydrocarbons (mg/kg):	500	500	ND	ND	82	74	ND	ND

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			Sample Date:	11/11/2004	11/11/2004	11/11/2004	11/11/2004	11/11/2004
			Sample Depth (ft bgs):	0-2	2-4	0-2	0-2	2-4
			Soil Type:	EF	EF/DRF	EF	EF	EF
Total Metals (mg/kg):								
Arsenic	10	--		3	5.4	3	1.8	ND
Barium	4,700	--		48	190	43	38	18
Cadmium	34	--		ND	ND	ND	ND	ND
Chromium	100*	--		13	11	13	6.5	6.3
Lead	400	--		41	340	40	38	9.8
Mercury	20	--		ND	0.59	ND	ND	ND
Selenium	340	--		ND	ND	ND	ND	ND
Silver	340	--		ND	ND	ND	ND	ND
Zinc	20,000	--		98	300	73	54	42

Notes:

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