

Appendix C. Water Quality Standards

Compound	Units	Freshwater EQS (mg/l)	Gwent Levels SSSI WQS
Acrylamide	mg/l	N/A	N/A
Acenaphthylene	mg/l	See BaP	N/A
Acenaphthene	mg/l	See BaP	N/A
Aliphatic TPH >C5-C6	mg/l	0.01	N/A
Aliphatic TPH >C6-C8	mg/l	0.01	N/A
Aliphatic TPH >C8-C10	mg/l	0.01	N/A
Aliphatic TPH >C10-C12	mg/l	0.01	N/A
Aliphatic TPH >C12-C16	mg/l	0.01	N/A
Aliphatic TPH >C16-C21	mg/l	0.01	N/A
Aliphatic TPH >C21-C35	mg/l	0.01	N/A
Aliphatic TPH >C35-C44	mg/l	0.01	N/A
Aromatic TPH >C5-C7	mg/l	0.01	N/A
Aromatic TPH >C7-C8	mg/l	0.01	N/A
Aromatic TPH >C8-C10	mg/l	0.01	N/A
Aromatic TPH >C10-C12	mg/l	0.01	N/A
Aromatic TPH >C12-C16	mg/l	0.01	N/A
Aromatic TPH >C16-C21	mg/l	0.01	N/A
Aromatic TPH >C21-C35	mg/l	0.01	N/A
Aromatic TPH >C35-C44	mg/l	0.01	N/A
Aldrin	mg/l	N/A	N/A
Aluminium	mg/l	N/A	N/A
Unionised Ammonia	mg/l	Not appropriate, see Ammonia	N/A
Ammonium as NH ₄	mg/l	Not appropriate, see Ammonia	N/A
Ammonia	mg/l	0.2	N/A
Ammoniacal Nitrogen	mg/l	Not appropriate, see Ammonia	N/A
Ammoniacal Nitrogen as NH ₄		n/a	1.1
Anthracene	mg/l	0.0001	N/A
Antimony	mg/l	N/A	N/A
Arsenic	mg/l	0.05	N/A
Barium	mg/l	N/A	N/A

Compound	Units	Freshwater EQS (mg/l)	Gwent Levels SSSI WQS
Benzene	mg/l	0.01	N/A
Benzo(a)anthracene	mg/l	See BaP	N/A
Benzo(a)pyrene	mg/l	0.00000017	N/A
Benzo(b)fluoranthene	mg/l	0.000017	N/A
Benzo(k)fluoranthene	mg/l	0.000017	N/A
Benzo(ghi)perylene	mg/l	0.0000082	N/A
Benzyl butyl phthalate	mg/l	0.0075	N/A
Beryllium	mg/l	N/A	N/A
BOD	mg/l		6.5
Boron	mg/l	2	N/A
Bromate	mg/l	N/A	N/A
Brominated diphenyl ethers	mg/l	0.00014	N/A
Bromine	mg/l	0.002	N/A
Bromodichloromethane	mg/l	See Trihalomethanes	N/A
Bromoform	mg/l	See Trihalomethanes	N/A
Cadmium	mg/l	0.00008 -> CaCO ₃ 0-50mg/l 0.00009 -> CaCO ₃ 50-100mg/l 0.00015 -> CaCO ₃ 100-200mg/l 0.00025 -> CaCO ₃ 200+mg/l (Calculated via VBA)	Use WFD standard
Calcium	mg/l	N/A	N/A
Carbofuran	mg/l	N/A	N/A
Chloride	mg/l	250	300
Chlorine	mg/l	0.002	N/A
2-Chlorophenol	mg/l	0.05	N/A
3-Chlorophenol	mg/l	0.05	N/A
4-Chlorophenol	mg/l	0.05	N/A
4-Chloro-3-methylphenol	mg/l	0.04	N/A
Chloroform	mg/l	See Trihalomethanes	N/A
Chromium	mg/l	0.0034	N/A
Chromium III	mg/l	0.0047	N/A
Chromium VI	mg/l	0.0034	N/A
Chrysene	mg/l	See BaP	N/A
Cobalt	mg/l	0.003	N/A
Conductivity	mS/cm	n/a	1.5

Compound	Units	Freshwater EQS (mg/l)	Gwent Levels SSSI WQS
Copper	mg/l	0.001 (Bioavailable)	Use WFD standard
Cyanide (free)	mg/l	0.001	N/A
Cyanide (total)	mg/l	0.001	N/A
Diazinon	mg/l	0.00001	N/A
Dibenz(a,h)anthracene	mg/l	N/A	N/A
Dibromochloromethane	mg/l	See Trihalomethanes	N/A
1,2-Dibromo-3-chloropropane	mg/l	N/A	N/A
1,2-Dibromoethane	mg/l	N/A	N/A
Dibutyl phthalate	mg/l	0.008	N/A
Dichlorobenzenes	mg/l	0.02	N/A
1, 2 Dichlorobenzene	mg/l	0.02	N/A
1, 4 Dichlorobenzene	mg/l	0.02	N/A
1,2-Dichloroethane	mg/l	0.01	N/A
Dichloromethane	mg/l	0.02	N/A
2,4-Dichlorophenol	mg/l	0.0042	N/A
1,2-Dichloropropane	mg/l	N/A	N/A
1,3-Dichloropropene	mg/l	N/A	N/A
Di(2-ethylhexyl)phthalate	mg/l	0.0013	N/A
Dieldrin	mg/l	N/A	N/A
Diethylphthalate	mg/l	0.2	N/A
Dimethylphthalate	mg/l	0.8	N/A
Diethylphthalate	mg/l	0.02	N/A
Ethylbenzene	mg/l	0.02	N/A
Epichlorohydrin	mg/l	N/A	N/A
Fluoranthene	mg/l	0.0000063	N/A
Fluorene	mg/l	N/A	N/A
Fluoride	mg/l	1 -> CaCO ₃ 0-50mg/l 5 -> CaCO ₃ 50+mg/l (Calculated via VBA)	N/A
Formaldehyde	mg/l	0.005	N/A
Heptachlor	mg/l	N/A	N/A
Heptachlor epoxide	mg/l	N/A	N/A
Hexachlorobenzene	mg/l	0.00005	N/A
Hexachlorobutadiene	mg/l	0.0006	N/A
Hydrocarbons	mg/l	0.01	1.0 (oil and grease)

Compound	Units	Freshwater EQS (mg/l)	Gwent Levels SSSI WQS
Hydrogen sulphide	mg/l	0.00025	N/A
Indeno(123-cd)pyrene	mg/l	N/A	N/A
Iron	mg/l	1	N/A
Lead	mg/l	0.0012 (Bioavailable)	Use WFD standard
Magnesium	mg/l	N/A	N/A
Manganese	mg/l	0.123 (Bioavailable)	N/A
Mercury	mg/l	0.00007	N/A
Methylphenols	mg/l	0.1	N/A
Molybdenum	mg/l	N/A	N/A
Naphthalene	mg/l	0.002	N/A
Nickel	mg/l	0.004 (Bioavailable)	Use WFD standard
Nitrate	mg/l	N/A	N/A
Nitrite	mg/l	0.01	N/A
Nonyl phenol	mg/l	0.0003	N/A
Octylphenol	mg/l	0.0001	N/A
Orthophosphate			Use WFD standard
PCB	mg/l	N/A	N/A
Permethrin	mg/l	0.000001	N/A
Pentachlorobenzene	mg/l	0.000007	N/A
Pentachlorophenol	mg/l	0.0004	N/A
Pesticides - sum of four	mg/l	N/A	N/A
Pesticides - sum of other	mg/l	N/A	N/A
Pesticides - Total	mg/l	N/A	N/A
pH	mg/l	6-9	6-9
Phenanthrene	mg/l	See BaP	N/A
Phenol	mg/l	0.0077	N/A
Phosphorus	mg/l	calculate as per Schedule 3 Part 1 of 2015 WFD Directions	N/A
Potassium	mg/l	N/A	N/A
Pyrene	mg/l	N/A	N/A
Selenium	mg/l	N/A	N/A
Silver	mg/l	0.00005	N/A
Sodium	mg/l	N/A	N/A
Styrene	mg/l	0.05	N/A
Sulphate	mg/l	400	300

Compound	Units	Freshwater EQS (mg/l)	Gwent Levels SSSI WQS
Suspended solids, total	mg/l		20-60
Tetrachloroethene	mg/l	0.01	N/A
Tetrachloromethane	mg/l	N/A	N/A
Tin	mg/l	0.025	N/A
Toluene	mg/l	0.074	N/A
Tributyl phosphate	mg/l	0.05	N/A
Tributyltin compounds	mg/l	0.0000002	N/A
1,1,1-Trichloroethane	mg/l	0.1	N/A
1,1,2-Trichloroethane	mg/l	0.4	N/A
Trichloroethene	mg/l	0.01	N/A
Trichlorobenzenes	mg/l	0.0004	N/A
Trichloromethane	mg/l	0.0025	N/A
2,4,6-Trichlorophenol	mg/l	N/A	N/A
Trihalomethanes	mg/l	N/A	N/A
Triphenyltin	mg/l	0.00002	N/A
Vanadium	mg/l	0.02 -> CaCO ₃ 0-200mg/l 0.06 -> CaCO ₃ 200+mg/l (Calculated via VBA)	N/A
Vinyl chloride	mg/l	N/A	N/A
Xylene	mg/l	0.03	N/A
Zinc	mg/l	0.0109	Use WFD standard