

TABLE 8-3. DMMP COCS AND REGULATORY GUIDELINES

CHEMICAL	CAS ⁽⁴⁾ NUMBER	USE FOR MARINE PROJECTS			USE FOR FRESHWATER PROJECTS WITHIN DMMP JURISDICTION	
		DMMP MARINE GUIDELINES			SMS FRESHWATER	
		SL	BT	ML	SL1	SL2
METALS (mg/kg dry weight)						
Antimony	7440-36-0	150	---	200	---	---
Arsenic	7440-38-2	57	507.1	700	14	120
Cadmium	7440-43-9	5.1	--	14	2.1	5.4
Chromium	7440-47-3	260	--	---	72	88
Copper	7440-50-8	390	--	1,300	400	1,200
Lead	7439-92-1	450	975	1,200	360	> 1,300
Mercury	7439-97-6	0.41	1.5	2.3	0.66	0.8
Nickel	7440-02-0	---	---	---	38 ⁽²⁾	110
Selenium	7782-49-2	---	3	---	11	>20
Silver	7440-22-4	6.1	--	8.4	0.57	1.7
Zinc	7440-66-6	410	--	3,800	3,200	>4,200
ORGANOMETALLIC COMPOUNDS ⁽³⁾						
Tributyltin ion (interstitial water; ug/L)	36643-28-4	---	0.15	---	---	---
Tributyltin ion (bulk; ug/kg) ⁽⁴⁾	36643-28-4	---	73	---	47	320
Monobutyltin ion (bulk; ug/kg)	78763-54-9	---	---	---	540	>4,800
Dibutyltin ion (bulk; ug/kg)	10-53-502	---	---	---	910	130,000
Tetrabutyltin ion (bulk; ug/kg)	1461-25-2	---	---	---	97	>97
PAHs (µg/kg dry weight)						
Naphthalene	91-20-3	2,100	---	2,400	---	---
Acenaphthylene	208-96-8	560	---	1,300	---	---
Acenaphthene	83-32-9	500	---	2,000	---	---
Fluorene	86-73-7	540	---	3,600	---	---
Phenanthrene	85-01-8	1,500	---	21,000	---	---
Anthracene	120-12-7	960	---	13,000	---	---
1-Methylnaphthalene ⁽⁵⁾	90-12-0	---	---	---	---	---
2-Methylnaphthalene ⁽⁵⁾	91-57-6	670	---	1,900	---	---
Total LPAH	—	5,200	—	29,000	---	---
Fluoranthene	206-44-0	1,700	4,600	30,000	---	---
Pyrene	129-00-0	2,600	11,980	16,000	---	---
Benz(a)anthracene	56-55-3	1,300	---	5,100	---	---
Chrysene	218-01-9	1,400	---	21,000	---	---
Benzofluoranthenes (b, j, k)	205-99-2	3,200	---	9,900	---	---
	205-82-3					
	207-08-9					
Benzo(a)pyrene	50-32-8	1,600	---	3,600	---	---
Indeno(1,2,3-c,d)pyrene	193-39-5	600	---	4,400	---	---
Dibenz(a,h)anthracene	53-70-3	230	---	1,900	---	---
Benzo(g,h,i)perylene	191-24-2	670	---	3,200	---	---

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		SL	BT	ML	SL1	SL2
Total HPAH	—	12,000	—	69,000	—	—
Total PAHs⁽⁶⁾	—	—	—	—	17,000	30,000
CHLORINATED HYDROCARBONS (µg/kg dry weight)						
1,4-Dichlorobenzene	106-46-7	110	—	120	—	—
1,2-Dichlorobenzene	95-50-1	35	—	110	—	—
1,2,4-Trichlorobenzene	120-82-1	31	—	64	—	—
Hexachlorobenzene (HCB)	118-74-1	22	168	230	—	—
beta-Hexachlorocyclohexane	319-85-7	—	—	—	7.2	11
PHTHALATES (µg/kg dry weight)						
Dimethyl phthalate	131-11-3	71	—	1,400	—	—
Diethyl phthalate	84-66-2	200	—	1,200	—	—
Di-n-butyl phthalate	84-74-2	1,400	—	5,100	380	1,000
Butyl benzyl phthalate	85-68-7	63	—	970	—	—
Bis(2-ethylhexyl) phthalate	117-81-7	1,300	—	8,300	500	22,000
Di-n-octyl phthalate	117-84-0	6,200	—	6,200	39	>1,100
PHENOLS (µg/kg dry weight)						
Phenol	108-95-2	420	—	1,200	120	210
2-Methylphenol	95-48-7	63	—	77	—	—
4-Methylphenol	106-44-5	670	—	3,600	260	2,000
2,4-Dimethylphenol	105-67-9	29	—	210	—	—
Pentachlorophenol	87-86-5	400	504	690	1,200	>1,200
MISCELLANEOUS EXTRACTABLES (µg/kg dry weight)						
Benzyl alcohol ⁽⁷⁾	100-51-6	57	—	870	—	—
Benzoic acid	65-85-0	650	—	760	2,900	3,800
Dibenzofuran	132-64-9	540	—	1,700	200	680
Hexachlorobutadiene	87-68-3	11	—	270	—	—
N-Nitrosodiphenylamine	86-30-6	28	—	130	—	—
Carbazole	86-74-8	—	—	—	900	1,100
PESTICIDES & PCBs (µg/kg dry weight)						
4,4'-DDD	72-54-8	16	—	—	—	—
4,4'-DDE	72-55-9	9	—	—	—	—
4,4'-DDT	50-29-3	12	—	—	—	—
sum of 4,4'-DDD, 4,4'-DDE, 4,4'-DDT	—	—	50	69	—	—
2,4'-DDD and 4,4'-DDD	—	—	—	—	310	860
2,4'-DDE and 4,4'-DDE	—	—	—	—	21	33
2,4'-DDT and 4,4'-DDT	—	—	—	—	100	8,100
Aldrin	309-00-2	9.5	—	—	—	—

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		SL	BT	ML	SL1	SL2
Total Chlordane (sum of cis-chlordane, trans-chlordane, cis-nonachlor, trans-nonachlor, oxychlordane)	5103-71-9 5103-74-2 5103-73-1 39765-80-5 27304-13-8	2.8	37	---	---	---
Dieldrin	60-57-1	1.9	---	1,700	4.9	9.3
Heptachlor	76-44-8	1.5	---	270	---	---
Endrin ketone	53494-70-5	---	---	---	8.5	>8.5
Total PCBs (Aroclors)	---	130	38 <small>(8)</small>	3,100	110	2,500
BULK PETROLEUM HYDROCARBONS (mg/kg)						
TPH – Diesel	---	---	---	---	340	510
TPH – Residual	---	---	---	---	3,600	4,400
CASE-BY-CASE COCS ⁽⁹⁾	DIOXINS/FURANS					
	Total TEQ (ng/kg dry weight)	---	Puget Sound: see 8.3.2 Grays Harbor: see 8.3.3 Other Waters: see 8.3.4			See 8.3.4

(1) Chemical Abstract Service Registry Number

(2) The Nickel SL1 value is based on the 90th percentile of soil background data from WA state (Ecology, 1994), and was adopted by the DMMP agencies at the 2014 SMARM (DMMP/RSET, 2014b)

(3) TBT and dioxins/furans are not standard COCs for marine projects. They may be required on a case-by-case basis (see **8.3 and 8.4**). All butyltins are required for freshwater projects unless their absence is demonstrated in Tier 1 analysis.

(4) Bulk sediment measurement of TBT is recommended for dredged material and Z-sample evaluations, although porewater TBT remains an option. See **8.4.2** for further details.

(5) 1-Methylnaphthalene and 2-Methylnaphthalene are included in the summation of total PAH for freshwater projects. 2-Methylnaphthalene is analyzed for marine projects but is not included in the summation for total LPAHs. 1-Methylnaphthalene is not analyzed for marine projects.

(6) Total PAHs for freshwater projects include the sum of all PAHs listed.

(7) DMMP agencies will use BPJ to determine the need for biological testing for projects in which benzyl alcohol is the only COC present in project sediments ([DMMP, 2016a](#)).

(8) This value is normalized to total organic carbon and is expressed in mg/kg carbon.

(9) Analyses required only when there is sufficient reason-to-believe for presence in a given project or location.

[Analytes printed in blue apply ONLY to freshwater.](#)