

Attachment 1 Waste Acceptance Criteria

Category	Composite Liner		Double Liner	
	Upper Limits		Upper Limits	
Contaminant concentration thresholds (dry weight)	ASLP ₁	TC ₂	ASLP ₂	TC ₂
Units	(mg/L)	(mg/kg)	(mg/L)	(mg/kg)
Inorganic Species				
Antimony ^{3,8}	2	75	8	300
Arsenic	0.7	500	2.8	2000
Barium ³	70	6250	280	25000
Beryllium ⁵	1	100	4	400
Boron	30	15000	120	60000
Cadmium	0.2	100	0.8	400
Chromium (VI)	5	500	20	2000
Copper	200	5000	800	20000
Lead	1	1500	4	6000
Mercury	0.1	75	0.4	300
Molybdenum ⁶	5	1000	20	4000
Nickel	2	3000	8	12000
Selenium ⁶	1	50	4	200
Silver ⁶	10	180	40	720
Tributyltin oxide ³	0.1	2.5	0.4	10
Zinc	300	35000	1200	140000
Anions				
Chloride	25000	N/A	N/A	N/A
Cyanide (amenable) ⁵	3.5	1250	14	5000
Cyanide (total)	8	2500	32	10000
Fluoride ⁶	150	10000	600	40000
Iodide	10	N/A	40	N/A
Nitrate	5000	N/A	20000	N/A
Nitrite	300	N/A	1200	N/A
Organic Species				
Benzene	0.1	4	0.4	16
Benzo(a)pyrene ⁷	0.001	5	0.004	20
C6-C9 petroleum hydrocarbons ⁶	N/A	650	N/A	2600
C10-C36 petroleum hydrocarbons ⁶	N/A	10000	N/A	40000
Carbon tetrachloride	0.3	12	1.2	48
Chlorobenzene	30	1200	120	4800
Chloroform ⁵	6	240	24	960
2 Chlorophenol	30	1200	120	4800
Cresol (total) ⁵	200	8000	800	32000
Di (2 ethylhexyl) phthalate	1	40	4	160
1,2-Dichlorobenzene	150	6000	600	24000
1,4-Dichlorobenzene	4	160	16	640
1,2-Dichloroethane	0.3	12	1.2	48
1,1-Dichloroethene	6	240	12	480
1,2-Dichloroethene	6	240	24	960
Dichloromethane (methylene chloride)	0.4	16	1.6	64
2,4-Dichlorophenol	20	800	80	3200
2,4-Dinitrotoluene ⁵	0.13	5.2	0.52	21
Ethylbenzene	30	1200	120	4800
Ethylene diamine tetra acetic acid (EDTA)	25	1000	100	4000
Formaldehyde	50	2000	200	8000
Hexachlorobutadiene	0.07	2.8	0.28	11
Methyl ethyl ketone ⁵	200	8000	800	32000
Nitrobenzene ⁵	2	80	8	320
PAHs (total) ^{7,10}	N/A	100	N/A	400
Phenols (total, non-halogenated) ^{5,11}	14	560	56	2200
Polychlorinated biphenyls ⁴	See note 4	See note 4	See note 4	See note 4

Category	Composite Liner		Double Liner	
	Upper Limits		Upper Limits	
Styrene	3	120	12	480
1,1,1,2-Tetrachloroethane ⁵	10	400	40	1600
1,1,2,2-Tetrachloroethane ⁵	1.3	52	5.2	210
Tetrachloroethene	5	200	20	800
Toluene	80	3200	320	12800
Trichlorobenzene (total)	3	120	12	480
1,1,1-Trichloroethane ⁵	30	1200	120	4800
1,1,2-Trichloroethane ⁵	1.2	48	4.8	190
Trichloroethene ⁵	0.5	20	2	80
2,4,5-Trichloropheno ¹⁵	400	16000	1600	64000
2,4,6-Trichlorophenol	2	80	8	320
Vinyl chloride	0.03	1.2	0.12	4.8
Xylenes (total)	60	2400	240	9600
Pesticides				
Aldrin + dieldrin	0.03	1.2	0.12	4.8
DDT + DDD + DDE ⁹	2	50	N/A	50
2,4-D	3	120	12	480
Chlordane	0.1	4	0.4	16
Heptachlor	0.03	1.2	0.12	4.8
per-and poly-fluoro alkyl substances (PFAS)				
PFOA ¹²	0.0056	50	0.056	50
Sum of PFOS + PFHxS ¹²	0.0007	50	0.007	50
Notes:				
¹ Where not otherwise specified, ASLP (Australian Standard Leaching Procedure) criteria are derived from the NHMRC Australian Drinking Water Guidelines (1996) Guideline Health Values, multiplied by 100.				
² Where not otherwise specified, TC (Total Concentration) criteria for inorganic species and anions has been adopted as the National Environment Protection Measure on the Assessment of Site Contamination 1999, Health Investigation Level for Commercial/Industrial land.				
³ TC adopted from the Risk-based Assessment of Soil and Groundwater Quality in the Netherlands, Intervention Values for Soil.				
⁴ Waste containing polychlorinated biphenyls (PCBs) must be managed in accordance with the Commonwealth Department of Environment, Water, Heritage and the Arts Polychlorinated Biphenyls Management Plan.				
⁵ ASLP adopted from Toxicity Characteristics Leaching Procedure (TCLP2) value specified in Department of Environment and Climate Change NSW, Waste Classification Guidelines Part1: Classifying Waste, 2014.				
⁶ TC adopted from SCC2 value specified in Department of Environment and Climate Change NSW, Waste Classification Guidelines Part 1: Classifying Waste, 2014.				
⁷ TC value adopted from the National Environment Protection Measure on the Assessment of Site Contamination 1999, Health Investigation Level for Commercial/industrial land.				
⁸ ASLP adopted from World Health Organisation (WHO) Antimony in drinking water. Background document for development of WHO guidelines for Drinking-water quality 2003, multiplied by 100.				
⁹ TC values adopted from the ANZECC Organochlorine Pesticides Waste Management Plan 1999.				
¹⁰ Total sum of naphthalene, acenaphthylene, acenaphthene, anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, fluorene, fluoranthene, indeno(1,2,3-c,d)pyrene, phenanthrene and pyrene.				
¹¹ Total sum of phenol, 2-methylphenol(o-cresol), 3-methylphenol(m-cresol), 4-methylphenol(p-cresol), 2,4-dimethylphenol, 2,4-dinitrophenol, 2-methyl-4,6-dinitrophenol, 2-nitrophenol, 4-nitrophenol, 2-cyclohexyl-4,6- dinitrophenol and dinoseb.				
¹² Based on PFAS NEMP 2.0 however, trigger values for the latest NEMP must be used when available.				
Stage 1 and Stage 2 of the Shoal Bay Waste Management Facility are unlined and cannot accept waste detailed in this attachment. Stage 3 and Stage 4 of the Shoal Bay Waste Management facility are closed and do not accept waste. Stage 5 and Stage 6 of the Shoal Bay Waste Management Facility use a composite liner system and can accept waste provided concentrations are less than the upper limits defined for composite liners in Attachment 1 in the licence.				