

3.4.2 How guidelines are developed for toxicants

Table 3.4.1 Trigger values for toxicants at alternative levels of protection. Values in grey shading are the trigger values applying to typical *slightly–moderately disturbed systems*; see table 3.4.2 and Section 3.4.2.4 for guidance on applying these levels to different ecosystem conditions.

Chemical	Trigger values for freshwater (µg/L ⁻¹)				Trigger values for marine water (µg/L ⁻¹)				
	Level of protection (% species)				Level of protection (% species)				
	99%	95%	90%	80%	99%	95%	90%	80%	
METALS & METALLOIDS									
Aluminium	pH >6.5	27	55	80	150	ID	ID	ID	ID
Aluminium	pH <6.5	ID	ID	ID	ID	ID	ID	ID	ID
Antimony		ID	ID	ID	ID	ID	ID	ID	ID
Arsenic (As III)		1	24	94 ^C	360 ^C	ID	ID	ID	ID
Arsenic (AsV)		0.8	13	42	140 ^C	ID	ID	ID	ID
Beryllium		ID	ID	ID	ID	ID	ID	ID	ID
Bismuth		ID	ID	ID	ID	ID	ID	ID	ID
Boron		90	370 ^C	680 ^C	1300 ^C	ID	ID	ID	ID
Cadmium	H	0.06	0.2	0.4	0.8 ^C	0.7 ^B	5.5 ^{B,C}	14 ^{B,C}	36 ^{B,A}
Chromium (Cr III)	H	ID	ID	ID	ID	7.7	27.4	48.6	90.6
Chromium (CrVI)		0.01	1.0 ^C	6 ^A	40 ^A	0.14	4.4	20 ^C	85 ^C
Cobalt		ID	ID	ID	ID	0.005	1	14	150 ^C
Copper	H	1.0	1.4	1.8 ^C	2.5 ^C	0.3	1.3	3 ^C	8 ^A
Gallium		ID	ID	ID	ID	ID	ID	ID	ID
Iron		ID	ID	ID	ID	ID	ID	ID	ID
Lanthanum		ID	ID	ID	ID	ID	ID	ID	ID
Lead	H	1.0	3.4	5.6	9.4 ^C	2.2	4.4	6.6 ^C	12 ^C
Manganese		1200	1900 ^C	2500 ^C	3600 ^C	ID	ID	ID	ID
Mercury (inorganic)	B	0.06	0.6	1.9 ^C	5.4 ^A	0.1	0.4 ^C	0.7 ^C	1.4 ^C
Mercury (methyl)		ID	ID	ID	ID	ID	ID	ID	ID
Molybdenum		ID	ID	ID	ID	ID	ID	ID	ID
Nickel	H	8	11	13	17 ^C	7	70 ^C	200 ^A	560 ^A
Selenium (Total)	B	5	11	18	34	ID	ID	ID	ID
Selenium (SeIV)	B	ID	ID	ID	ID	ID	ID	ID	ID
Silver		0.02	0.05	0.1	0.2 ^C	0.8	1.4	1.8	2.6 ^C
Thallium		ID	ID	ID	ID	ID	ID	ID	ID
Tin (inorganic, SnIV)		ID	ID	ID	ID	ID	ID	ID	ID
Tributyltin (as µg/L Sn)		ID	ID	ID	ID	0.0004	0.006 ^C	0.02 ^C	0.05 ^C
Uranium		ID	ID	ID	ID	ID	ID	ID	ID
Vanadium		ID	ID	ID	ID	50	100	160	280
Zinc	H	2.4	8.0 ^C	15 ^C	31 ^C	7	15 ^C	23 ^C	43 ^C
NON-METALLIC INORGANICS									
Ammonia	D	320	900 ^C	1430 ^C	2300 ^A	500	910	1200	1700
Chlorine	E	0.4	3	6 ^A	13 ^A	ID	ID	ID	ID
Cyanide	F	4	7	11	18	2	4	7	14
Nitrate	J	17	700	3400 ^C	17000 ^A	ID	ID	ID	ID
Hydrogen sulfide	G	0.5	1.0	1.5	2.6	ID	ID	ID	ID
ORGANIC ALCOHOLS									
Ethanol		400	1400	2400 ^C	4000 ^C	ID	ID	ID	ID
Ethylene glycol		ID	ID	ID	ID	ID	ID	ID	ID
Isopropyl alcohol		ID	ID	ID	ID	ID	ID	ID	ID
CHLORINATED ALKANES									
Chloromethanes									
Dichloromethane		ID	ID	ID	ID	ID	ID	ID	ID
Chloroform		ID	ID	ID	ID	ID	ID	ID	ID
Carbon tetrachloride		ID	ID	ID	ID	ID	ID	ID	ID
Chloroethanes									
1,2-dichloroethane		ID	ID	ID	ID	ID	ID	ID	ID
1,1,1-trichloroethane		ID	ID	ID	ID	ID	ID	ID	ID

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Chemical	Trigger values for freshwater (μgL^{-1})				Trigger values for marine water (μgL^{-1})			
	Level of protection (% species)				Level of protection (% species)			
	99%	95%	90%	80%	99%	95%	90%	80%
1,1,2-trichloroethane	5400	6500	7300	8400	140	1900	5800 ^C	18000 ^C
1,1,2,2-tetrachloroethane	ID	ID	ID	ID	ID	ID	ID	ID
Pentachloroethane	ID	ID	ID	ID	ID	ID	ID	ID
Hexachloroethane	B	290	360	420	500	ID	ID	ID
Chloropropanes								
1,1-dichloropropane	ID	ID	ID	ID	ID	ID	ID	ID
1,2-dichloropropane	ID	ID	ID	ID	ID	ID	ID	ID
1,3-dichloropropane	ID	ID	ID	ID	ID	ID	ID	ID
CHLORINATED ALKENES								
Chloroethylene	ID	ID	ID	ID	ID	ID	ID	ID
1,1-dichloroethylene	ID	ID	ID	ID	ID	ID	ID	ID
1,1,2-trichloroethylene	ID	ID	ID	ID	ID	ID	ID	ID
1,1,2,2-tetrachloroethylene	ID	ID	ID	ID	ID	ID	ID	ID
3-chloropropene	ID	ID	ID	ID	ID	ID	ID	ID
1,3-dichloropropene	ID	ID	ID	ID	ID	ID	ID	ID
ANILINES								
Aniline	8	250 ^A	1100 ^A	4800 ^A	ID	ID	ID	ID
2,4-dichloroaniline	0.6	7	20	60 ^C	ID	ID	ID	ID
2,5-dichloroaniline	ID	ID	ID	ID	ID	ID	ID	ID
3,4-dichloroaniline	1.3	3	6 ^C	13 ^C	85	150	190	260
3,5-dichloroaniline	ID	ID	ID	ID	ID	ID	ID	ID
Benzidine	ID	ID	ID	ID	ID	ID	ID	ID
Dichlorobenzidine	ID	ID	ID	ID	ID	ID	ID	ID
AROMATIC HYDROCARBONS								
Benzene	600	950	1300	2000	500 ^C	700 ^C	900 ^C	1300 ^C
Toluene	ID	ID	ID	ID	ID	ID	ID	ID
Ethylbenzene	ID	ID	ID	ID	ID	ID	ID	ID
o-xylene	200	350	470	640	ID	ID	ID	ID
m-xylene	ID	ID	ID	ID	ID	ID	ID	ID
p-xylene	140	200	250	340	ID	ID	ID	ID
m+p-xylene	ID	ID	ID	ID	ID	ID	ID	ID
Cumene	ID	ID	ID	ID	ID	ID	ID	ID
Polycyclic Aromatic Hydrocarbons								
Naphthalene	2.5	16	37	85	50 ^C	70 ^C	90 ^C	120 ^C
Anthracene	B	ID	ID	ID	ID	ID	ID	ID
Phenanthrene	B	ID	ID	ID	ID	ID	ID	ID
Fluoranthene	B	ID	ID	ID	ID	ID	ID	ID
Benzo(a)pyrene	B	ID	ID	ID	ID	ID	ID	ID
Nitrobenzenes								
Nitrobenzene	230	550	820	1300	ID	ID	ID	ID
1,2-dinitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID
1,3-dinitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID
1,4-dinitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID
1,3,5-trinitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID
1-methoxy-2-nitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID
1-methoxy-4-nitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID
1-chloro-2-nitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID
1-chloro-3-nitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID
1-chloro-4-nitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID
1-chloro-2,4-dinitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID
1,2-dichloro-3-nitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID
1,3-dichloro-5-nitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID
1,4-dichloro-2-nitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID
2,4-dichloro-2-nitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID

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	Level of protection (% species)				Level of protection (% species)				
	99%	95%	90%	80%	99%	95%	90%	80%	
1,2,4,5-tetrachloro-3-nitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID	
1,5-dichloro-2,4-dinitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID	
1,3,5-trichloro-2,4-dinitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID	
1-fluoro-4-nitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID	
Nitrotoluenes									
2-nitrotoluene	ID	ID	ID	ID	ID	ID	ID	ID	
3-nitrotoluene	ID	ID	ID	ID	ID	ID	ID	ID	
4-nitrotoluene	ID	ID	ID	ID	ID	ID	ID	ID	
2,3-dinitrotoluene	ID	ID	ID	ID	ID	ID	ID	ID	
2,4-dinitrotoluene	16	65 ^C	130 ^C	250 ^C	ID	ID	ID	ID	
2,4,6-trinitrotoluene	100	140	160	210	ID	ID	ID	ID	
1,2-dimethyl-3-nitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID	
1,2-dimethyl-4-nitrobenzene	ID	ID	ID	ID	ID	ID	ID	ID	
4-chloro-3-nitrotoluene	ID	ID	ID	ID	ID	ID	ID	ID	
Chlorobenzenes and Chloronaphthalenes									
Monochlorobenzene	ID	ID	ID	ID	ID	ID	ID	ID	
1,2-dichlorobenzene	120	160	200	270	ID	ID	ID	ID	
1,3-dichlorobenzene	160	260	350	520 ^C	ID	ID	ID	ID	
1,4-dichlorobenzene	40	60	75	100	ID	ID	ID	ID	
1,2,3-trichlorobenzene	B	3	10	16	30 ^C	ID	ID	ID	
1,2,4-trichlorobenzene	B	85	170 ^C	220 ^C	300 ^C	20	80	140	240
1,3,5-trichlorobenzene	B	ID	ID	ID	ID	ID	ID	ID	
1,2,3,4-tetrachlorobenzene	B	ID	ID	ID	ID	ID	ID	ID	
1,2,3,5-tetrachlorobenzene	B	ID	ID	ID	ID	ID	ID	ID	
1,2,4,5-tetrachlorobenzene	B	ID	ID	ID	ID	ID	ID	ID	
Pentachlorobenzene	B	ID	ID	ID	ID	ID	ID	ID	
Hexachlorobenzene	B	ID	ID	ID	ID	ID	ID	ID	
1-chloronaphthalene	ID	ID	ID	ID	ID	ID	ID	ID	
Polychlorinated Biphenyls (PCBs) & Dioxins									
Capacitor 21	B	ID	ID	ID	ID	ID	ID	ID	
Aroclor 1016	B	ID	ID	ID	ID	ID	ID	ID	
Aroclor 1221	B	ID	ID	ID	ID	ID	ID	ID	
Aroclor 1232	B	ID	ID	ID	ID	ID	ID	ID	
Aroclor 1242	B	0.3	0.6	1.0	1.7	ID	ID	ID	
Aroclor 1248	B	ID	ID	ID	ID	ID	ID	ID	
Aroclor 1254	B	0.01	0.03	0.07	0.2	ID	ID	ID	
Aroclor 1260	B	ID	ID	ID	ID	ID	ID	ID	
Aroclor 1262	B	ID	ID	ID	ID	ID	ID	ID	
Aroclor 1268	B	ID	ID	ID	ID	ID	ID	ID	
2,3,4'-trichlorobiphenyl	B	ID	ID	ID	ID	ID	ID	ID	
4,4'-dichlorobiphenyl	B	ID	ID	ID	ID	ID	ID	ID	
2,2',4,5,5'-pentachloro-1,1'-biphenyl	B	ID	ID	ID	ID	ID	ID	ID	
2,4,6,2',4',6'-hexachlorobiphenyl	B	ID	ID	ID	ID	ID	ID	ID	
Total PCBs	B	ID	ID	ID	ID	ID	ID	ID	
2,3,7,8-TCDD	B	ID	ID	ID	ID	ID	ID	ID	
PHENOLS and XYLENOLS									
Phenol	85	320	600	1200 ^C	270	400	520	720	
2,4-dimethylphenol	ID	ID	ID	ID	ID	ID	ID	ID	
Nonylphenol	ID	ID	ID	ID	ID	ID	ID	ID	
2-chlorophenol	T	340 ^C	490 ^C	630 ^C	870 ^C	ID	ID	ID	
3-chlorophenol	T	ID	ID	ID	ID	ID	ID	ID	
4-chlorophenol	T	160	220	280 ^C	360 ^C	ID	ID	ID	
2,3-dichlorophenol	T	ID	ID	ID	ID	ID	ID	ID	
2,4-dichlorophenol	T	120	160 ^C	200 ^C	270 ^C	ID	ID	ID	

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Chemical		Trigger values for freshwater (µgL ⁻¹)				Trigger values for marine water (µgL ⁻¹)			
		Level of protection (% species)				Level of protection (% species)			
		99%	95%	90%	80%	99%	95%	90%	80%
2,5-dichlorophenol	T	ID	ID	ID	ID	ID	ID	ID	ID
2,6-dichlorophenol	T	ID	ID	ID	ID	ID	ID	ID	ID
3,4-dichlorophenol	T	ID	ID	ID	ID	ID	ID	ID	ID
3,5-dichlorophenol	T	ID	ID	ID	ID	ID	ID	ID	ID
2,3,4-trichlorophenol	T	ID	ID	ID	ID	ID	ID	ID	ID
2,3,5-trichlorophenol	T	ID	ID	ID	ID	ID	ID	ID	ID
2,3,6-trichlorophenol	T	ID	ID	ID	ID	ID	ID	ID	ID
2,4,5-trichlorophenol	T,B	ID	ID	ID	ID	ID	ID	ID	ID
2,4,6-trichlorophenol	T,B	3	20	40	95	ID	ID	ID	ID
2,3,4,5-tetrachlorophenol	T,B	ID	ID	ID	ID	ID	ID	ID	ID
2,3,4,6-tetrachlorophenol	T,B	10	20	25	30	ID	ID	ID	ID
2,3,5,6-tetrachlorophenol	T,B	ID	ID	ID	ID	ID	ID	ID	ID
Pentachlorophenol	T,B	3.6	10	17	27 ^A	11	22	33	55 ^A
Nitrophenols									
2-nitrophenol		ID	ID	ID	ID	ID	ID	ID	ID
3-nitrophenol		ID	ID	ID	ID	ID	ID	ID	ID
4-nitrophenol		ID	ID	ID	ID	ID	ID	ID	ID
2,4-dinitrophenol		13	45	80	140	ID	ID	ID	ID
2,4,6-trinitrophenol		ID	ID	ID	ID	ID	ID	ID	ID
ORGANIC SULFUR COMPOUNDS									
Carbon disulfide		ID	ID	ID	ID	ID	ID	ID	ID
Isopropyl disulfide		ID	ID	ID	ID	ID	ID	ID	ID
n-propyl sulfide		ID	ID	ID	ID	ID	ID	ID	ID
Propyl disulfide		ID	ID	ID	ID	ID	ID	ID	ID
Tert-butyl sulfide		ID	ID	ID	ID	ID	ID	ID	ID
Phenyl disulfide		ID	ID	ID	ID	ID	ID	ID	ID
Bis(dimethylthiocarbamyl)sulfide		ID	ID	ID	ID	ID	ID	ID	ID
Bis(diethylthiocarbamyl)disulfide		ID	ID	ID	ID	ID	ID	ID	ID
2-methoxy-4H-1,3,2-benzodioxaphosphorium-2-sulfide		ID	ID	ID	ID	ID	ID	ID	ID
Xanthates									
Potassium amyl xanthate		ID	ID	ID	ID	ID	ID	ID	ID
Potassium ethyl xanthate		ID	ID	ID	ID	ID	ID	ID	ID
Potassium hexyl xanthate		ID	ID	ID	ID	ID	ID	ID	ID
Potassium isopropyl xanthate		ID	ID	ID	ID	ID	ID	ID	ID
Sodium ethyl xanthate		ID	ID	ID	ID	ID	ID	ID	ID
Sodium isobutyl xanthate		ID	ID	ID	ID	ID	ID	ID	ID
Sodium isopropyl xanthate		ID	ID	ID	ID	ID	ID	ID	ID
Sodium sec-butyl xanthate		ID	ID	ID	ID	ID	ID	ID	ID
PHTHALATES									
Dimethylphthalate		3000	3700	4300	5100	ID	ID	ID	ID
Diethylphthalate		900	1000	1100	1300	ID	ID	ID	ID
Dibutylphthalate	B	9.9	26	40.2	64.6	ID	ID	ID	ID
Di(2-ethylhexyl)phthalate	B	ID	ID	ID	ID	ID	ID	ID	ID
MISCELLANEOUS INDUSTRIAL CHEMICALS									
Acetonitrile		ID	ID	ID	ID	ID	ID	ID	ID
Acrylonitrile		ID	ID	ID	ID	ID	ID	ID	ID
Poly(acrylonitrile-co-butadiene-co-styrene)		200	530	800 ^C	1200 ^C	200	250	280	340
Dimethylformamide		ID	ID	ID	ID	ID	ID	ID	ID
1,2-diphenylhydrazine		ID	ID	ID	ID	ID	ID	ID	ID
Diphenylnitrosamine		ID	ID	ID	ID	ID	ID	ID	ID
Hexachlorobutadiene		ID	ID	ID	ID	ID	ID	ID	ID
Hexachlorocyclopentadiene		ID	ID	ID	ID	ID	ID	ID	ID

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	Level of protection (% species)				Level of protection (% species)				
	99%	95%	90%	80%	99%	95%	90%	80%	
Isophorone	ID	ID	ID	ID	ID	ID	ID	ID	
ORGANOCHLORINE PESTICIDES									
Aldrin	B	ID	ID	ID	ID	ID	ID	ID	
Chlordane	B	0.03	0.08	0.14	0.27 ^C	ID	ID	ID	
DDE	B	ID	ID	ID	ID	ID	ID	ID	
DDT	B	0.006	0.01	0.02	0.04	ID	ID	ID	
Dicofol	B	ID	ID	ID	ID	ID	ID	ID	
Dieldrin	B	ID	ID	ID	ID	ID	ID	ID	
Endosulfan	B	0.03	0.2 ^A	0.6 ^A	1.8 ^A	0.005	0.01	0.02	0.05 ^A
Endosulfan alpha	B	ID	ID	ID	ID	ID	ID	ID	
Endosulfan beta	B	ID	ID	ID	ID	ID	ID	ID	
Endrin	B	0.01	0.02	0.04 ^C	0.06 ^A	0.004	0.008	0.01	0.02
Heptachlor	B	0.01	0.09	0.25	0.7 ^A	ID	ID	ID	
Lindane		0.07	0.2	0.4	1.0 ^A	ID	ID	ID	
Methoxychlor	B	ID	ID	ID	ID	ID	ID	ID	
Mirex	B	ID	ID	ID	ID	ID	ID	ID	
Toxaphene	B	0.1	0.2	0.3	0.5	ID	ID	ID	
ORGANOPHOSPHORUS PESTICIDES									
Azinphos methyl		0.01	0.02	0.05	0.11 ^A	ID	ID	ID	
Chlorpyrifos	B	0.00004	0.01	0.11 ^A	1.2 ^A	0.0005	0.009	0.04 ^A	0.3 ^A
Demeton		ID	ID	ID	ID	ID	ID	ID	
Demeton-S-methyl		ID	ID	ID	ID	ID	ID	ID	
Diazinon		0.00003	0.01	0.2 ^A	2 ^A	ID	ID	ID	
Dimethoate		0.1	0.15	0.2	0.3	ID	ID	ID	
Fenitrothion		0.1	0.2	0.3	0.4	ID	ID	ID	
Malathion		0.002	0.05	0.2	1.1 ^A	ID	ID	ID	
Parathion		0.0007	0.004 ^C	0.01 ^C	0.04 ^A	ID	ID	ID	
Profenofos	B	ID	ID	ID	ID	ID	ID	ID	
Temephos	B	ID	ID	ID	ID	0.0004	0.05	0.4	3.6 ^A
CARBAMATE & OTHER PESTICIDES									
Carbofuran		0.06	1.2 ^A	4 ^A	15 ^A	ID	ID	ID	
Methomyl		0.5	3.5	9.5	23	ID	ID	ID	
S-methoprene		ID	ID	ID	ID	ID	ID	ID	
PYRETHROIDS									
Deltamethrin		ID	ID	ID	ID	ID	ID	ID	
Esfenvalerate		ID	0.001*	ID	ID	ID	ID	ID	
HERBICIDES & FUNGICIDES									
Bypyridilium herbicides									
Diquat		0.01	1.4	10	80 ^A	ID	ID	ID	
Paraquat		ID	ID	ID	ID	ID	ID	ID	
Phenoxyacetic acid herbicides									
MCPA		ID	ID	ID	ID	ID	ID	ID	
2,4-D		140	280	450	830	ID	ID	ID	
2,4,5-T		3	36	100	290 ^A	ID	ID	ID	
Sulfonylurea herbicides									
Bensulfuron		ID	ID	ID	ID	ID	ID	ID	
Metsulfuron		ID	ID	ID	ID	ID	ID	ID	
Thiocarbamate herbicides									
Molinate		0.1	3.4	14	57	ID	ID	ID	
Thiobencarb		1	2.8	4.6	8 ^C	ID	ID	ID	
Thiram		0.01	0.2	0.8 ^C	3 ^A	ID	ID	ID	
Triazine herbicides									
Amitrole		ID	ID	ID	ID	ID	ID	ID	
Atrazine		0.7	13	45 ^C	150 ^C	ID	ID	ID	

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	Level of protection (% species)				Level of protection (% species)			
	99%	95%	90%	80%	99%	95%	90%	80%
Hexazinone	ID	ID	ID	ID	ID	ID	ID	ID
Simazine	0.2	3.2	11	35	ID	ID	ID	ID
Urea herbicides								
Diuron	ID	ID	ID	ID	ID	ID	ID	ID
Tebuthiuron	0.02	2.2	20	160 ^C	ID	ID	ID	ID
Miscellaneous herbicides								
Acrolein	ID	ID	ID	ID	ID	ID	ID	ID
Bromacil	ID	ID	ID	ID	ID	ID	ID	ID
Glyphosate	370	1200	2000	3600 ^A	ID	ID	ID	ID
Imazethapyr	ID	ID	ID	ID	ID	ID	ID	ID
loxynil	ID	ID	ID	ID	ID	ID	ID	ID
Metolachlor	ID	ID	ID	ID	ID	ID	ID	ID
Sethoxydim	ID	ID	ID	ID	ID	ID	ID	ID
Trifluralin	B	2.6	4.4	6	9 ^A	ID	ID	ID
GENERIC GROUPS OF CHEMICALS								
Surfactants								
Linear alkylbenzene sulfonates (LAS)	65	280	520 ^C	1000 ^C	ID	ID	ID	ID
Alcohol ethoxylated sulfate (AES)	340	650	850 ^C	1100 ^C	ID	ID	ID	ID
Alcohol ethoxylated surfactants (AE)	50	140	220	360 ^C	ID	ID	ID	ID
Oils & Petroleum Hydrocarbons								
Oil Spill Dispersants								
BP 1100X	ID	ID	ID	ID	ID	ID	ID	ID
Corexit 7664	ID	ID	ID	ID	ID	ID	ID	ID
Corexit 8667		ID	ID	ID	ID	ID	ID	ID
Corexit 9527	ID	ID	ID	ID	230	1100	2200	4400 ^A
Corexit 9550	ID	ID	ID	ID	ID	ID	ID	ID

Notes: Where the final water quality guideline to be applied to a site is below current analytical practical quantitation limits, see Section 3.4.3.3 for guidance.

Most trigger values listed here for metals and metalloids are *High reliability* figures, derived from field or chronic NOEC data (see 3.4.2.3 for reference to Volume 2). The exceptions are *Moderate reliability* for freshwater aluminium (pH >6.5), manganese and marine chromium (III).

Most trigger values listed here for non-metallic inorganics and organic chemicals are *Moderate reliability* figures, derived from acute LC₅₀ data (see 3.4.2.3 for reference to Volume 2). The exceptions are *High reliability* for freshwater ammonia, 3,4-DCA, endosulfan, chlorpyrifos, esfenvalerate, tebuthiuron, three surfactants and marine for 1,1,2-TCE and chlorpyrifos.

* = *High reliability* figure for esfenvalerate derived from mesocosm NOEC data (no alternative protection levels available).

A = Figure may not protect key test species from acute toxicity (and chronic) — check Section 8.3.7 for spread of data and its significance. 'A' indicates that trigger value > acute toxicity figure; note that trigger value should be <1/3 of acute figure (Section 8.3.4.4).

B = Chemicals for which possible bioaccumulation and secondary poisoning effects should be considered (see Sections 8.3.3.4 and 8.3.5.7).

C = Figure may not protect key test species from chronic toxicity (this refers to experimental chronic figures or geometric mean for species) — check Section 8.3.7 for spread of data and its significance. Where grey shading and 'C' coincide, refer to text in Section 8.3.7.

D = Ammonia as TOTAL ammonia as [NH₃-N] at pH 8. For changes in trigger value with pH refer to Section 8.3.7.2.

E = Chlorine as total chlorine, as [Cl]; see Section 8.3.7.2.

F = Cyanide as un-ionised HCN, measured as [CN]; see Section 8.3.7.2.

G = Sulfide as un-ionised H₂S, measured as [S]; see Section 8.3.7.2.

H = Chemicals for which algorithms have been provided in table 3.4.3 to account for the effects of hardness. The values have been calculated using a hardness of 30 mg/L CaCO₃. These should be adjusted to the site-specific hardness (see Section 3.4.3).

J = Figures protect against toxicity and do not relate to eutrophication issues. Refer to Section 3.3 if eutrophication is the issue of concern.

ID = Insufficient data to derive a reliable trigger value. Users advised to check if a low reliability value or an ECL is given in Section 8.3.7.

T = Tainting or flavour impairment of fish flesh may possibly occur at concentrations below the trigger value. See Sections 4.4.5.3/3 and 8.3.7.