

## APPENDIX R WM3 ASSESSMENT



Haswaste, developed by Dr. lain Haslock.

371654 Ugly Brown Building

TP/WS/BH Depth (m) Envirolab reference

% Moisture
pH (soil)
pH (leachate)
Arsenic
Cadmium
Copper
CrVI or Chromium
Lead
Mercury
Nickel
Selenium
Zinc
Barium
Beryllium
Vanadium
Cobalt
Manganese
Molybdenum
Antimony
Aluminium
Bismuth
CrIII
Iron
Strontium
Tellurium
Thallium
Titanium
Tungsten
Ammoniacal N
ws Boron
PAH (Input Total PAH OR individual

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)

TPH Petrol Diesel Lube Oil Crude Oil White Spirit / Kerosene Creosote Unknown TPH with ID Unknown TPHCWG
Total Sulphide Complex Cyanide
Free (or Total) Cyanide
Thiocyanate

Thiocyanate mg/kg
Elemental/Free Sulphur mg/kg
Phenols Input Total Phenols HPLC OR individual Phenol results.

Xylenols	mg/kg
Resourcinol	mg/kg
Phenols Total by HPLC	mg/kg
BTEX Input Total BTEX OR individ	ual BTEX results.
Benzene	mg/kg
Toluene	mg/kg
Ethylbenzene	mg/kg
Xylenes	mg/kg
Total BTEX	mg/kg

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

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

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

> mg/kg mg/kg

> > mg/kg

WAC

BH02	BH02	BH05	BH01	BH01	BH01	BH06	BH06	BH07
0.30	0.60 19/00318/2	0.70 19/00318/4	1.00	3.00 19/00430/3	4.00 19/00430/4	0.70 19/00718/2	2.60 19/00718/3	3.00 19/00718/7
13.6 8.13	18.1 8.29	16.8 8.33	7.1	10.3	17.5 8.86	9.6	27.9 8.47	21.0 9.21
0.10	0.20	0.00	11.00	10.77	0.00	0.01	0.47	V.E.1
6 0.5	4 0.5	4 0.5	2 0.5	3 0.5	1 0.6	4 0.5	2 0.5	8 0.5
17	23	21	24	15	30	348	90	59
1 47	1 15	1 19	1 57	1 40	1 14	1 99	1 68	1 207
0.51	0.17	0.17	0.30	0.47	0.17	0.43	0.24	0.54
9	35 1	30 1	14 1	9	40 1	11	34 1	21 2
53	67	59	81	39	83	89	102	180
	1							
0.07	1 000	0.00		0.00		1 000		
0.01 0.01	0.01 0.01	0.01 0.01	0.02 0.03	0.01 0.01	0.01 0.01	0.04 0.02	0.08 0.01	0.24 0.02
0.02	0.02	0.02	0.10	0.05	0.02	0.27	0.02	0.69
0.09	0.04	0.04	0.53	0.18	0.04	0.99	0.04	2.16
0.10 0.13	0.04 0.05	0.04 0.05	0.47 0.64	0.16 0.20	0.04 0.05	0.66 1.18	0.04 0.05	1.86 2.13
0.06	0.05	0.05	0.31	0.12	0.05	0.38	0.05	0.83
0.07	0.07	0.07	0.23	0.07	0.07	0.38	0.07	0.70
0.11	0.06 0.04	0.06 0.04	0.60 0.08	0.20 0.04	0.06 0.04	1.08 0.10	0.06 0.04	2.02 0.21
0.16	0.08	0.08	1.08	0.35	0.08	1.26	0.46	4.96
0.01 0.08	0.01	0.01 0.03	0.02 0.36	0.01 0.12	0.01 0.03	0.03 0.49	0.01 0.03	0.20 1.10
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
0.05	0.03	0.03 0.07	0.54	0.22	0.05	0.37	0.03	2.77
0.14	0.07	0.07	0.91	0.31	0.07 0.01	2.21 0.10	0.32 0.01	4.11 0.21
	1		<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>
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31.0	10.0	83.0	682.0	102.0	28.0	289.0	53.0	791.0
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BH05

0.70



Haswaste, developed by Dr. lain Haslock.

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.

BH01

3.00

BH01

4.00

BH06

0.70

BH06

2.60

BH07

3.00

371654 Ugly Brown Building

BH02

0.60

BH02

0.30

TP/WS/BH Depth (m) Envirolab re

Envirolab reference		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 T										
OR individual Dioxin and Furan res										
2,3,7,8-TeCDD	mg/kg									1
1,2,3,7,8-PeCDD	mg/kg									1
1,2,3,4,7,8-HxCDD	mg/kg									1
1,2,3,6,7,8-HxCDD	mg/kg									1
1,2,3,7,8,9-HxCDD	mg/kg									1
1,2,3,4,6,7,8-HpCDD	mg/kg									1
OCDD	mg/kg									1
2,3,7,8-TeCDF	mg/kg									1
1,2,3,7,8-PeCDF	mg/kg									1
2,3,4,7,8-PeCDF	mg/kg									
1,2,3,4,7,8-HxCDF	mg/kg									1
1,2,3,6,7,8-HxCDF	mg/kg									1
2,3,4,6,7,8-HxCDF	mg/kg									1
1,2,3,7,8,9-HxCDF	mg/kg									1
1,2,3,4,6,7,8-HpCDF	mg/kg									1
1,2,3,4,7,8,9-HpCDF	mg/kg									1
OCDF	mg/kg									1
Total Dioxins and Furans	mg/kg									
Total Bioxilio and Falano	99				l			l		

WAC

BH01

1.00

	-					
Some Pesticides (POPs unless oth	omuico etatod\					
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	mg/kg					
results used)	iliging					
α Cis-Chlordane (alpha) OR Total						
Chlordane	mg/kg					
δ Hexachlorocyclohexane (delta-						
HCH) (leave empty if total HCH	mg/kg					
results used)						
Dieldrin	mg/kg					
Endrin	mg/kg					
χ Hexachlorocyclohexane (gamma-						
HCH) (lindane) OR Total HCH	mg/kg					
Heptachlor	mg/kg					
Hexachlorobenzene	mg/kg					
o,p'-DDT (leave empty if total DDT	1					
results used)	mg/kg					
p,p'-DDT OR Total DDT	mg/kg					
χ Trans-Chlordane (gamma)						
(leave empty if total Chlordane	mg/kg					
results used)						
Chlordecone (kepone)	mg/kg					
Pentachlorobenzene	mg/kg					
Mirex	mg/kg					
Toxaphene (camphechlor)	mg/kg					
Tin	•			-	-	
	]					
Tin (leave empty if Organotin and	mg/kg					
Tin excl Organotin results used)						
Organotin						
Dibutyltin; DiBT	mg/kg					
-						
Tributyltin; TriBT	mg/kg					
Triphenyltin; TriPT	mg/kg					
Tetrabutyltin; TeBT	mg/kg					
Tin excluding Organotin	ı	1		I	I	
Tin excl Organotin	mg/kg					
				1		



371654 Ugly Brown Building

TP/WS/BH Depth (m) Envirolab reference

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

Asbestos % Composition in Soil (Matrix Loose Fibres or see "Carc HP7 % Asbestos in Soil (Fibres)" below Microscopic Identifiable Pieces only) 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 ≥0.1% been undertaken and the result is

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

WAC

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
N	N	Y	N	N	N	N	N	N
		lf .	Asbestos in Soil above	is "Y", the soil is Hazaro	ous Waste HP5 and H	P7		
		0.00600						
0.00000	0.00000	0.00600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Asbestos in Soil abo	ove is "Y", but Asbestos	% above is "<0.1%", the		Waste. You can only when visual identifiable		where loose fibres or r	nicro pieces are only pr	esent. You canno
					piococ al o prodorta			

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 "<0.11%", but the Asbestos Identifiable Pieces visible with the naked eye is "V", the soil is Hazardous Waste.

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

			All visual a	sbestos pieces need to	be removed leaving on	ly fibres (or micro piece	s) with an Asbestos % (	Composition in Soil res	ult of <0.1% for the soil	to become non-hazardo	ous waste.
Hazardous Property	Thresholds	Cut Off Value			If cells below turn y	ellow and the text tur	ns red, the samples s	hould be classified a	s Hazardous Waste.		
Corrosive HP8	≥5%	<1%	0.00085	0.00059	0.00060	0.00042	0.00053	0.00027	0.00065	0.00033	0.00099
Irritant HP4	≥10%	<1%	0.00234	0.00256	0.00241	0.00276	0.00188	0.00291	0.03603	0.00752	0.00610
Irritant HP4	≥20%	<1%	0.00325	0.00793	0.00703	0.00530	0.00320	0.00948	0.03782	0.01232	0.00924
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00000	0.00000	0.00000	0.00005	0.00002	0.00000	0.00003	0.00001	0.00022
Specifc Target Organ Toxicity HP5	≥1%		0.00157	0.00579	0.00504	0.00263	0.00163	0.00667	0.00201	0.00495	0.00335
Specifc Target Organ Toxicity HP5	≥10%		0.00406	0.00123	0.00691	0.06336	0.00915	0.00231	0.02613	0.00490	0.06249
Aspiration Toxicity HP5	≥10%		0.00268	0.00082	0.00691	0.06336	0.00915	0.00231	0.02613	0.00382	0.06249
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00073	0.00045	0.00045	0.00027	0.00040	0.00012	0.00052	0.00021	0.00088
Acute Toxicity HP6	≥5%	<0.1%	0.00029	0.00027	0.00028	0.00031	0.00030	0.00027	0.00030	0.00024	0.00037
Acute Toxicity HP6	≥25%	<1%	0.00736	0.00920	0.00865	0.01064	0.00684	0.01068	0.04670	0.01726	0.02563
Acute Toxicity HP6	≥0.25%	<0.1%	0.00004	0.00001	0.00001	0.00003	0.00004	0.00001	0.00004	0.00002	0.00004
Acute Toxicity HP6	≥2.5%	<0.1%	0.00017	0.00016	0.00016	0.00018	0.00017	0.00016	0.00017	0.00014	0.00015
Acute Toxicity HP6	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥55%	<1%	0.00004	0.00004	0.00004	0.00005	0.00004	0.00005	0.00005	0.00004	0.00004
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.5%	<0.1%	0.00025	0.00021	0.00022	0.00025	0.00026	0.00022	0.00026	0.00019	0.00023
Acute Toxicity HP6	≥3.5%	<0.1%	0.00012	0.00012	0.00012	0.00013	0.00013	0.00012	0.00013	0.00010	0.00022
Acute Toxicity HP6	≥22.5%	<1%	0.00729	0.00915	0.00860	0.01044	0.00674	0.01062	0.04651	0.01719	0.02497
Carcinogenic HP7	≥0.1%		0.00406	0.00579	0.00504	0.00530	0.00359	0.00667	0.00895	0.00495	0.01635
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00001	0.00000	0.00000	0.00003	0.00001	0.00000	0.00004	0.00000	0.00009
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		26.78	8.19	69.06	633.58	91.49	23.10	261.26	38.21	624.89
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		0.27871	0.32760	0.04010	0.06402	0.14071	0.11786	0.20645	0.05442	0.18576
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		8.13	8.29	8.33	11.60	10.77	8.86	9.01	8.47	9.21
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		8.13	8.29	8.33	11.60	10.77	8.86	9.01	8.47	9.21
Toxic for Reproduction HP10	≥0.3%		0.00406	0.00579	0.00504	0.00530	0.00359	0.00667	0.00895	0.00495	0.01635
Toxic for Reproduction HP10	≥3%		0.00268	0.00082	0.00691	0.06336	0.00915	0.00231	0.02613	0.00382	0.06249
Mutagenic HP11	≥0.1%		0.00017	0.00016	0.00016	0.00018	0.00017	0.00016	0.00017	0.00014	0.00015
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		26.78	8.19	69.06	633.58	91.49	23.10	261.26	38.21	624.89
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		0.27871	0.32760	0.04010	0.06402	0.14071	0.11786	0.20645	0.05442	0.18576
Mutagenic HP11	≥1%		0.00157	0.00579	0.00504	0.00263	0.00163	0.00667	0.00201	0.00495	0.00335
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%	i	0.00157	0.00579	0.00504	0.00263	0.00163	0.00667	0.00201	0.00495	0.00335
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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

Envirolab reference			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%	c0.1% (except Be, V, Te, Ti, Petrol, Dises, Crude Oli, Kerosene, White Spirt, Crosote, TPH, TTHOW, Phenol, Cresols, Xylenols, T. Phenols, CompCN, Thiocyanate, Toluene, Ethylbanzene Xylene, St. Spirch CompCN, Thiocyanate, Toluene, Xylene, St. Spirch CompCN, Thiocyanate, Toluene, Xylene, Spirch CompCN, Thiocyanate, Toluene, Xylene, Spirch CompCN, Spir	0.01684	0.01763	0.02246	0.08435	0.02118	0.02199	0.08436	0.03078	0.10834
Ecotoxic HP14 amended v6	≥25%	c0.1% (except leg	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%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
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	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

(Individual Dioxins+Furans) >0.000

0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
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.



371654 Ugly Brown Building							WAC	WAC		WAC
						I				
rp/ws/bh		BH11	BH12A	WS1	WS4	BH13	WS6	BH15	BH15	BH10
Depth (m)		0.70	2.50	0.40	0.70	0.70	0.60	1.50	4.50	2.00
Envirolab reference		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
6 Moisture	%	12.3	10.1	11.5	5.7	18.8	10.9	12.6	15.0	19.2
oH (soil)		9.18	9.38	7.72	8.84	8.44	9.07	9.49	9.15	12.13
oH (leachate)										
Arsenic Cadmium	mg/kg mg/kg	3 0.5	3 0.5	8 0.5	2 0.7	0.5	5 0.5	4 0.5	2 0.5	8 0.7
Copper	mg/kg	26	18	35	268	41	144	24	10	38
CrVI or Chromium ead	mg/kg mg/kg	1 45	1 50	1 60	1 260	1 25	1 88	1 150	1 30	1 299
Mercury	mg/kg	0.87	0.20	0.17	0.48	0.17	0.17	2.41	0.17	0.54
lickel	mg/kg	10	13	17	26	28	22	13	26	47
Selenium Iinc	mg/kg mg/kg	1 76	1 33	1 61	1 152	1 62	2 74	1 82	1 33	1 152
Barium	mg/kg									
Beryllium /anadium	mg/kg mg/kg									
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum Antimony	mg/kg mg/kg									
luminium	mg/kg									
Bismuth	mg/kg									
Crill ron	mg/kg mg/kg									
Strontium	mg/kg									
ellurium	mg/kg									
hallium itanium	mg/kg mg/kg									
ungsten	mg/kg									
Ammoniacal N vs Boron	mg/kg mg/kg									
PAH (Input Total PAH OR individual				!						
cenaphthene	mg/kg	0.01	0.01	0.01	0.24	0.01	0.01	0.04	0.01	0.16
Acenaphthylene	mg/kg	0.01	0.01	0.01	0.14	0.01	0.01	0.01	0.01	0.02
Anthracene Benzo(a)anthracene	mg/kg mg/kg	0.03 0.15	0.02 0.04	0.02 0.04	1.37 4.62	0.02 0.09	0.06 0.11	0.15 0.58	0.05 0.11	0.18 0.50
Benzo(a)pyrene	mg/kg	0.15	0.04	0.04	4.05	0.06	0.07	0.43	0.10	0.48
Benzo(b)fluoranthene	mg/kg	0.19	0.05	0.05	6.28	0.09	0.12	0.56	0.11	0.76
Benzo(ghi)perylene Benzo(k)fluoranthene	mg/kg	0.11 0.07	0.05 0.07	0.05 0.07	2.42 1.97	0.05 0.07	0.05 0.07	0.20 0.24	0.05 0.07	0.31 0.29
Chrysene	mg/kg mg/kg	0.16	0.06	0.06	5.48	0.09	0.16	0.57	0.07	0.58
Dibenzo(ah)anthracene	mg/kg	0.04	0.04	0.04	0.50	0.04	0.04	0.04	0.04	0.09
luoranthene	mg/kg	0.25	0.08	0.08	8.76	0.15	0.21	1.34	0.25	1.34
Fluorene ndeno(123cd)pyrene	mg/kg mg/kg	0.01 0.14	0.01 0.03	0.01 0.03	0.18 2.70	0.01 0.04	0.01 0.03	0.04 0.23	0.01 0.05	0.11 0.37
laphthalene	mg/kg	0.03	0.03	0.03	0.10	0.03	0.03	0.03	0.03	0.03
henanthrene	mg/kg	0.12	0.03	0.03	3.33	0.04	0.10	0.62	0.17	0.93
Pyrene	mg/kg	0.20	0.07	0.07	9.20	0.12	0.18	1.25	0.20	1.10
Coronene Total PAHs (16 or 17)	mg/kg mg/kg	0.05	0.01	0.01	0.45	0.01	0.01	0.04	0.01	0.07
PH										
Petrol	mg/kg									
Diesel	mg/kg									
ube Oil	mg/kg							-		
rude Oil	mg/kg									
Vhite Spirit / Kerosene Preosote	mg/kg mg/kg									
Inknown TPH with ID	mg/kg	38.0	10.0	64.0	830.0	14.0	58.0	567.0	84.0	400.0
Inknown TPHCWG	mg/kg							Ī		
otal Sulphide	mg/kg									
omplex Cyanide	mg/kg									
ree (or Total) Cyanide hiocyanate	mg/kg mg/kg									
lemental/Free Sulphur	mg/kg									
henols Input Total Phenols HPLC			-	-			-	-		
esults. henol	malke		1	1		1	Ι	1		
resols	mg/kg mg/kg									
	mg/kg							1		
yieriois										
Kylenols Resourcinol Phenols Total by HPLC	mg/kg mg/kg									

White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg	38.0	10.0	64.0	830.0	14.0	58.0	567.0	84.0	400.0
Unknown TPHCWG	mg/kg									
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg									
Free (or Total) Cyanide	mg/kg									
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									
Phenois Input Total Phenois HPLC	OR individual Phenol									
results.										
Phenol	mg/kg									
Cresols	mg/kg									
Xylenols	mg/kg									
Resourcinol	mg/kg									
Phenols Total by HPLC	mg/kg									
BTEX Input Total BTEX OR individu	ual BTEX results.		-				•	•	•	•
Benzene	mg/kg									
Toluene	mg/kg									
Ethylbenzene	mg/kg									
Xylenes	mg/kg									
Total BTEX	mg/kg									
PCBs (POPs)										
PCBs Total (eg EC7/WHO12)	mg/kg									
PBBs (POPs)			•	•	•	•	•	•	•	•
Hexabromobiphenyl (Total or	1									
PBB153; 2,2',4,4',5,5'- if only	mg/kg									
available)										
αναπασιοή	ı									



Tin excl Organotin

laswaste developed by Dr. Jain Haslock

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.

riaswaste, developed by Dr. lain ria	asiocik.									
371654 Ugly Brown Building							WAC	WAC		WAC
ogly Brown Bulluling										
TP/WS/BH		BH11	BH12A	WS1	WS4	BH13	WS6	BH15	BH15	BH10
Depth (m)		0.70	2.50	0.40	0.70	0.70	0.60	1.50	4.50	2.00
Envirolab reference		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 To	otal Dioxins and Furans									
OR individual Dioxin and Furan resu										
2,3,7,8-TeCDD 1,2,3,7,8-PeCDD	mg/kg 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 2,3,7,8-TeCDF	mg/kg 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 1,2,3,7,8,9-HxCDF	mg/kg mg/kg					1				
1,2,3,4,6,7,8-HpCDF	mg/kg					1				
1,2,3,4,7,8,9-HpCDF	mg/kg			1		1				
OCDF	mg/kg									
Total Dioxins and Furans	mg/kg									
Some Pesticides (POPs unless ot										
Aldrin	mg/kg									
α Hexachlorocyclohexane (alpha- HCH) (leave empty if total HCH	mg/kg									
results used)	iligikg									
β Hexachlorocyclohexane (beta-										
HCH) (leave empty if total HCH	mg/kg									
results used) α Cis-Chlordane (alpha) <b>OR</b> Total				-						
Chlordane	mg/kg									
δ Hexachlorocyclohexane (delta-										
HCH) (leave empty if total HCH	mg/kg									
results used) Dieldrin	mg/kg									
Endrin	mg/kg									
χ Hexachlorocyclohexane (gamma-	9 9									
HCH) (lindane) OR Total HCH	mg/kg									
Heptachlor Hexachlorobenzene	mg/kg mg/kg			<u> </u>						
o,p'-DDT (leave empty if total DDT				1		1				
results used)	mg/kg									
p,p'-DDT <i>OR</i> Total DDT	mg/kg			<u> </u>		<del>                                     </del>			ļ	
χ Trans-Chlordane (gamma) (leave empty if total Chlordane	mg/kg			1		1				
results used)	g.ng									
Chlordecone (kepone)	mg/kg									
Pentachlorobenzene	mg/kg									
Mirex	mg/kg									
Toxaphene (camphechlor)	mg/kg		l	L	l	<u> </u>				
Tin	l		1	1	1	1			1	1
Tin (leave empty if Organotin and	mg/kg					1				
Tin excl Organotin results used)	mgng			1						
Organotin										
Dibutyltin; DiBT	mg/kg			1						
Tributyltin; TriBT	ma//ca			<u> </u>		<del> </del>				
	mg/kg									
Triphenyltin; TriPT	mg/kg			1						
Tetrabutyltin; TeBT	mg/kg									
Tin excluding Organotin	l				1	1				
Tin aval Ossanatia		1	1	1	1	1	ı	l	1	



Haswaste, developed by Dr. Jain Haslock

371654 Ugly Brown Building

TP/WS/BH Depth (m) Envirolab reference

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

Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)

Carcinogenic HP7 % Asbestos in Soil (fibres) below

Carcinogenic HP7 % Asbestos in Soil (fibres) below

Please be advised, if the calculation cell is "0.0000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.

visib	estos Identifiable Pieces le with the naked eye	Y
dete	cted in the Soil (enter Y or N)	*

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.

					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			
N	N	N	Υ	Y	N	N	N	N			
	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 abo	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 us										
	ı	ı	Asbestos % results	when visual identifiable	pieces are present.		1				

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 "<0.11 %", but the Asbestos Identifiable Pieces visible with the naked eye is "V", the soil is Hazardous Waste.

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

e removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to be

			All visual a	sbestos pieces need to	be removed leaving on	ly fibres (or micro piece	s) with an Asbestos %	Composition in Soil res	ult of <0.1% for the soil	to become non-hazard	ous waste.
Hazardous Property	Thresholds	Cut Off Value			If cells below turn y	rellow and the text tur	ns red, the samples s	hould be classified a	s Hazardous Waste.		
Corrosive HP8	≥5%	<1%	0.00052	0.00053	0.00110	0.00043	0.00026	0.00076	0.00063	0.00039	0.00101
Irritant HP4	≥10%	<1%	0.00292	0.00218	0.00443	0.02881	0.00387	0.01509	0.00283	0.00118	0.00432
Irritant HP4	≥20%	<1%	0.00438	0.00420	0.00655	0.03486	0.00837	0.01849	0.00485	0.00546	0.01133
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00001	0.00000	0.00000	0.00031	0.00000	0.00001	0.00005	0.00001	0.00008
Specifc Target Organ Toxicity HP5	≥1%		0.00177	0.00236	0.00304	0.00495	0.00459	0.00396	0.00230	0.00446	0.00767
Specifc Target Organ Toxicity HP5	≥10%		0.00395	0.00450	0.00566	0.07827	0.00203	0.00784	0.04956	0.00714	0.03232
Aspiration Toxicity HP5	≥10%		0.00333	0.00090	0.00566	0.07827	0.00114	0.00517	0.04956	0.00714	0.03232
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00042	0.00037	0.00095	0.00029	0.00012	0.00060	0.00067	0.00024	0.00090
Acute Toxicity HP6	≥5%	<0.1%	0.00029	0.00030	0.00029	0.00031	0.00027	0.00042	0.00029	0.00028	0.00027
Acute Toxicity HP6	≥25%	<1%	0.00837	0.00874	0.01191	0.05926	0.01044	0.02637	0.01799	0.00806	0.03554
Acute Toxicity HP6	≥0.25%	<0.1%	0.00008	0.00002	0.00002	0.00005	0.00001	0.00002	0.00021	0.00001	0.00004
Acute Toxicity HP6	≥2.5%	<0.1%	0.00017	0.00017	0.00017	0.00018	0.00016	0.00017	0.00017	0.00016	0.00016
Acute Toxicity HP6	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥55%	<1%	0.00004	0.00004	0.00004	0.00007	0.00004	0.00004	0.00004	0.00004	0.00006
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.5%	<0.1%	0.00029	0.00024	0.00023	0.00029	0.00021	0.00023	0.00042	0.00022	0.00026
Acute Toxicity HP6	≥3.5%	<0.1%	0.00012	0.00013	0.00012	0.00013	0.00011	0.00025	0.00012	0.00012	0.00011
Acute Toxicity HP6	≥22.5%	<1%	0.00829	0.00868	0.01185	0.05803	0.01038	0.02630	0.01778	0.00797	0.03530
Carcinogenic HP7	≥0.1%		0.00395	0.00450	0.00531	0.02452	0.00459	0.00784	0.01311	0.00446	0.02416
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00001	0.00000	0.00000	0.00025	0.00000	0.00000	0.00002	0.00000	0.00003
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		33.33	8.99	56.64	782.69	11.37	51.68	495.56	71.40	323.20
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		0.34618	0.35960	0.05531	0.46014	0.34800	0.10753	0.06628	0.10119	0.09696
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		9.18	9.38	7.72	8.84	8.44	9.07	9.49	9.15	12.13
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		9.18	9.38	7.72	8.84	8.44	9.07	9.49	9.15	12.13
Toxic for Reproduction HP10	≥0.3%	1	0.00395	0.00450	0.00531	0.02452	0.00459	0.00784	0.01311	0.00446	0.02416
Toxic for Reproduction HP10	≥3%	1	0.00333	0.00090	0.00566	0.07827	0.00114	0.00517	0.04956	0.00714	0.03232
Mutagenic HP11	≥0.1%	1	0.00017	0.00017	0.00017	0.00038	0.00016	0.00017	0.00017	0.00016	0.00016
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		33.33	8.99	56.64	782.69	11.37	51.68	495.56	71.40	323.20
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		0.34618	0.35960	0.05531	0.46014	0.34800	0.10753	0.06628	0.10119	0.09696
Mutagenic HP11	≥1%	1	0.00177	0.00236	0.00304	0.00495	0.00459	0.00396	0.00230	0.00446	0.00767
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%	1	0.00177	0.00236	0.00304	0.00495	0.00459	0.00396	0.00230	0.00446	0.00767
in to conducting	2.070	3	0.00177	0.00200	0.00004	0.00400	3.53400	0.00000	0.00200	0.00440	0.00707



WAC

371654 Ugly Brown Building

WAC WAC

	_
TP/WS/BH	=
Depth (m)	
Envirolab reference	
	_

TP/WS/BH			BH11	BH12A	WS1	WS4	BH13	WS6	BH15	BH15	BH10
Depth (m)			0.70	2.50	0.40	0.70	0.70	0.60	1.50	4.50	2.00
Envirolab reference	]		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%	c0.1%, (except Be, V, Te, Ti, Petrol, Diesel, Crude Oli, Kerosene, White Spirit, Crosote, TPH, TTPHCWG, Phenol, Cresols, Xylenols, T- Pherols, CompCN, Thiocyanate, Toluene, Ethybenzene 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%	c0.1% (except Bet), Te, Ti, Petro, Ti, Petro, Ti, Petro, Diesel, Crude Oli, Kerosene, White Spirt, Crosoite, TPH, TPH-CWG, Phenol, Cresoite, Xykenols, T. Phenols, CompcN, Tilocyanate, Toluene, Ethybenzene the Spirt, Spi	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%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
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 contac