



APPENDIX R

WM3 ASSESSMENT



Please enter available data in the rows associated with the test (grey cells). Calculation cells initially display either "0.0000" or "#DIV/0!". If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

371654
Ugly Brown Building

WAC

TP/WS/BH
Depth (m)
Envirolab reference

BH02 0.30 19/00318/1	BH02 0.60 19/00318/2	BH05 0.70 19/00318/4	BH01 1.00 19/00430/1	BH01 3.00 19/00430/3	BH01 4.00 19/00430/4	BH06 0.70 19/00718/2	BH06 2.60 19/00718/3	BH07 3.00 19/00718/7
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% Moisture
pH (soil)
pH (leachate)

%	13.6	18.1	16.8	7.1	10.3	17.5	9.6	27.9	21.0
	8.13	8.29	8.33	11.60	10.77	8.86	9.01	8.47	9.21

Arsenic
Cadmium
Copper
CrVI or Chromium
Lead
Mercury
Nickel
Selenium
Zinc

mg/kg	6	4	4	2	3	1	4	2	8
mg/kg	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5
mg/kg	17	23	21	24	15	30	348	90	59
mg/kg	1	1	1	1	1	1	1	1	1
mg/kg	47	15	19	57	40	14	99	68	207
mg/kg	0.51	0.17	0.17	0.30	0.47	0.17	0.43	0.24	0.54
mg/kg	9	35	30	14	9	40	11	34	21
mg/kg	1	1	1	1	1	1	1	1	2
mg/kg	53	67	59	81	39	83	89	102	180

Barium
Beryllium
Vanadium
Cobalt
Manganese
Molybdenum
Antimony
Aluminium
Bismuth
CrIII
Iron
Strontium
Tellurium
Thallium
Titanium
Tungsten
Ammoniacal N
ws Boron

mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									

PAH (Input Total PAH OR individual PAH results)

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(ghi)perylene
Benzo(k)fluoranthene
Chrysene
Dibenzo(ah)anthracene
Fluoranthene
Fluorene
Indeno(123cd)pyrene
Naphthalene
Phenanthrene
Pyrene
Coronene
Total PAHs (16 or 17)

mg/kg	0.01	0.01	0.01	0.02	0.01	0.01	0.04	0.08	0.24
mg/kg	0.01	0.01	0.01	0.03	0.01	0.01	0.02	0.01	0.02
mg/kg	0.02	0.02	0.02	0.10	0.05	0.02	0.27	0.02	0.69
mg/kg	0.09	0.04	0.04	0.53	0.18	0.04	0.99	0.04	2.16
mg/kg	0.10	0.04	0.04	0.47	0.16	0.04	0.66	0.04	1.86
mg/kg	0.13	0.05	0.05	0.64	0.20	0.05	1.18	0.05	2.13
mg/kg	0.06	0.05	0.05	0.31	0.12	0.05	0.38	0.05	0.83
mg/kg	0.07	0.07	0.07	0.23	0.07	0.07	0.38	0.07	0.70
mg/kg	0.11	0.06	0.06	0.60	0.20	0.06	1.08	0.06	2.02
mg/kg	0.04	0.04	0.04	0.08	0.04	0.04	0.10	0.04	0.21
mg/kg	0.16	0.08	0.08	1.08	0.35	0.08	1.26	0.46	4.96
mg/kg	0.01	0.01	0.01	0.02	0.01	0.01	0.03	0.01	0.20
mg/kg	0.08	0.03	0.03	0.36	0.12	0.03	0.49	0.03	1.10
mg/kg	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
mg/kg	0.05	0.03	0.03	0.54	0.22	0.05	0.37	0.03	2.77
mg/kg	0.14	0.07	0.07	0.91	0.31	0.07	2.21	0.32	4.11
mg/kg	0.02	0.01	0.01	0.08	0.03	0.01	0.10	0.01	0.21
mg/kg									

TPH
Petrol
Diesel
Lube Oil
Crude Oil
White Spirit / Kerosene
Creosote
Unknown TPH with ID

mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg	31.0	10.0	83.0	682.0	102.0	28.0	289.0	53.0	791.0
mg/kg									

Unknown TPHCWG
Total Sulphide
Complex Cyanide
Free (or Total) Cyanide
Thiocyanate
Elemental/Free Sulphur

mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									

Phenols Input Total Phenols HPLC OR individual Phenol results.

Phenol
Cresols
Xylenols
Resorcinol
Phenols Total by HPLC

mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									

BTEX Input Total BTEX OR individual BTEX results.

Benzene
Toluene
Ethylbenzene
Xylenes
Total BTEX

mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									

PCBs (POPs)
PCBs Total (eg EC7/WHO12)

mg/kg									
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PBBs (POPs)
Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)

mg/kg									
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If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

371654
Ugly Brown Building

WAC

TP/WS/BH
Depth (m)
Envirolab reference

BH02	BH02	BH05	BH01	BH01	BH01	BH06	BH06	BH07
0.30	0.60	0.70	1.00	3.00	4.00	0.70	2.60	3.00
19/00318/1	19/00318/2	19/00318/4	19/00430/1	19/00430/3	19/00430/4	19/00718/2	19/00718/3	19/00718/7

POPs Dioxins and Furans Input Total Dioxins and Furans
OR individual Dioxin and Furan results.

2,3,7,8-TeCDD	mg/kg								
1,2,3,7,8-PeCDD	mg/kg								
1,2,3,4,7,8-HxCDD	mg/kg								
1,2,3,6,7,8-HxCDD	mg/kg								
1,2,3,7,8,9-HxCDD	mg/kg								
1,2,3,4,6,7,8-HpCDD	mg/kg								
OCDD	mg/kg								
2,3,7,8-TeCDF	mg/kg								
1,2,3,7,8-PeCDF	mg/kg								
2,3,4,7,8-PeCDF	mg/kg								
1,2,3,4,7,8-HxCDF	mg/kg								
1,2,3,6,7,8-HxCDF	mg/kg								
2,3,4,6,7,8-HxCDF	mg/kg								
1,2,3,7,8,9-HxCDF	mg/kg								
1,2,3,4,6,7,8-HpCDF	mg/kg								
1,2,3,4,7,8,9-HpCDF	mg/kg								
OCDF	mg/kg								
Total Dioxins and Furans	mg/kg								

Some Pesticides (POPs unless otherwise stated)

Aldrin	mg/kg								
α Hexachlorocyclohexane (alpha-HCH) (leave empty if total HCH results used)	mg/kg								
β Hexachlorocyclohexane (beta-HCH) (leave empty if total HCH results used)	mg/kg								
α Cis-Chlordane (alpha) OR Total Chlordane	mg/kg								
δ Hexachlorocyclohexane (delta-HCH) (leave empty if total HCH results used)	mg/kg								
Dieldrin	mg/kg								
Endrin	mg/kg								
γ Hexachlorocyclohexane (gamma-HCH) (lindane) OR Total HCH	mg/kg								
Heptachlor	mg/kg								
Hexachlorobenzene	mg/kg								
o,p'-DDT (leave empty if total DDT results used)	mg/kg								
p,p'-DDT OR Total DDT	mg/kg								
γ Trans-Chlordane (gamma) (leave empty if total Chlordane results used)	mg/kg								
Chlordecone (kepone)	mg/kg								
Pentachlorobenzene	mg/kg								
Mirex	mg/kg								
Toxaphene (camphechlor)	mg/kg								
Tin									
Tin (leave empty if Organotin and Tin excl Organotin results used)	mg/kg								
Organotin									
Dibutyltin; DiBT	mg/kg								
Tributyltin; TriBT	mg/kg								
Triphenyltin; TriPT	mg/kg								
Tetrabutyltin; TeBT	mg/kg								
Tin excluding Organotin									
Tin excl Organotin	mg/kg								



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Ugly Brown Building

WAC

TP/WS/BH
Depth (m)
Envirolab reference

BH02	BH02	BH05	BH01	BH01	BH01	BH06	BH06	BH07
0.30	0.60	0.70	1.00	3.00	4.00	0.70	2.60	3.00
19/00318/1	19/00318/2	19/00318/4	19/00430/1	19/00430/3	19/00430/4	19/00718/2	19/00718/3	19/00718/7

Asbestos in Soil Thresholds
Asbestos detected in Soil (enter Y or N) Y

N	N	Y	N	N	N	N	N	N
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Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only) see "Carc HP7 % Asbestos in Soil (Fibres)" below

If Asbestos in Soil above is "Y", the soil is Hazardous Waste HP5 and HP7

		0.00600						
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Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces)
Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.

≥0.1%

0.00000	0.00000	0.00600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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If Asbestos in Soil above is "Y", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.

Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N) Y

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If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05. Therefore, if Asbestos in Soil above is "Y", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.

All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property Thresholds Cut Off Value

If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.

Corrosive HP8	≥5%	<1%
Irritant HP4	≥10%	<1%
Irritant HP4	≥20%	<1%
Specific Target Organ Toxicity HP5	≥1%	
Specific Target Organ Toxicity HP5	≥20%	
Specific Target Organ Toxicity HP5	≥1%	
Specific Target Organ Toxicity HP5	≥10%	
Aspiration Toxicity HP5	≥10%	
Acute Toxicity HP6	≥0.1%	<0.1%
Acute Toxicity HP6	≥0.25%	<0.1%
Acute Toxicity HP6	≥5%	<0.1%
Acute Toxicity HP6	≥25%	<1%
Acute Toxicity HP6	≥0.25%	<0.1%
Acute Toxicity HP6	≥2.5%	<0.1%
Acute Toxicity HP6	≥15%	<0.1%
Acute Toxicity HP6	≥55%	<1%
Acute Toxicity HP6	≥0.1%	<0.1%
Acute Toxicity HP6	≥0.5%	<0.1%
Acute Toxicity HP6	≥3.5%	<0.1%
Acute Toxicity HP6	≥22.5%	<1%
Carcinogenic HP7	≥0.1%	
Carcinogenic HP7	≥0.1%	
Carcinogenic HP7	≥1%	
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg	
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%	
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5	
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2	
Toxic for Reproduction HP10	≥0.3%	
Toxic for Reproduction HP10	≥3%	
Mutagenic HP11	≥0.1%	
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg	
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%	
Mutagenic HP11	≥1%	
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg	
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg	
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg	
HP13 Sensitising	≥10%	

0.00085	0.00059	0.00060	0.00042	0.00053	0.00027	0.00065	0.00033	0.00099
0.00234	0.00256	0.00241	0.00276	0.00188	0.00291	0.03603	0.00752	0.00610
0.00325	0.00793	0.00703	0.00530	0.00320	0.00948	0.03782	0.01232	0.00924
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00005	0.00002	0.00000	0.00003	0.00001	0.00022
0.00157	0.00579	0.00504	0.00263	0.00163	0.00667	0.00201	0.00495	0.00335
0.00406	0.00123	0.00691	0.06336	0.00915	0.00231	0.02613	0.00490	0.06249
0.00268	0.00082	0.00691	0.06336	0.00915	0.00231	0.02613	0.00382	0.06249
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00073	0.00045	0.00045	0.00027	0.00040	0.00012	0.00052	0.00021	0.00088
0.00029	0.00027	0.00028	0.00031	0.00030	0.00027	0.00030	0.00024	0.00037
0.00736	0.00920	0.00865	0.01064	0.00684	0.01068	0.04670	0.01726	0.02563
0.00004	0.00001	0.00001	0.00003	0.00004	0.00001	0.00004	0.00002	0.00004
0.00017	0.00016	0.00016	0.00018	0.00017	0.00016	0.00017	0.00014	0.00015
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00004	0.00004	0.00004	0.00005	0.00004	0.00005	0.00005	0.00004	0.00004
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00025	0.00021	0.00022	0.00025	0.00026	0.00022	0.00026	0.00019	0.00023
0.00012	0.00012	0.00012	0.00013	0.00013	0.00012	0.00013	0.00010	0.00022
0.00729	0.00915	0.00860	0.01044	0.00674	0.01062	0.04651	0.01719	0.02497
0.00406	0.00579	0.00504	0.00530	0.00359	0.00667	0.00895	0.00495	0.01635
0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
0.00001	0.00000	0.00000	0.00003	0.00001	0.00000	0.00004	0.00000	0.00009
26.78	8.19	69.06	633.58	91.49	23.10	261.26	38.21	624.89
0.27871	0.32760	0.04010	0.06402	0.14071	0.11786	0.20645	0.05442	0.18576
8.13	8.29	8.33	11.60	10.77	8.86	9.01	8.47	9.21
0.00406	0.00579	0.00504	0.00530	0.00359	0.00667	0.00895	0.00495	0.01635
0.00268	0.00082	0.00691	0.06336	0.00915	0.00231	0.02613	0.00382	0.06249
0.00017	0.00016	0.00016	0.00018	0.00017	0.00016	0.00017	0.00014	0.00015
26.78	8.19	69.06	633.58	91.49	23.10	261.26	38.21	624.89
0.27871	0.32760	0.04010	0.06402	0.14071	0.11786	0.20645	0.05442	0.18576
0.00157	0.00579	0.00504	0.00263	0.00163	0.00667	0.00201	0.00495	0.00335
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.00157	0.00579	0.00504	0.00263	0.00163	0.00667	0.00201	0.00495	0.00335



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Haswaste, developed by Dr. Iain Haslock.

371654
Ugly Brown Building

WAC

TP/WS/BH
Depth (m)
Envirolab reference

BH02	BH02	BH05	BH01	BH01	BH01	BH06	BH06	BH07
0.30	0.60	0.70	1.00	3.00	4.00	0.70	2.60	3.00
19/00318/1	19/00318/2	19/00318/4	19/00430/1	19/00430/3	19/00430/4	19/00718/2	19/00718/3	19/00718/7

Ecotoxic HP14 amended v6	>25%	<0.1%	0.01416	0.01682	0.01556	0.02099	0.01203	0.01968	0.05824	0.02696	0.04585
Ecotoxic HP14 amended v6	>25%	<0.1% (except Be, V, Te, Ti, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	0.01684	0.01763	0.02246	0.08435	0.02118	0.02199	0.08436	0.03078	0.10834
Ecotoxic HP14 amended v6	>25%	<0.1% (except Be, V, Te, Ti, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	1.44305	1.68976	1.62456	2.73293	1.29428	1.99064	6.08510	2.73396	5.20966
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

If other contaminants need adding to Haswaste, please contact Envirolab.



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Ugly Brown Building

WAC WAC WAC

TP/WS/BH
Depth (m)
Envirolab reference

BH11	BH12A	WS1	WS4	BH13	WS6	BH15	BH15	BH10
0.70	2.50	0.40	0.70	0.70	0.60	1.50	4.50	2.00
19/00718/10	19/00718/14	19/01010/1	19/01010/6	19/01010/10	19/01010/12	19/01010/13	19/01010/16	19/01381/1

% Moisture
pH (soil)
pH (leachate)

%	12.3	10.1	11.5	5.7	18.8	10.9	12.6	15.0	19.2
	9.18	9.38	7.72	8.84	8.44	9.07	9.49	9.15	12.13

Arsenic
Cadmium
Copper
CrVI or Chromium
Lead
Mercury
Nickel
Selenium
Zinc

mg/kg	3	3	8	2	1	5	4	2	8
mg/kg	0.5	0.5	0.5	0.7	0.5	0.5	0.5	0.5	0.7
mg/kg	26	18	35	268	41	144	24	10	38
mg/kg	1	1	1	1	1	1	1	1	1
mg/kg	45	50	60	260	25	88	150	30	299
mg/kg	0.87	0.20	0.17	0.48	0.17	0.17	2.41	0.17	0.54
mg/kg	10	13	17	26	28	22	13	26	47
mg/kg	1	1	1	1	1	2	1	1	1
mg/kg	76	33	61	152	62	74	82	33	152

Barium
Beryllium
Vanadium
Cobalt
Manganese
Molybdenum
Antimony
Aluminium
Bismuth
CrIII
Iron
Strontium
Tellurium
Thallium
Titanium
Tungsten
Ammoniacal N
ws Boron

mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									

PAH (Input Total PAH OR individual PAH results)

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(ghi)perylene
Benzo(k)fluoranthene
Chrysene
Dibenzo(ah)anthracene
Fluoranthene
Fluorene
Indeno(123cd)pyrene
Naphthalene
Phenanthrene
Pyrene
Coronene
Total PAHs (16 or 17)

mg/kg	0.01	0.01	0.01	0.24	0.01	0.01	0.04	0.01	0.16
mg/kg	0.01	0.01	0.01	0.14	0.01	0.01	0.01	0.01	0.02
mg/kg	0.03	0.02	0.02	1.37	0.02	0.06	0.15	0.05	0.18
mg/kg	0.15	0.04	0.04	4.62	0.09	0.11	0.58	0.11	0.50
mg/kg	0.15	0.04	0.04	4.05	0.06	0.07	0.43	0.10	0.48
mg/kg	0.19	0.05	0.05	6.28	0.09	0.12	0.56	0.11	0.76
mg/kg	0.11	0.05	0.05	2.42	0.05	0.05	0.20	0.05	0.31
mg/kg	0.07	0.07	0.07	1.97	0.07	0.07	0.24	0.07	0.29
mg/kg	0.16	0.06	0.06	5.48	0.09	0.16	0.57	0.12	0.58
mg/kg	0.04	0.04	0.04	0.50	0.04	0.04	0.04	0.04	0.09
mg/kg	0.25	0.08	0.08	8.76	0.15	0.21	1.34	0.25	1.34
mg/kg	0.01	0.01	0.01	0.18	0.01	0.01	0.04	0.01	0.11
mg/kg	0.14	0.03	0.03	2.70	0.04	0.03	0.23	0.05	0.37
mg/kg	0.03	0.03	0.03	0.10	0.03	0.03	0.03	0.03	0.03
mg/kg	0.12	0.03	0.03	3.33	0.04	0.10	0.62	0.17	0.93
mg/kg	0.20	0.07	0.07	9.20	0.12	0.18	1.25	0.20	1.10
mg/kg	0.05	0.01	0.01	0.45	0.01	0.01	0.04	0.01	0.07

TPH
Petrol
Diesel
Lube Oil
Crude Oil
White Spirit / Kerosene
Creosote
Unknown TPH with ID

mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg	38.0	10.0	64.0	830.0	14.0	58.0	567.0	84.0	400.0

Unknown TPHCWG
Total Sulphide
Complex Cyanide
Free (or Total) Cyanide
Thiocyanate
Elemental/Free Sulphur

mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									

Phenols Input Total Phenols HPLC OR individual Phenol results.

Phenol
Cresols
Xylenols
Resorcinol
Phenols Total by HPLC

mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									

BTEX Input Total BTEX OR individual BTEX results.

Benzene
Toluene
Ethylbenzene
Xylenes
Total BTEX

mg/kg									
mg/kg									
mg/kg									
mg/kg									
mg/kg									

PCBs (POPs)
PCBs Total (eg EC7/WHO12)

mg/kg									
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PBBs (POPs)
Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)

mg/kg									
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Please enter available data in the rows associated with the test (grey cells). Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

371654 Ugly Brown Building
TP/WS/BH
Depth (m)
Envirolab reference

WAC WAC WAC

BH11	BH12A	WS1	WS4	BH13	WS6	BH15	BH15	BH10
0.70	2.50	0.40	0.70	0.70	0.60	1.50	4.50	2.00
19/00718/10	19/00718/14	19/01010/1	19/01010/6	19/01010/10	19/01010/12	19/01010/13	19/01010/16	19/01381/1

POPs Dioxins and Furans Input Total Dioxins and Furans
OR individual Dioxin and Furan results.

2,3,7,8-TeCDD	mg/kg							
1,2,3,7,8-PeCDD	mg/kg							
1,2,3,4,7,8-HxCDD	mg/kg							
1,2,3,6,7,8-HxCDD	mg/kg							
1,2,3,7,8,9-HxCDD	mg/kg							
1,2,3,4,6,7,8-HpCDD	mg/kg							
OCDD	mg/kg							
2,3,7,8-TeCDF	mg/kg							
1,2,3,7,8-PeCDF	mg/kg							
2,3,4,7,8-PeCDF	mg/kg							
1,2,3,4,7,8-HxCDF	mg/kg							
1,2,3,6,7,8-HxCDF	mg/kg							
2,3,4,6,7,8-HxCDF	mg/kg							
1,2,3,7,8,9-HxCDF	mg/kg							
1,2,3,4,6,7,8-HpCDF	mg/kg							
1,2,3,4,7,8,9-HpCDF	mg/kg							
OCDF	mg/kg							
Total Dioxins and Furans	mg/kg							

Some Pesticides (POPs unless otherwise stated)

Aldrin	mg/kg							
α Hexachlorocyclohexane (alpha-HCH) (leave empty if total HCH results used)	mg/kg							
β Hexachlorocyclohexane (beta-HCH) (leave empty if total HCH results used)	mg/kg							
α Cis-Chlordane (alpha) OR Total Chlordane	mg/kg							
δ Hexachlorocyclohexane (delta-HCH) (leave empty if total HCH results used)	mg/kg							
Dieldrin	mg/kg							
Endrin	mg/kg							
γ Hexachlorocyclohexane (gamma-HCH) (lindane) OR Total HCH	mg/kg							
Heptachlor	mg/kg							
Hexachlorobenzene	mg/kg							
o,p'-DDT (leave empty if total DDT results used)	mg/kg							
p,p'-DDT OR Total DDT	mg/kg							
γ Trans-Chlordane (gamma) (leave empty if total Chlordane results used)	mg/kg							
Chlordecone (kepone)	mg/kg							
Pentachlorobenzene	mg/kg							
Mirex	mg/kg							
Toxaphene (camphechlor)	mg/kg							
Tin								
Tin (leave empty if Organotin and Tin excl Organotin results used)	mg/kg							
Organotin								
Dibutyltin; DiBT	mg/kg							
Tributyltin; TriBT	mg/kg							
Triphenyltin; TriPT	mg/kg							
Tetrabutyltin; TeBT	mg/kg							
Tin excluding Organotin								
Tin excl Organotin	mg/kg							



Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!". If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

371654
Ugly Brown Building

WAC WAC WAC

TP/WS/BH
Depth (m)
Envirolab reference

BH11	BH12A	WS1	WS4	BH13	WS6	BH15	BH15	BH10
0.70	2.50	0.40	0.70	0.70	0.60	1.50	4.50	2.00
19/00718/10	19/00718/14	19/01010/1	19/01010/6	19/01010/10	19/01010/12	19/01010/13	19/01010/16	19/01381/1

Asbestos in Soil Thresholds
Asbestos detected in Soil (enter Y or N) Y

N	N	N	Y	Y	N	N	N	N
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Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only) see "Carc HP7 % Asbestos in Soil (Fibres)" below

%

Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces)
Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero. ≥0.1%

If Asbestos in Soil above is "Y", the soil is Hazardous Waste HP5 and HP7

0.00000	0.00000	0.00000	0.00100	0.00100	0.00000	0.00000	0.00000	0.00000
---------	---------	---------	---------	---------	---------	---------	---------	---------

If Asbestos in Soil above is "Y", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.

Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N) Y

--	--	--	--	--	--	--	--	--

If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05. Therefore, if Asbestos in Soil above is "Y", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.

All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property Thresholds Cut Off Value

Corrosive HP8	≥5%	<1%
Irritant HP4	≥10%	<1%
Irritant HP4	≥20%	<1%
Specific Target Organ Toxicity HP5	≥1%	
Specific Target Organ Toxicity HP5	≥20%	
Specific Target Organ Toxicity HP5	≥1%	
Specific Target Organ Toxicity HP5	≥10%	
Aspiration Toxicity HP5	≥10%	
Acute Toxicity HP6	≥0.1%	<0.1%
Acute Toxicity HP6	≥0.25%	<0.1%
Acute Toxicity HP6	≥5%	<0.1%
Acute Toxicity HP6	≥25%	<1%
Acute Toxicity HP6	≥0.25%	<0.1%
Acute Toxicity HP6	≥2.5%	<0.1%
Acute Toxicity HP6	≥15%	<0.1%
Acute Toxicity HP6	≥55%	<1%
Acute Toxicity HP6	≥0.1%	<0.1%
Acute Toxicity HP6	≥0.5%	<0.1%
Acute Toxicity HP6	≥3.5%	<0.1%
Acute Toxicity HP6	≥22.5%	<1%
Carcinogenic HP7	≥0.1%	
Carcinogenic HP7	≥0.1%	
Carcinogenic HP7	≥1%	
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg	
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%	
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5	
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2	
Toxic for Reproduction HP10	≥0.3%	
Toxic for Reproduction HP10	≥3%	
Mutagenic HP11	≥0.1%	
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg	
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%	
Mutagenic HP11	≥1%	
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg	
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg	
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg	
HP13 Sensitising	≥10%	

If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.

0.00052	0.00053	0.00110	0.00043	0.00026	0.00076	0.00063	0.00039	0.00101
0.00292	0.00218	0.00443	0.02881	0.00387	0.01509	0.00283	0.00118	0.00432
0.00438	0.00420	0.00655	0.03486	0.00837	0.01849	0.00485	0.00546	0.01133
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00001	0.00000	0.00000	0.00031	0.00000	0.00001	0.00005	0.00001	0.00008
0.00177	0.00236	0.00304	0.00495	0.00459	0.00396	0.00230	0.00446	0.00767
0.00395	0.00450	0.00566	0.07827	0.00203	0.00784	0.04956	0.00714	0.03232
0.00333	0.00090	0.00566	0.07827	0.00114	0.00517	0.04956	0.00714	0.03232
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00042	0.00037	0.00095	0.00029	0.00012	0.00060	0.00067	0.00024	0.00090
0.00029	0.00030	0.00029	0.00031	0.00027	0.00042	0.00029	0.00028	0.00027
0.00837	0.00874	0.01191	0.05926	0.01044	0.02637	0.01799	0.00806	0.03554
0.00008	0.00002	0.00002	0.00005	0.00001	0.00002	0.00021	0.00001	0.00004
0.00017	0.00017	0.00017	0.00018	0.00016	0.00017	0.00017	0.00016	0.00016
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00004	0.00004	0.00004	0.00007	0.00004	0.00004	0.00004	0.00004	0.00006
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00029	0.00024	0.00023	0.00029	0.00021	0.00023	0.00042	0.00022	0.00026
0.00012	0.00013	0.00012	0.00013	0.00011	0.00025	0.00012	0.00012	0.00011
0.00829	0.00868	0.01185	0.05803	0.01038	0.02630	0.01778	0.00797	0.03530
0.00395	0.00450	0.00531	0.02452	0.00459	0.00784	0.01311	0.00446	0.02416
0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
0.00001	0.00000	0.00000	0.00025	0.00000	0.00000	0.00002	0.00000	0.00003
33.33	8.99	56.64	782.69	11.37	51.68	495.56	71.40	323.20
0.34618	0.35960	0.05531	0.46014	0.34800	0.10753	0.06628	0.10119	0.09696
9.18	9.38	7.72	8.84	8.44	9.07	9.49	9.15	12.13
9.18	9.38	7.72	8.84	8.44	9.07	9.49	9.15	12.13
0.00395	0.00450	0.00531	0.02452	0.00459	0.00784	0.01311	0.00446	0.02416
0.00333	0.00090	0.00566	0.07827	0.00114	0.00517	0.04956	0.00714	0.03232
0.00017	0.00017	0.00017	0.00038	0.00016	0.00017	0.00017	0.00016	0.00016
33.33	8.99	56.64	782.69	11.37	51.68	495.56	71.40	323.20
0.34618	0.35960	0.05531	0.46014	0.34800	0.10753	0.06628	0.10119	0.09696
0.00177	0.00236	0.00304	0.00495	0.00459	0.00396	0.00230	0.00446	0.00767
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.00177	0.00236	0.00304	0.00495	0.00459	0.00396	0.00230	0.00446	0.00767



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Haswaste, developed by Dr. Iain Haslock.

371654 Ugly Brown Building
TP/WS/BH
Depth (m)
Envirolab reference

WAC WAC WAC

BH11	BH12A	WS1	WS4	BH13	WS6	BH15	BH15	BH10
0.70	2.50	0.40	0.70	0.70	0.60	1.50	4.50	2.00
19/00718/10	19/00718/14	19/01010/1	19/01010/6	19/01010/10	19/01010/12	19/01010/13	19/01010/16	19/01381/1

Ecotoxic HP14 amended v6	≥25%	<0.1%	0.01752	0.01316	0.01994	0.08119	0.01718	0.03572	0.02827	0.01216	0.05243
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Ti, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	0.02085	0.01406	0.02560	0.15946	0.01832	0.04089	0.07783	0.01930	0.08475
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Ti, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	1.78522	1.32549	2.05055	8.90201	1.72940	3.62361	3.32286	1.28716	5.56607
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

If other contaminants need adding to Haswaste, please contact