

Appendix E. COC Concentration Decision – Ambient Areas

Table E-1. COC Concentration Decision – Ambient Areas

Parameter	Sub-basin							
	Admiralty Inlet		Commencement Bay		Hood Canal North		Elliott Bay	
	Urban Ambient	Non-urban ambient	Urban Ambient	Non-urban ambient	Urban Ambient	Non-urban ambient	Urban Ambient	Non-urban ambient
	C_{UA}	C_{NUA}	C_{UA}	C_{NUA}	C_{UA}	C_{NUA}	C_{UA}	C_{NUA}
2,4'-DDD	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
2,4'-DDE	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
2,4'-DDT	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
4,4'-DDD	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
4,4'-DDE	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
4,4'-DDT	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Acenaphthene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Acenaphthylene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Anthracene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Fluorene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Naphthalene	PUA	PNUA	PUA	PNUA	PUA	SBNUAM	PUA	PNUA
Phenanthrene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Benz(a)anthracene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Benzo[a]pyrene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Benzo(b)fluoranthene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Benzo[g,h,i]perylene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Benzo[k]fluoranthene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Chrysene	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Dibenzo[a,h]anthracene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Fluoranthene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Indeno[1,2,3-c,d]pyrene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Pyrene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Diesel Range Organics	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Gasoline Range Organics	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Lube Oil	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Arsenic	PUA	PNUA	PUA	PNUA	SBUAM	SBNUAM	PUA	PNUA
Cadmium	PUA	PNUA	PUA	PNUA	SBUAM	SBNUAM	PUA	PNUA
Copper	PUA	PNUA	PUA	PNUA	SBUAM	SBNUAM	PUA	PNUA
Lead	PUA	PNUA	PUA	PNUA	SBUAM	SBNUAM	PUA	PNUA
Mercury	PUA	PNUA	PUA	PNUA	SBUAM	SBNUAM	PUA	PNUA
Zinc	PUA	PNUA	PUA	PNUA	SBUAM	SBNUAM	PUA	PNUA
Bis(2-ethylhexyl)phthalate	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Total TCDD	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Total TCDF	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%

SBUAM = median of sub-basin urban ambient samples

SBNUAM = median of sub-basin non-urban ambient samples

PUA - median of pooled Puget Sound urban ambient samples

PNUA - median of pooled Puget Sound non-urban ambient samples

I-25% - 25th percentile of pooled Puget Sound impacted samples

I-10% - 10th percentile of pooled Puget Sound impacted samples

Table E-1. COC Concentration Decision – Ambient Areas (cont.)

Parameter	Sub-basin							
	Hood Canal South		Strait of Juan de Fuca		Main Basin		Port Gardner	
	Urban Ambient	Non-urban ambient	Urban Ambient	Non-urban ambient	Urban Ambient	Non-urban ambient	Urban Ambient	Non-urban ambient
	C_{UA}	C_{NUA}	C_{UA}	C_{NUA}	C_{UA}	C_{NUA}	C_{UA}	C_{NUA}
2,4'-DDD	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
2,4'-DDE	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
2,4'-DDT	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
4,4'-DDD	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
4,4'-DDE	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
4,4'-DDT	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Acenaphthene	I-25%	PNUA	I-25%	PNUA	I-25%	SBNUAM	I-25%	PNUA
Acenaphthylene	I-25%	PNUA	I-25%	PNUA	I-25%	SBNUAM	I-25%	PNUA
Anthracene	I-25%	PNUA	I-25%	PNUA	I-25%	SBNUAM	I-25%	PNUA
Fluorene	I-25%	PNUA	I-25%	PNUA	I-25%	SBNUAM	I-25%	PNUA
Naphthalene	PUA	PNUA	PUA	PNUA	PUA	SBNUAM	PUA	PNUA
Phenanthrene	I-25%	PNUA	I-25%	PNUA	I-25%	SBNUAM	I-25%	PNUA
Benz(a)anthracene	I-25%	PNUA	I-25%	PNUA	I-25%	SBNUAM	I-25%	PNUA
Benzo[a]pyrene	I-25%	PNUA	I-25%	PNUA	I-25%	SBNUAM	I-25%	PNUA
Benzo(b)fluoranthene	I-25%	PNUA	I-25%	PNUA	I-25%	SBNUAM	I-25%	PNUA
Benzo[g,h,i]perylene	I-25%	PNUA	I-25%	PNUA	I-25%	SBNUAM	I-25%	PNUA
Benzo[k]fluoranthene	I-25%	PNUA	I-25%	PNUA	I-25%	SBNUAM	I-25%	PNUA
Chrysene	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Dibenzo[a,h]anthracene	I-25%	PNUA	I-25%	PNUA	I-25%	SBNUAM	I-25%	PNUA
Fluoranthene	I-25%	PNUA	I-25%	PNUA	I-25%	SBNUAM	I-25%	PNUA
Indeno[1,2,3-c,d]pyrene	I-25%	PNUA	I-25%	PNUA	I-25%	SBNUAM	I-25%	PNUA
Pyrene	I-25%	PNUA	I-25%	PNUA	I-25%	SBNUAM	I-25%	PNUA
Diesel Range Organics	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Gasoline Range Organics	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Lube Oil	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Arsenic	PUA	PNUA	PUA	PNUA	PUA	SBNUAM	PUA	PNUA
Cadmium	PUA	PNUA	PUA	PNUA	PUA	SBNUAM	PUA	PNUA
Copper	PUA	PNUA	PUA	PNUA	PUA	SBNUAM	PUA	PNUA
Lead	PUA	PNUA	PUA	PNUA	PUA	SBNUAM	PUA	PNUA
Mercury	PUA	PNUA	PUA	PNUA	PUA	SBNUAM	PUA	PNUA
Zinc	PUA	PNUA	PUA	PNUA	PUA	SBNUAM	PUA	PNUA
Bis(2-ethylhexyl)phthalate	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Total TCDD	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Total TCDF	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%

SBUAM = median of sub-basin urban ambient samples
 SBNUAM = median of sub-basin non-urban ambient samples
 PUA - median of pooled Puget Sound urban ambient samples
 PNUA - median of pooled Puget Sound non-urban ambient samples
 I-25% - 25th percentile of pooled Puget Sound impacted samples
 I-10% - 10th percentile of pooled Puget Sound impacted samples

Table E-1. COC Concentration Decision – Ambient Areas (cont.)

Parameter	Sub-basin							
	San Juan Islands		Sinclair Dyes Inlet		South Sound East		South Sound West	
	Urban Ambient	Non-urban ambient	Urban Ambient	Non-urban ambient	Urban Ambient	Non-urban ambient	Urban Ambient	Non-urban ambient
	C_{UA}	C_{NUA}	C_{UA}	C_{NUA}	C_{UA}	C_{NUA}	C_{UA}	C_{NUA}
2,4'-DDD	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
2,4'-DDE	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
2,4'-DDT	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
4,4'-DDD	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
4,4'-DDE	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
4,4'-DDT	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Acenaphthene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Acenaphthylene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Anthracene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Fluorene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Naphthalene	PUA	PNUA	PUA	PNUA	PUA	PNUA	PUA	PNUA
Phenanthrene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Benz(a)anthracene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Benzo[a]pyrene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Benzo(b)fluoranthene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Benzo[g,h,i]perylene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Benzo[k]fluoranthene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Chrysene	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Dibenzo[a,h]anthracene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Fluoranthene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Indeno[1,2,3-c,d]pyrene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Pyrene	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA	I-25%	PNUA
Diesel Range Organics	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Gasoline Range Organics	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Lube Oil	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Arsenic	PUA	SBNUAM	PUA	PNUA	PUA	PNUA	PUA	PNUA
Cadmium	PUA	PNUA	PUA	PNUA	PUA	PNUA	PUA	PNUA
Copper	PUA	PNUA	PUA	PNUA	PUA	PNUA	PUA	PNUA
Lead	PUA	PNUA	PUA	PNUA	PUA	PNUA	PUA	PNUA
Mercury	PUA	PNUA	PUA	PNUA	PUA	PNUA	PUA	PNUA
Zinc	PUA	PNUA	PUA	PNUA	PUA	PNUA	PUA	PNUA
Bis(2-ethylhexyl)phthalate	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Total TCDD	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%
Total TCDF	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%	I-25%	I-10%

SBUAM = median of sub-basin urban ambient samples

SBNUAM = median of sub-basin non-urban ambient samples

PUA - median of pooled Puget Sound urban ambient samples

PNUA - median of pooled Puget Sound non-urban ambient samples

I-25% - 25th percentile of pooled Puget Sound impacted samples

I-10% - 10th percentile of pooled Puget Sound impacted samples

Table E-1. COC Concentration Decision – Ambient Areas (cont.)

Parameter	Sub-basin			
	Strait of Georgia		Whidbey Basin	
	Urban Ambient	Non-urban ambient	Urban Ambient	Non-urban ambient
	C_{UA}	C_{NUA}	C_{UA}	C_{NUA}
2,4'-DDD	I-25%	I-10%	I-25%	I-10%
2,4'-DDE	I-25%	I-10%	I-25%	I-10%
2,4'-DDT	I-25%	I-10%	I-25%	I-10%
4,4'-DDD	I-25%	I-10%	I-25%	I-10%
4,4'-DDE	I-25%	I-10%	I-25%	I-10%
4,4'-DDT	I-25%	I-10%	I-25%	I-10%
Acenaphthene	I-25%	PNUA	I-25%	PNUA
Acenaphthylene	I-25%	PNUA	I-25%	PNUA
Anthracene	I-25%	PNUA	I-25%	PNUA
Fluorene	I-25%	PNUA	I-25%	PNUA
Naphthalene	PUA	PNUA	PUA	PNUA
Phenanthrene	I-25%	PNUA	I-25%	PNUA
Benz(a)anthracene	I-25%	PNUA	I-25%	PNUA
Benzo[a]pyrene	I-25%	PNUA	I-25%	PNUA
Benzo(b)fluoranthene	I-25%	PNUA	I-25%	PNUA
Benzo[g,h,i]perylene	I-25%	PNUA	I-25%	PNUA
Benzo[k]fluoranthene	I-25%	PNUA	I-25%	PNUA
Chrysene	I-25%	I-10%	I-25%	I-10%
Dibenzo[a,h]anthracene	I-25%	PNUA	I-25%	PNUA
Fluoranthene	I-25%	PNUA	I-25%	PNUA
Indeno[1,2,3-c,d]pyrene	I-25%	PNUA	I-25%	PNUA
Pyrene	I-25%	PNUA	I-25%	PNUA
Diesel Range Organics	I-25%	I-10%	I-25%	I-10%
Gasoline Range Organics	I-25%	I-10%	I-25%	I-10%
Lube Oil	I-25%	I-10%	I-25%	I-10%
Arsenic	PUA	PNUA	PUA	PNUA
Cadmium	PUA	PNUA	PUA	PNUA
Copper	PUA	PNUA	PUA	PNUA
Lead	PUA	PNUA	PUA	PNUA
Mercury	PUA	PNUA	PUA	PNUA
Zinc	PUA	PNUA	PUA	PNUA
Bis(2-ethylhexyl)phthalate	I-25%	I-10%	I-25%	I-10%
Total TCDD	I-25%	I-10%	I-25%	I-10%
Total TCDF	I-25%	I-10%	I-25%	I-10%

SBUAM = median of sub-basin urban ambient samples

SBNUAM = median of sub-basin non-urban ambient samples

PUA - median of pooled Puget Sound urban ambient samples

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I-10% - 10th percentile of pooled Puget Sound impacted samples