

**Table 6-1: Parameters Analyzed for in the Regional Monitoring Program**

<b>Conventional Water Quality Parameters</b>
Conductivity
Dissolved Ammonia
Dissolved Nitrate
Dissolved Nitrite
Dissolved Organic Carbon
Particulate Organic Carbon
Dissolved Oxygen
Dissolved Phosphates
Dissolved Silicates
Hardness (when salinity is < 5 parts per thousand)
pH
Phaeophytin
Salinity
Temperature
Total Chlorophyll- <i>a</i>
Total Suspended Solids
<b>Sediment Quality Parameters</b>
% clay (< 4 $\mu\text{m}$ )
% silt (4 $\mu\text{m}$ –62 $\mu\text{m}$ )
% sand (2 mm > 62 $\mu\text{m}$ )
% gravel (> 2 mm)
% solids
Depth
Hydrogen Sulfide ( <i>QAQC measurements</i> )
pH (porewater, interstitial sediment)
Total Ammonia ( <i>QAQC measurements</i> )
Total Organic Carbon
Total Sulfide ( <i>QAQC measurements</i> )
Total Nitrogen
<b>Bivalve Tissue Parameters</b>
% Lipid
% Moisture
Bivalve Percent Survival
Growth - Change in Internal Shell Volume (mean, std. dev)
Dry Flesh Weight (mean and std error)
<b>Toxicity Tests—Water and Sediment</b>
Episodic Aquatic Toxicity – ( <i>Ceriodaphnia</i> , <i>Menidia</i> , Mysid) % Survival
Sediment Toxicity – (Amphipod) % Survival
Sediment Toxicity – (Bivalve) % Normal Development

**Table 6-1 Parameters Analyzed for in the Regional Monitoring Program (continued)**

<b>Trace elements analyzed in water, sediment, and tissue samples:</b>		
Target Method Detection Limits (MDLs) are in parentheses following the reporting units.		
	<b>Water</b> (Dissolved and Total)	<b>Sediment</b> (dry weight)
<b>Lab(s)</b>	BRL/UCSCDET	BRL/CCSF/ UCSCDET
Aluminum (Al)*	-	mg/kg (200)
Arsenic (As)	µg/L (0.1)	mg/kg (0.2)
Cadmium (Cd)*	µg/L(0.001)	mg/kg (0.001)
Cobalt (Co)*	µg/L(0.001)	
Copper (Cu)*	µg/L (0.01)	mg/kg (2)
Iron (Fe)*	µg/L(10)	mg/kg (200)
Lead (Pb)*	µg/L (0.001)	mg/kg (0.5)
Manganese (Mn)*	µg/L (0.01)	mg/kg (20)
Mercury (Hg)	µg/L (.0001)	mg/kg (0.00001)
Methylmercury (MeHg)	ng/L (0.005)	µg/kg (0.005)
Nickel (Ni)*	µg/L (0.01)	mg/kg (5)
Selenium (Se)	µg/L (0.02)	mg/kg (0.01)
Silver (Ag)*	µg/L (0.0001)	mg/kg (0.001)
Zinc (Zn)*	µg/L (0.005)	mg/kg (5)

- Parameter is not sampled for the matrix.

\* Near-total instead of total concentrations are reported for water. Near-total metals are extracted with a weak acid (pH < 2) for a minimum of one month, resulting in measurements that approximate bioavailability of these metals to Estuary organisms.

**Table 6-1 Parameters Analyzed for in the Regional Monitoring Program (continued)**

Trace organic parameters (lab; reporting units) – in water (AXYS & CDFG; pg/L), sediment (EBMUD; µg/kg), and bivalve tissue (CDFG-WPCL; µg/kg) samples:

Organochlorines analyzed by GC-ECD will be determined using two columns of differing polarity.

<b>Polynuclear Aromatic Hydrocarbons (PAHs)</b> (Target MDLs: water – 200 pg/L, sediment and tissue – 5 µg/kg; water PAHs reported in ng/L)	<b>SYNTHETIC BIOCIDES</b> (Target MDLs: water – 2 pg/L, sediment and tissue – 1 µg/kg)	<b>OTHER SYNTHETIC COMPOUNDS</b> <sup>1</sup> New analytes added in 2002. <sup>2</sup> Not required by RMP but are expected to be analyzed in the 2002 RMP samples.	
1-Methylnaphthalene	<b>Cyclopentadienes</b>	<b>Polychlorinated Biphenyls (PCB Congeners (IUPAC numbers))</b> (Target MDLs: water – 2 pg/L, sediment and tissue – 1 µg/kg) 8, 18, 28, 31, 33, 44, 49, 52, 56, 60, 66, 70, 74, 87, 95, 97, 99, 101, 105, 110, 118, 128, 132, 138, 141, 149, 151, 153, 156, 158, 170, 174, 177, 180, 183, 187, 194, 195, 201, 203	
2,3,5-Trimethylnaphthalene	Aldrin	<b>Polybrominated Diphenyl Ethers<sup>1</sup></b> (BDE-IUPAC No., Compound Name) (Target MDLs: water – 1 pg/L, sediment and tissue – 1 µg/kg).	
2,6-Dimethylnaphthalene	Diendrin		
2-Methylnaphthalene	Endrin		
Biphenyl	<b>Chlordanes</b>		
Naphthalene	alpha-Chlordane		
1-Methylphenanthrene	cis-Nonachlor		
Acenaphthene	gamma-Chlordane		
Acenaphthylene	Heptachlor		
Anthracene	Heptachlor Epoxide		
Fluorene	Oxychlordane		
Phenanthrene	trans-Nonachlor	BDE 7	[2,4-DiBDE]
Benz(a)anthracene	<b>Dichloro-diphenyl-trichloroethane (DDTs)</b>	BDE 8	[2,4'-DiBDE]
Chrysene	o,p'-DDD	BDE 10	[2,6-DiBDE]
Fluoranthene	o,p'-DDE	BDE 11	[3,3'-DiBDE]
Pyrene	o,p'-DDT	BDE 12	[3,4-DiBDE]
Benzo(a)pyrene	p,p'-DDD	BDE 13	[3,4'-DiBDE]
Benzo(b)fluoranthene	p,p'-DDE	BDE 15	[4,4'-DiBDE]
Benzo(e)pyrene	p,p'-DDT	BDE 17	[2,2',4-triBDE]
Benzo(k)fluoranthene	<b>Hexachlorcyclohexane (HCH)</b>	BDE 25	[2,3',4-triBDE]
Dibenz(a,h)anthracene	alpha-HCH	BDE 28	[2,4,4'-triBDE]
Perylene	beta-HCH	BDE 30	[2,4,6-triBDE]
Benzo(ghi)perylene	delta-HCH	BDE 32	[2,4',6-triBDE]
Indeno(1,2,3-cd)pyrene	gamma-HCH	BDE 33	[2',3,4-triBDE]
Dibenzothiophene	<b>Other Synthetic Biocides</b>	BDE 35	[3,3',4-triBDE]
<b>Alkylated PAHs</b>	Chlorpyrifos (water only; CDFG-WPCL)	BDE 37	[3,4,4'-triBDE]
C1-Chrysenes	Dacthal (water only)	BDE 47	[2,2',4,4'-tetraBDE]
C2-Chrysenes	Diazinon (water only; CDFG-WPCL)	BDE 49	[2,2',4,5'-tetraBDE]
C3-Chrysenes	Endosulfan I (water only)	BDE 51	[2,2',4,6'-tetraBDE]
C4-Chrysenes	Endosulfan II (water only)	BDE 66	[2,3',4,4'-tetraBDE]
C1-Dibenzothiophenes	Endosulfan Sulfate (water only)	BDE 71	[2,3',4',6-tetraBDE]
C2-Dibenzothiophenes	Hexachlorobenzene	BDE 75	[2,4,4',6-tetraBDE]
C3-Dibenzothiophenes	Mirex	BDE 77	[3,3',4,4',-tetraBDE]
C1-Fluoranthene/Pyrenes	Oxadiazon (water only)	BDE 82	[2,2',3,3',4-pentaBDE]
C1-Fluorenes		BDE 85	[2,2',3,4,4'-pentaBDE]
C2-Fluorenes		BDE 99	[2,2',4,4,5-pentaBDE]
C3-Fluorenes		BDE 100	[2,2',4,4',6-pentaBDE]
C1-Naphthalenes		BDE 105	[2,3,3',4,4',-pentaBDE]
C2-Naphthalenes		BDE 116	[2,3,4,5,6-pentaBDE]
C3-Naphthalenes		BDE 119	[2,3',4,4',6-pentaBDE]
C4-Naphthalenes		BDE 120	[2,3',4,5,5'-PeBDE]
C1-Phenanthrene/Anthracenes		BDE 126	[3,3',4,4',5-PeBDE]
C2-Phenanthrene/Anthracenes		BDE 128	[2,2',3,3',4,4'-hexaBDE]
C3-Phenanthrene/Anthracenes		BDE 138	[2,2',3,4,4',5'-hexaBDE]
C4-Phenanthrene/Anthracenes			

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**Trace organic parameters (lab; reporting units) – in water (AXYS & CDFG; pg/L), sediment (EBMUD; µg/kg), and bivalve tissue (CDFG-WPCL; µg/kg) samples:**

Organochlorines analyzed by GC-ECD will be determined using two columns of differing polarity.

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**Polynuclear Aromatic**

**Hydrocarbons (PAHs)**

(Target MDLs: water – 200 pg/L,  
sediment and tissue – 5 µg/kg;  
water PAHs reported in ng/L)

**SYNTHETIC BIOCIDES**

(Target MDLs: water – 2 pg/L,  
sediment and tissue – 1 µg/kg)

**OTHER SYNTHETIC COMPOUNDS**

<sup>1</sup>New analytes added in 2002.

<sup>2</sup>Not required by RMP but are expected to be analyzed in the 2002 RMP samples.

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BDE 140	[2,2', 3,4,4',6'-hexaBDE]
BDE 153	[2,2',4,4',5,5'-hexaBDE]
BDE 154	[2,2',4,4',5,6'-hexaBDE]
BDE 155	[2,2',4,4',6,6'-hexaBDE]
BDE 166	[2,3,4,4',5,6'-hexaBDE]
BDE 181	[2,2',3,4,4',5,6'-heptaBDE]
BDE 183	[2,2',3,4,4',5',6-heptaBDE]
BDE 190	[2,3,3',4,4',5,6-heptaBDE]
BDE 203	[2,2',3,4,4',5,5',6]
BDE 206	[2,2',3,3',4,4',5,5',6]
BDE 209	[2,2',3,3',4,4',5,5',6,6'-decaBDE]

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