

Attachment 4 Results of Chemicals of Interest Screen

CHEMICAL	BIO- ACCUMULATIVE CHEMICAL? (Y/N)	SEDIMENT		INTERTIDAL SEDIMENT		TISSUE			SELECTED AS COPC? (Y/N)	SELECTED AS SANDPIPER COPC? (Y/N)	SELECTED AS CRAB COPC? (Y/N)
		DETECTION FREQUENCY (No. of detects/No. of samples)	DETECTED IN ≥ 5% OF SEDIMENT SAMPLES? (Y/N)	DETECTION FREQUENCY (No. of detects/No. of samples)	DETECTED IN ≥ 5% OF SEDIMENT SAMPLES? (Y/N)	ANY TISSUE (No. of detects/No. of samples)	CRAB ^a (No. of detects/ No. of samples)	BENTHIC INVERTEBRATE (No. of detects/No. of samples)			
Metals and Trace Elements											
Aluminum	N	453/453	Y	154/154	Y	na	na	na	N	N	N
Antimony	N	139/552	Y	57/181	Y	130/164	26/29	63/67	Y	Y	Y
Arsenic	Y	754/814	Y	307/357	Y	164/164	29/29	67/67	Y	Y	Y
Arsenic (inorganic)	N	na	na	na	na	36/36	12/12	20/20	N	N	N
Barium	N	418/418	Y	142/142	Y	na	na	na	N	N	N
Beryllium	N	451/463	Y	146/156	Y	na	na	na	N	N	N
Cadmium	Y	565/797	Y	218/348	Y	164/164	29/29	67/67	Y	Y	Y
Calcium	N	418/418	Y	142/142	Y	na	na	na	N	N	N
Chromium	N	811/811	Y	357/357	Y	121/164	9/29	47/67	Y	Y	Y
Chromium VI	Y	1/7	Y	na	na	na	na	na	Y	N	N
Cobalt	N	556/556	Y	232/232	Y	143/143	26/26	60/60	Y	Y	Y
Copper	Y	814/814	Y	357/357	Y	164/164	29/29	67/67	Y	Y	Y
Iron	N	451/451	Y	152/152	Y	na	na	na	N	N	N
Lead	Y	814/814	Y	357/357	Y	164/164	29/29	67/67	Y	Y	Y
Magnesium	N	428/428	Y	143/143	Y	na	na	na	N	N	N
Manganese	N	448/448	Y	154/154	Y	na	na	na	N	N	N
Mercury	N	715/831	Y	274/352	Y	167/169	29/29	65/67	Y	Y	Y
Methylmercury	Y	20/20	Y	4/4	Y	na	na	na	Y	Y	N
Molybdenum	N	199/257	Y	105/119	Y	142/142	26/26	60/60	Y	Y	Y
Nickel	Y	771/773	Y	323/324	Y	163/164	29/29	67/67	Y	Y	Y
Potassium	N	429/429	Y	145/145	Y	na	na	na	N	N	N
Selenium	Y	277/629	Y	71/249	Y	132/132	26/26	60/60	Y	Y	Y
Silver	Y	481/782	Y	174/345	Y	139/164	29/29	67/67	Y	Y	Y
Sodium	N	418/418	Y	140/140	Y	na	na	na	N	N	N

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		DETECTION FREQUENCY (No. of detects/No. of samples)	DETECTED IN ≥ 5% OF SEDIMENT SAMPLES? (Y/N)	DETECTION FREQUENCY (No. of detects/No. of samples)	DETECTED IN ≥ 5% OF SEDIMENT SAMPLES? (Y/N)	ANY TISSUE (No. of detects/No. of samples)	CRAB ^a (No. of detects/ No. of samples)	BENTHIC INVERTEBRATE (No. of detects/No. of samples)			
Thallium	N	325/635	Y	90/249	Y	103/134	22/26	56/62	Y	Y	Y
Tin	N	163/251	Y	15/43	Y	na	na	na	N	N	N
Vanadium	N	556/556	Y	232/232	Y	114/140	16/26	50/60	Y	Y	Y
Zinc	Y	810/811	Y	354/355	Y	164/164	29/29	67/67	Y	Y	Y
Organometals											
Monobutyltin as ion	N	89/117	Y	36/42	Y	92/144	24/26	49/62	Y	Y	Y
Dibutyltin as ion	N	106/147	Y	43/52	Y	136/144	26/26	56/62	Y	Y	Y
Tributyltin as ion	Y	143/159	Y	47/56	Y	158/181	21/29	58/67	Y	Y	Y
Tetrabutyltin as ion	N	15/119	Y	3/43	Y	1/133	0/26	0/62	Y	N	N
Butyltin (total)	N	29/37	Y	0/4	N	na	na	na	N	N	N
Alkylated PAHs											
C1-Chrysenes	N	20/20	Y	13/13	Y	5/20	na	5/20	Y	N	N
C1-Dibenzothiophenes	N	14/20	Y	11/13	Y	1/20	na	1/20	Y	Y	N
C1-Fluoranthene/pyrene	N	19/20	Y	12/13	Y	12/20	na	12/20	Y	Y	N
C1-Fluorenes	N	10/20	Y	5/13	Y	2/20	na	2/20	Y	Y	N
C1-Phenanthrenes/ anthracenes	N	20/20	Y	13/13	Y	7/20	na	7/20	Y	Y	N
C2-Chrysenes	N	20/20	Y	13/13	Y	1/20	na	1/20	Y	N	N
C2-Dibenzothiophenes	N	15/20	Y	10/13	Y	1/20	na	1/20	Y	Y	N
C2-Fluorenes	N	16/20	Y	9/13	Y	4/20	na	4/20	Y	Y	N
C2-Naphthalenes	N	20/20	Y	13/13	Y	1/20	na	1/20	Y	Y	N
C2-Phenanthrenes/ anthracenes	N	20/20	Y	13/13	Y	6/20	na	6/20	Y	Y	N
C3-Chrysenes	N	20/20	Y	13/13	Y	0/20	na	0/20	N	N	N
C3-Dibenzothiophenes	N	16/20	Y	11/13	Y	0/20	na	0/20	N	N	N
C3-Fluorenes	N	18/20	Y	11/13	Y	4/20	na	4/20	Y	Y	N
C3-Naphthalenes	N	20/20	Y	13/13	Y	1/20	na	1/20	Y	Y	N
C3-Phenanthrenes/ anthracenes	N	20/20	Y	13/13	Y	7/20	na	7/20	Y	Y	N
C4-Chrysenes	N	17/20	Y	10/13	Y	0/20	na	0/20	N	N	N

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C4-Naphthalenes	N	20/20	Y	13/13	Y	1/20	na	1/20	Y	Y	N
C4-Phenanthrenes/ anthracenes	N	20/20	Y	13/13	Y	4/20	na	4/20	Y	Y	N
PAHs											
1-Methylnaphthalene	N	20/20	Y	13/13	Y	19/20	na	19/20	Y	Y	N
2-Chloronaphthalene	N	0/743	N	0/310	N	0/164	0/29	0/67	N	N	N
2-Methylnaphthalene	N	139/780	Y	69/341	Y	100/164	18/29	52/67	Y	Y	Y
Acenaphthene	Y	301/790	Y	113/345	Y	109/164	26/29	60/67	Y	Y	Y
Acenaphthylene	Y	121/780	Y	59/341	Y	96/164	15/29	48/67	Y	Y	Y
Anthracene	Y	552/790	Y	181/345	Y	106/164	25/29	59/67	Y	Y	Y
Benzo(a)anthracene	Y	717/790	Y	292/345	Y	111/164	23/29	57/67	Y	Y	Y
Benzo(a)pyrene	Y	716/784	Y	294/341	Y	70/164	3/29	34/67	Y	Y	Y
Benzo(b)fluoranthene	Y	723/784	Y	302/340	Y	88/164	9/29	43/67	Y	Y	Y
Benzo(e)pyrene	N	20/20	Y	13/13	Y	20/20	na	20/20	Y	Y	N
Benzo(g,h,i)perylene	Y	648/785	Y	254/343	Y	71/164	9/29	43/67	Y	Y	Y
Benzo(k)fluoranthene	Y	696/784	Y	284/340	Y	86/164	9/29	43/67	Y	Y	Y
Chrysene	Y	739/790	Y	311/345	Y	113/164	23/29	57/67	Y	Y	Y
Dibenzo(a,h)anthracene	Y	400/790	Y	139/345	Y	40/164	2/29	31/67	Y	Y	Y
Dibenzofuran	N	246/789	Y	90/344	Y	107/164	26/29	59/67	Y	Y	Y
Fluoranthene	Y	759/790	Y	327/345	Y	128/164	24/29	59/67	Y	Y	Y
Fluorene	Y	371/790	Y	117/345	Y	110/164	26/29	60/67	Y	Y	Y
Indeno(1,2,3-cd)pyrene	Y	692/785	Y	280/343	Y	69/164	9/29	42/67	Y	Y	Y
Naphthalene	N	148/780	Y	71/341	Y	54/164	9/29	30/67	Y	Y	Y
Perylene	N	20/20	Y	13/13	Y	13/20	na	13/20	Y	Y	N
Phenanthrene	Y	724/790	Y	294/345	Y	108/164	26/29	60/67	Y	Y	Y
Pyrene	Y	750/790	Y	321/345	Y	120/164	24/29	59/67	Y	Y	Y
Total PAH (calc'd)	N	769/790	Y	335/345	Y	134/164	26/29	61/67	Y	Y	N

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Phthalates											
Bis(2-ethylhexyl)phthalate	N	635/794	Y	275/345	Y	28/164	4/29	21/67	Y	Y	Y
Butyl benzyl phthalate	N	390/784	Y	122/341	Y	25/159	14/29	15/65	Y	N	Y
Diethyl phthalate	N	42/794	Y	23/345	Y	39/164	15/29	17/67	Y	Y	Y
Dimethyl phthalate	N	136/784	Y	49/341	Y	5/164	5/29	5/67	Y	N	Y
Di-n-butyl phthalate	N	181/784	Y	93/341	Y	8/164	2/29	6/67	Y	Y	Y
Di-n-octyl phthalate	N	48/794	Y	23/345	Y	0/164	0/29	0/67	N	N	N
Other SVOCs											
1,2,4-Trichlorobenzene	N	5/778	N	0/339	N	0/164	0/29	0/67	N	N	N
1,2-Dichlorobenzene	Y	18/778	N	1/339	N	0/164	0/29	0/67	N	N	N
1,2-Diphenylhydrazine	N	0/109	N	0/31	N	0/32	0/3	0/7	N	N	N
1,3-Dichlorobenzene	Y	3/767	N	1/330	N	0/164	0/29	0/67	N	N	N
1,4-Dichlorobenzene	Y	35/778	N	10/339	N	0/164	0/29	0/67	N	N	N
2,4,5-Trichlorophenol	N	0/733	N	0/306	N	2/164	0/29	1/67	N	N	N
2,4,6-Trichlorophenol	N	0/733	N	0/306	N	2/164	0/29	1/67	N	N	N
2,4-Dichlorophenol	N	0/733	N	0/306	N	1/164	0/29	0/67	N	N	N
2,4-Dimethylphenol	N	1/773	N	1/339	N	2/164	0/29	1/67	N	N	N
2,4-Dinitrophenol	N	0/721	N	0/306	N	0/145	0/29	0/67	N	N	N
2,4-Dinitrotoluene	N	0/733	N	0/306	N	0/164	0/29	0/67	N	N	N
2,6-Dinitrotoluene	N	0/733	N	0/306	N	1/164	0/29	0/67	N	N	N
2-Chlorophenol	N	0/733	N	0/306	N	0/164	0/29	0/67	N	N	N
2-Methylphenol	N	3/783	N	1/344	N	19/164	0/29	0/67	N	N	N
2-Nitroaniline	N	0/721	N	0/306	N	0/164	0/29	0/67	N	N	N
2-Nitrophenol	N	0/733	N	0/306	N	0/164	0/29	0/67	N	N	N
3,3'-Dichlorobenzidine	N	0/692	N	0/294	N	0/136	0/26	0/64	N	N	N
3-Nitroaniline	N	0/709	N	0/301	N	0/144	0/26	0/64	N	N	N

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4,6-Dinitro-o-cresol	N	0/721	N	0/306	N	0/164	0/29	0/67	N	N	N
4-Bromophenyl phenyl ether	Y	1/733	N	0/306	N	0/162	0/29	0/67	N	N	N
4-Chloro-3-methylphenol	N	1/721	N	1/306	N	1/162	0/29	0/65	N	N	N
4-Chloroaniline	N	0/686	N	0/301	N	2/136	0/27	1/64	N	N	N
4-Chlorophenyl phenyl ether	Y	0/733	N	0/306	N	1/164	0/29	0/67	Y	N	N
4-Methylphenol	N	78/793	Y	37/348	Y	18/164	0/29	13/67	Y	Y	N
4-Nitroaniline	N	0/709	N	0/301	N	0/154	0/27	0/65	N	N	N
4-Nitrophenol	N	0/721	N	0/306	N	5/162	0/29	2/65	N	N	N
Aniline	N	1/250	N	0/121	N	0/153	0/26	0/62	N	N	N
Benzaldehyde	N	6/10	Y	0/4	N	na	na	na	N	N	N
Benzidine	N	0/7	N	0/5	N	0/111	0/18	0/52	N	N	N
Benzoic acid	N	69/781	Y	40/345	Y	112/164	0/29	33/67	Y	Y	N
Benzyl alcohol	N	14/771	N	9/341	N	37/164	4/29	12/67	N	N	Y
Biphenyl	N	20/20	Y	13/13	Y	20/20	na	20/20	Y	Y	N
Bis(2-chloroethoxy)methane	N	1/733	N	0/306	N	1/164	0/29	0/67	N	N	N
Bis(2-chloroethyl)ether	N	0/733	N	0/306	N	0/164	0/29	0/67	N	N	N
Bis(2-chloroisopropyl)ether	N	0/733	N	0/306	N	0/164	0/29	0/67	N	N	N
Caffeine	N	1/31	N	0/11	N	0/32	0/3	0/7	N	N	N
Caprolactam	N	1/10	Y	0/4	N	na	na	na	N	N	N
Carbazole	N	385/743	Y	124/310	Y	2/164	0/29	0/67	Y	N	N
Coprostanol	N	43/107	Y	8/27	Y	0/32	0/3	0/7	N	N	N
Dibenzothiophene	N	20/20	Y	13/13	Y	15/20	na	15/20	Y	Y	N
Hexachlorobenzene	Y	46/781	Y	20/342	Y	21/164	5/29	14/67	Y	Y	Y
Hexachlorobutadiene	Y	0/780	N	0/341	N	0/164	0/29	0/67	N	N	N
Hexachlorocyclopentadiene	Y	1/682	N	0/299	N	0/160	0/29	0/63	N	N	N
Hexachloroethane	Y	0/761	N	0/325	N	0/163	0/29	0/67	N	N	N
Isophorone	N	2/743	N	1/310	N	1/164	0/29	0/67	N	N	N

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Methyl isobutyl ketone	N	0/42	N	0/10	N	na	na	na	N	N	N
Nitrobenzene	N	0/733	N	0/306	N	0/164	0/29	0/67	N	N	N
N-Nitrosodimethylamine	N	0/292	N	0/130	N	0/164	0/29	0/67	N	N	N
N-Nitroso-di-n-propylamine	N	0/733	N	0/306	N	3/162	0/29	1/65	N	N	N
N-Nitrosodiphenylamine	N	23/780	N	11/341	N	1/164	0/29	1/67	N	N	N
Pentachlorophenol	N	12/747	N	8/318	N	16/164	0/29	5/67	N	N	N
Phenol	N	254/793	Y	84/348	Y	39/164	1/29	24/67	Y	Y	Y
Pyridine	N	0/12	N	na	na	na	na	na	N	N	N
Retene	N	10/19	Y	2/4	Y	na	na	na	N	N	N
PCBs											
Aroclor-1016	N	0/981	N	0/443	N	0/237	0/37	0/75	N	N	N
Aroclor-1016/1242	Y	na	na	na	na	6/6	na	na	N	N	N
Aroclor-1221	Y	0/855	N	0/334	N	0/243	0/37	0/75	N	N	N
Aroclor-1232	Y	0/855	N	0/334	N	0/243	0/37	0/75	N	N	N
Aroclor-1242	Y	103/982	Y	27/442	Y	0/237	0/37	0/75	Y	Y	N
Aroclor-1248	Y	203/991	Y	76/447	Y	107/243	29/37	36/75	Y	Y	Y
Aroclor-1254	Y	776/983	Y	296/445	Y	237/243	37/37	73/75	Y	Y	Y
Aroclor-1254/1260	Y	8/8	Y	2/2	Y	na	na	na	Y	Y	N
Aroclor-1260	Y	783/983	Y	323/445	Y	180/243	37/37	45/75	Y	Y	Y
Aroclor-1262	Y	2/12	Y	2/6	Y	na	na	na	Y	Y	N
Aroclor-1268	Y	1/11	Y	1/5	Y	na	na	na	Y	Y	N
PCBs (total calc'd)	Y	1203/1288	Y	509/552	Y	238/243	37/37	74/75	Y	Y	Y
Pesticides											
2,4'-DDD	Y	5/93	Y	4/53	Y	36/150	11/26	26/60	Y	Y	Y
2,4'-DDE	Y	2/93	N	2/53	N	14/150	0/26	3/60	Y	Y	N
2,4'-DDT	Y	29/93	Y	23/53	Y	134/150	26/26	49/60	Y	Y	Y
4,4'-DDD	Y	67/197	Y	28/75	Y	112/161	12/26	31/60	Y	Y	Y
4,4'-DDE	Y	30/197	Y	19/75	Y	122/161	26/26	49/60	Y	Y	Y

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4,4'-DDT	Y	41/197	Y	27/75	Y	136/161	26/26	56/60	Y	Y	Y
DDTs (total-calc'd)	Y	78/197	Y	34/75	Y	150/161	26/26	60/60	Y	Y	Y
Aldrin	Y	4/197	N	3/75	N	6/161	0/26	3/60	Y	Y	N
Dieldrin	Y	9/197	N	6/75	Y	11/161	1/26	6/60	Y	Y	Y
alpha-BHC	Y	3/197	N	3/75	N	12/161	4/26	6/60	Y	Y	Y
beta-BHC	Y	4/197	N	4/75	Y	53/161	0/26	14/60	Y	Y	N
delta-BHC	Y	3/158	N	3/66	N	3/161	0/26	3/60	Y	Y	N
gamma-BHC	Y	11/197	Y	7/75	Y	16/161	1/26	4/60	Y	Y	Y
alpha-Chlordane	Y	13/153	Y	10/62	Y	38/150	2/26	3/60	Y	Y	Y
gamma-Chlordane	Y	25/153	Y	18/62	Y	130/150	26/26	50/60	Y	Y	Y
Chlordane	Y	5/44	Y	2/13	Y	0/11	na	na	Y	Y	Y
alpha-Endosulfan	Y	10/151	Y	9/60	Y	50/161	4/26	10/60	Y	Y	Y
beta-Endosulfan	Y	4/153	N	3/62	N	32/161	0/26	8/60	Y	Y	N
Endosulfan	N	1/46	N	1/15	Y	na	na	na	N	N	N
Endosulfan sulfate	N	3/195	N	3/73	N	4/161	0/26	0/60	N	N	N
Endrin	Y	4/197	N	4/75	Y	31/161	0/26	11/60	Y	Y	N
Endrin aldehyde	N	6/186	N	6/69	Y	25/161	5/26	9/60	N	Y	Y
Endrin ketone	N	7/141	N	5/62	Y	4/150	0/26	2/60	N	N	N
Heptachlor	Y	8/197	N	2/75	N	10/161	0/26	1/60	Y	Y	N
Heptachlor epoxide	Y	5/197	N	2/75	N	54/161	16/26	24/60	Y	Y	Y
Methoxychlor	Y	11/197	Y	8/75	Y	8/161	3/26	7/60	Y	Y	Y
Mirex	Y	3/93	N	1/53	N	0/150	0/26	0/60	N	N	N
cis-Nonachlor	Y	0/58	N	0/25	N	0/18	na	na	N	N	N
Oxychlordane	Y	0/58	N	0/25	N	6/18	na	na	Y	N	N
Toxaphene	Y	2/195	N	2/73	N	0/161	0/26	0/60	N	N	N
trans-Nonachlor	Y	0/58	N	0/25	N	6/18	na	na	Y	N	N
Total chlordane (calc'd)	Y	28/153	Y	20/62	Y	133/150	26/26	50/60	Y	Y	Y
VOCs											
1,1,1,2-Tetrachloroethane	N	0/37	N	0/7	N	na	na	na	N	N	N

CHEMICAL	BIO- ACCUMULATIVE CHEMICAL? (Y/N)	SEDIMENT		INTERTIDAL SEDIMENT		TISSUE			SELECTED AS COPC? (Y/N)	SELECTED AS SANDPIPER COPC? (Y/N)	SELECTED AS CRAB COPC? (Y/N)
		DETECTION FREQUENCY (No. of detects/No. of samples)	DETECTED IN ≥ 5% OF SEDIMENT SAMPLES? (Y/N)	DETECTION FREQUENCY (No. of detects/No. of samples)	DETECTED IN ≥ 5% OF SEDIMENT SAMPLES? (Y/N)	ANY TISSUE (No. of detects/No. of samples)	CRAB ^a (No. of detects/ No. of samples)	BENTHIC INVERTEBRATE (No. of detects/No. of samples)			
1,1,1-Trichloroethane	N	0/42	N	0/10	N	na	na	na	N	N	N
1,1,2,2-Tetrachloroethane	N	0/42	N	0/10	N	na	na	na	N	N	N
1,1,2-Trichloroethane	N	0/42	N	0/10	N	na	na	na	N	N	N
1,1,2-Trichlorotrifluoroethane	N	0/40	N	0/10	N	na	na	na	N	N	N
1,1-Dichloroacetone	N	0/35	N	0/6	N	na	na	na	N	N	N
1,1-Dichloroethane	N	0/42	N	0/10	N	na	na	na	N	N	N
1,1-Dichloroethene	N	0/42	N	0/10	N	na	na	na	N	N	N
1,1-Dichloropropene	N	0/37	N	0/7	N	na	na	na	N	N	N
1,2,3-Trichlorobenzene	N	0/37	N	0/7	N	na	na	na	N	N	N
1,2,3-Trichloropropane	N	0/37	N	0/7	N	na	na	na	N	N	N
1,2,4-Trimethylbenzene	Y	1/37	N	0/7	N	na	na	na	N	N	N
1,2-Dibromo-3-chloropropane	N	0/37	N	0/7	N	na	na	na	N	N	N
1,2-Dibromoethane (EDB)	N	0/37	N	0/7	N	na	na	na	N	N	N
1,2-Dichloroethane	N	0/42	N	0/10	N	na	na	na	N	N	N
1,2-Dichloroethene (total)	N	0/2	N	na	na	na	na	na	N	N	N
1,2-Dichloropropane	N	0/42	N	0/10	N	na	na	na	N	N	N
1,3,5-Trimethylbenzene	N	0/37	N	0/7	N	na	na	na	N	N	N
1,3-Dichloropropane	N	0/37	N	0/7	N	na	na	na	N	N	N
1-Chlorobutane	N	0/37	N	0/7	N	na	na	na	N	N	N
2,2-Dichloropropane	N	0/37	N	0/7	N	na	na	na	N	N	N
2-Chloroethyl vinyl ether	N	0/3	N	0/3	N	na	na	na	N	N	N
2-Chlorotoluene	N	0/37	N	0/7	N	na	na	na	N	N	N
2-Hexanone	N	0/42	N	0/10	N	na	na	na	N	N	N
2-Nitropropane	N	0/37	N	0/7	N	na	na	na	N	N	N
4-Chlorotoluene	N	0/37	N	0/7	N	na	na	na	N	N	N
Acetone	N	3/42	Y	3/10	Y	na	na	na	N	N	N
Allyl chloride	N	0/37	N	0/7	N	na	na	na	N	N	N
Benzene	N	0/42	N	0/10	N	na	na	na	N	N	N
Bromobenzene	N	0/37	N	0/7	N	na	na	na	N	N	N

CHEMICAL	BIO- ACCUMULATIVE CHEMICAL? (Y/N)	SEDIMENT		INTERTIDAL SEDIMENT		TISSUE			SELECTED AS COPC? (Y/N)	SELECTED AS SANDPIPER COPC? (Y/N)	SELECTED AS CRAB COPC? (Y/N)
		DETECTION FREQUENCY (No. of detects/No. of samples)	DETECTED IN ≥ 5% OF SEDIMENT SAMPLES? (Y/N)	DETECTION FREQUENCY (No. of detects/No. of samples)	DETECTED IN ≥ 5% OF SEDIMENT SAMPLES? (Y/N)	ANY TISSUE (No. of detects/No. of samples)	CRAB ^a (No. of detects/ No. of samples)	BENTHIC INVERTEBRATE (No. of detects/No. of samples)			
Bromochloromethane	N	0/37	N	0/7	N	na	na	na	N	N	N
Bromodichloromethane	N	0/42	N	0/10	N	na	na	na	N	N	N
Bromoform	N	0/42	N	0/10	N	na	na	na	N	N	N
Bromomethane	N	0/42	N	0/10	N	na	na	na	N	N	N
Carbon disulfide	N	13/42	Y	1/10	Y	na	na	na	N	N	N
Carbon tetrachloride	N	0/42	N	0/10	N	na	na	na	N	N	N
Chloroacetonitrile	N	0/2	N	na	na	na	na	na	N	N	N
Chlorobenzene	N	0/42	N	0/10	N	na	na	na	N	N	N
Chloroethane	N	0/42	N	0/10	N	na	na	na	N	N	N
Chloroform	Y	0/42	N	0/10	N	na	na	na	N	N	N
Chloromethane	N	0/42	N	0/10	N	na	na	na	N	N	N
cis-1,2-Dichloroethene	N	0/40	N	0/10	N	na	na	na	N	N	N
cis-1,3-Dichloropropene	N	0/42	N	0/10	N	na	na	na	N	N	N
p-Cymene	N	3/37	Y	0/7	N	na	na	na	N	N	N
Dibromochloromethane	N	0/42	N	0/10	N	na	na	na	N	N	N
Dibromomethane	N	0/37	N	0/7	N	na	na	na	N	N	N
Dichlorodifluoromethane	N	0/7	N	0/2	N	na	na	na	N	N	N
Dichloromethane	N	1/42	N	0/10	N	na	na	na	N	N	N
Diethyl ether	N	0/37	N	0/7	N	na	na	na	N	N	N
Ethyl methacrylate	N	0/37	N	0/7	N	na	na	na	N	N	N
Ethylbenzene	N	0/42	N	0/10	N	na	na	na	N	N	N
Iodomethane	N	0/37	N	0/7	N	na	na	na	N	N	N
Isopropylbenzene	N	0/37	N	0/7	N	na	na	na	N	N	N
Methacrylonitrile	N	0/37	N	0/7	N	na	na	na	N	N	N
Methyl Acrylate	N	0/37	N	0/7	N	na	na	na	N	N	N
Methyl ethyl ketone	N	15/42	Y	4/10	Y	na	na	na	N	N	N
Methyl methacrylate	N	0/37	N	0/7	N	na	na	na	N	N	N
n-Butylbenzene	N	0/37	N	0/7	N	na	na	na	N	N	N
n-Propylbenzene	N	0/37	N	0/7	N	na	na	na	N	N	N

CHEMICAL	BIO- ACCUMULATIVE CHEMICAL? (Y/N)	SEDIMENT		INTERTIDAL SEDIMENT		TISSUE			SELECTED AS COPC? (Y/N)	SELECTED AS SANDPIPER COPC? (Y/N)	SELECTED AS CRAB COPC? (Y/N)
		DETECTION FREQUENCY (No. of detects/No. of samples)	DETECTED IN ≥ 5% OF SEDIMENT SAMPLES? (Y/N)	DETECTION FREQUENCY (No. of detects/No. of samples)	DETECTED IN ≥ 5% OF SEDIMENT SAMPLES? (Y/N)	ANY TISSUE (No. of detects/No. of samples)	CRAB ^a (No. of detects/ No. of samples)	BENTHIC INVERTEBRATE (No. of detects/No. of samples)			
Pentachloroethane	N	0/37	N	0/7	N	na	na	na	N	N	N
sec-Butylbenzene	N	0/37	N	0/7	N	na	na	na	N	N	N
Styrene	N	0/42	N	0/10	N	na	na	na	N	N	N
tert-Butyl methyl ether	N	0/37	N	0/7	N	na	na	na	N	N	N
tert-Butylbenzene	N	0/37	N	0/7	N	na	na	na	N	N	N
Tetrachloroethene	N	2/42	N	0/10	N	na	na	na	N	N	N
Toluene	N	4/42	Y	0/10	N	na	na	na	N	N	N
trans-1,2-Dichloroethene	N	0/40	N	0/10	N	na	na	na	N	N	N
trans-1,3-Dichloropropene	N	0/42	N	0/10	N	na	na	na	N	N	N
trans-1,4-Dichloro-2-butene	N	0/35	N	0/6	N	na	na	na	N	N	N
Trichloroethene	N	0/42	N	0/10	N	na	na	na	N	N	N
Trichlorofluoromethane	N	0/40	N	0/10	N	na	na	na	N	N	N
Vinyl acetate	N	0/3	N	0/3	N	na	na	na	N	N	N
Vinyl chloride	N	0/42	N	0/10	N	na	na	na	N	N	N
Xylene (ortho)	N	0/40	N	0/10	N	na	na	na	N	N	N
Xylene (meta and para)	N	0/40	N	0/10	N	na	na	na	N	N	N
Xylene (total)	N	0/2	N	na	na	na	na	na	N	N	N
Total xylenes (calc'd)	N	0/40	N	0/10	N	na	na	na	N	N	N
Dioxins/Furans^b											
2,3,7,8-TCDD	Y	17/43	Y	11/17	Y	na	na	na	Y	Y	N
1,2,3,7,8-PeCDD	Y	19/43	Y	12/17	Y	na	na	na	Y	Y	N
1,2,3,4,7,8-HxCDD	Y	19/43	Y	12/17	Y	na	na	na	Y	Y	N
1,2,3,6,7,8-HxCDD	Y	35/43	Y	15/17	Y	na	na	na	Y	Y	N
1,2,3,7,8,9-HxCDD	Y	31/43	Y	15/17	Y	na	na	na	Y	Y	N
1,2,3,4,6,7,8-HpCDD	Y	41/43	Y	17/17	Y	na	na	na	Y	Y	N
OCDD	Y	43/43	Y	17/17	Y	na	na	na	Y	Y	N
2,3,7,8-TCDF	Y	34/43	Y	15/17	Y	na	na	na	Y	Y	N
1,2,3,7,8-PeCDF	Y	18/43	Y	12/17	Y	na	na	na	Y	Y	N
2,3,4,7,8-PeCDF	Y	19/43	Y	12/17	Y	na	na	na	Y	Y	N

CHEMICAL	BIO- ACCUMULATIVE CHEMICAL? (Y/N)	SEDIMENT		INTERTIDAL SEDIMENT		TISSUE			SELECTED AS COPC? (Y/N)	SELECTED AS SANDPIPER COPC? (Y/N)	SELECTED AS CRAB COPC? (Y/N)
		DETECTION FREQUENCY (No. of detects/No. of samples)	DETECTED IN ≥ 5% OF SEDIMENT SAMPLES? (Y/N)	DETECTION FREQUENCY (No. of detects/No. of samples)	DETECTED IN ≥ 5% OF SEDIMENT SAMPLES? (Y/N)	ANY TISSUE (No. of detects/No. of samples)	CRAB ^a (No. of detects/ No. of samples)	BENTHIC INVERTEBRATE (No. of detects/No. of samples)			
1,2,3,4,7,8-HxCDF	Y	30/43	Y	14/17	Y	na	na	na	Y	Y	N
1,2,3,6,7,8-HxCDF	Y	19/43	Y	12/17	Y	na	na	na	Y	Y	N
1,2,3,7,8,9-HxCDF	Y	18/43	Y	12/17	Y	na	na	na	Y	Y	N
2,3,4,6,7,8-HxCDF	Y	19/43	Y	12/17	Y	na	na	na	Y	Y	N
1,2,3,4,6,7,8-HpCDF	Y	40/43	Y	16/17	Y	na	na	na	Y	Y	N
1,2,3,4,7,8,9-HpCDF	Y	27/43	Y	14/17	Y	na	na	na	Y	Y	N
OCDF	Y	42/43	Y	17/17	Y	na	na	na	Y	Y	N
Total TCDD	Y	20/25	Y	4/5	Y	na	na	na	Y	Y	N
Total PeCDD	Y	1/25	N	0/5	N	na	na	na	N	N	N
Total HxCDD	Y	23/25	Y	5/5	Y	na	na	na	Y	Y	N
Total HpCDD	Y	23/25	Y	5/5	Y	na	na	na	Y	Y	N
Total TCDF	Y	23/25	Y	5/5	Y	na	na	na	Y	Y	N
Total PeCDF	Y	22/25	Y	4/5	Y	na	na	na	Y	Y	N
Total HxCDF	Y	23/25	Y	5/5	Y	na	na	na	Y	Y	N
Total HpCDF	Y	23/25	Y	5/5	Y	na	na	na	Y	Y	N

^a Eight hepatopancreas samples and twenty-one calculated whole body samples. The LDWRI 2005 crab samples were analyzed for PCB Aroclors only and include an additional four hepatopancreas samples and four calculated whole body samples.

^b No quantitative LDW risk estimates were calculated for ecological risks from dioxins/furans. LDWG, EPA, and Ecology agreed that such data were not needed for remedial decision-making, because remedial decisions to address dioxins/furans will be based on concentrations of dioxins/furans in LDW sediment relative to their concentrations in urban background sediment from the greater Seattle metropolitan area

COPC – chemical of potential concern

HpCDD – heptachlorodibenzo-*p*-dioxin

HpCDF – heptachlorodibenzofuran

HxCDD – hexachlorodibenzo-*p*-dioxin

HxCDF – hexachlorodibenzofuran

N – no

na – not analyzed

OCDD – octachlorodibenzo-*p*-dioxin

OCDF – octachlorodibenzofuran

PAH – polycyclic aromatic hydrocarbon

PCB – polychlorinated biphenyl

PeCDD – pentachlorodibenzo-*p*-dioxin

PeCDF – pentachlorodibenzofuran

SVOC – semivolatile organic compound

TCDD – tetrachlorodibenzo-*p*-dioxin

TCDF – tetrachlorodibenzofuran

VOC – volatile organic compound

Y – yes

Lower Duwamish Waterway Group

Port of Seattle/City of Seattle/King County/The Boeing Company

FINAL

LDW RI: Baseline ERA
Attachment 4
July 31, 2007
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