TABLE 12-6
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN
SURFACE WATER - MARINE BASIN LOW TIDE

REMEDIAL INVESTIGATION REPORT
STRATFORD ARMY ENGINE PLANT
STRATFORD, CONNECTICUT

Scenario Timeframe: Current/Future Land Use
Medium: Surface Water
Exposure Medium: Surface Water
Exposure Point: Marine Basin

CAS NUMBER	CHEMICAL	DETECTION FREQUENCY	RANGE OF DETECTION LIMITS MIN-MAX	MINIMUM (1) CONCENTRATION	MINIMUM QUALIFIER	MAXIMUM (1) CONCENTRATION	MAXIMUM QUALIFIER	SAMPLE ID OF MAXIMUM CONCENTRATION	AVERAGE (2) CONCENTRATION	UNITS	95% UCL	SCREENING TOXICITY VALUE (3) MG/L	BACKGROUND VALUE (4)	RETAIN AS COPC?	RATIONALE FOR CONTAMINANT DELETION (5)
	Volatile Organics														
540-59-0	1,2-Dichloroethene (total)	1/ 4	.0007 - .0007	0.001		0.001		SWMB001L	0.00051	mg/L	NC	0.59	ND	NO	LTS
75-09-2	Methylene chloride	2/ 4	.0007 - .0007	0.001	B	0.002	B	SWMB002L	0.00093	mg/L	NC	NA	ND	NO	
	Inorganics/Metals														
7429-90-5	Aluminum	4/ 4	0 - 0	0.176	B	0.227		SWMB001L	0.2037	mg/L	NC	0.087	0.266	YES	
7440-36-0	Antimony	4/ 4	0 - 0	0.0038	B	0.0073		SWMB003L	0.0059	mg/L	NC	0.03	0.03425	NO	LTS
7440-38-2	Arsenic	3/ 4	.0017 - .0017	0.0022	B	0.0028	B	SWMB003L	0.00209	mg/L	NC	0.036	0.00155	NO	LTS
7440-39-3	Barium	2/ 4	.0115 - .0289	0.0097	B	0.0103	B	SWMB002L	0.01	mg/L	NC	0.004	ND	YES	
7440-70-2	Calcium	4/ 4	0 - 0	219	*	292	*	SWMB004L	271.8	mg/L	NC	NA	190.75	NO	EN
7440-47-3	Chromium	2/ 4	.0017 - .0028	0.001	B	0.0032	B	SWMB001L	0.001613	mg/L	NC	0.011	ND	NO	LTS
7440-50-8	Copper	2/ 4	.0082 - .0127	0.0076	B	0.0107		SWMB001L	0.007187	mg/L	NC	0.0024	0.00669	YES	
7439-89-6	Iron	4/ 4	0 - 0	0.215		0.557		SWMB003L	0.38	mg/L	NC	1	0.3823	NO	LTS
7439-92-1	Lead	1/ 4	.0011 - .0011	0.0018	B	0.0018	B	SWMB001L	0.00086	mg/L	NC	0.001	0.0025	YES	
7439-95-4	Magnesium	4/ 4	0 - 0	681	*	901	J	SWMB004L	832.25	mg/L	NC	NA	587.25	NO	EN
7439-96-5	Manganese	4/ 4	0 - 0	0.0391		0.124		SWMB003L	0.077	mg/L	NC	0.12	0.0703	YES	
7440-02-0	Nickel	2/ 4	.0029 - .0045	0.0024	B	0.0038	B	SWMB001L	0.0025	mg/L	NC	0.008118	ND	NO	LTS
7440-09-7	Potassium	4/ 4	0 - 0	287	*	392	*	SWMB002L	360.3	mg/L	NC	NA	218.5	NO	EN
7440-22-4	Silver	1/ 4	.0032 - .0032	0.0058	B	0.0058	B	SWMB003L	0.00265	mg/L	NC	0.00036	ND	YES	
7440-23-5	Sodium	4/ 4	0 - 0	5720	E	7410	E	SWMB002L	6860	mg/L	NC	NA	4170	NO	EN
7440-62-2	Vanadium	2/ 4	.0072 - .008	0.0062	B	0.0065	B	SWMB001L	0.00508	mg/L	NC	0.02	0.00669	NO	LTS
7440-66-6	Zinc	1/ 4	.0023 - .0023	0.0161	B	0.0161	B	SWMB003L	0.00489	mg/L	NC	0.0582	0.00737	NO	LTS
Metals, Dissolved															
7429-90-5	Aluminum	4/ 4	0 - 0	0.11	B	0.1360	B	SWMB003LD	0.12025	mg/L	NC	0.087	0.1197	YES	
7440-36-0	Antimony	4/ 4	0 - 0	0.003	B	0.0087		SWMB003LD	0.00623	mg/L	NC	0.03	0.0072	NO	LTS
7440-38-2	Arsenic	4/ 4	0 - 0	0.0017	B	0.0027	B	SWMB002LD	0.0021	mg/L	NC	0.036	0.0012	NO	LTS
7440-70-2	Calcium	4/ 4	0 - 0	216	*	301	*	SWMB004LD	273.3	mg/L	NC	NA	169.3	NO	EN
7440-47-3	Chromium	1/ 4	.0007 - .0024	0.00092	B	0.00092	B	SWMB001LD	0.00083	mg/L	NC	0.011	ND	NO	LTS
7440-50-8	Copper	2/ 4	.0081 - .0091	0.006	B	0.0072	B	SWMB001LD	0.00545	mg/L	NC	0.0024	ND	YES	
7439-89-6	Iron	4/ 4	0 - 0	0.0838	B	0.108		SWMB003LD	0.09995	mg/L	NC	1	0.0737	NO	LTS
7439-95-4	Magnesium	4/ 4	0 - 0	669	*	940	J	SWMB004LD	838.25	mg/L	NC	NA	500.3	NO	EN
7439-96-5	Manganese	4/ 4	0 - 0	0.0453		0.141		SWMB002LD	0.10657	mg/L	NC	0.12	0.0694	YES	
7440-02-0	Nickel	2/ 4	.0026 - .0045	0.0028	B	0.003	B	SWMB001LD	0.00234	mg/L	NC	0.008118	ND	NO	LTS
7440-09-7	Potassium	4/ 4	0 - 0	287	*	406	J	SWMB004LD	364.5	mg/L	NC	NA	199.67	NO	EN
7440-23-5	Sodium	4/ 4	0 - 0	5640	E	7640	J	SWMB004LD	6955	mg/L	NC	NA	4143.3	NO	EN
7440-62-2	Vanadium	2/ 4	.0077 - .008	0.0061	B	0.0064	B	SWMB002LD	0.00509	mg/L	NC	0.02	ND	NO	LTS
7440-66-6	Zinc	1/ 4	.0023 - .0023	0.008	B	0.008	B	SWMB003LD	0.00286	mg/L	NC	0.0582	0.00537	NO	LTS

(1) Minimum or maximum concentration detected in exposure area. Samples included in data set are provided in **Appendix T-1**
(2) Average concentration is calculated using 1/2 the detection limit for non-detects.
(3) Lowest of screening toxicity values presented in Table 12-37
(4) The background concentration shown here is equal to the average concentration from the low tide data set.
(5) LTS = less than screening toxicity value; EN = essential nutrient
J - estimated value
B - report value less than Contract Required Detection Limit but greater than or equal to the Instrument Detection Limit
E - results are not within control limits following dilution
* - sample duplicate results not within control limits