HazWasteOnline™

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

a) understand the origin of the waste
b) select the correct List of Waste code(s)
c) confirm that the list of determinands, results and sampling plan are fit for purpose
d) select and justify the chosen metal species (Appendix B)
e) correctly apply moisture correction and other available corrections
f) add the meta data for their user-defined substances (Appendix A)
g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

3L5TN-CAGF2-N75SV

Job name

14-944

Description/Comments

This Waste Classification is based on the analytical results provided by E3P on the i2 Analytical Ltd 'Analytical Report' Number: 21-79838. Soil Samples Only. During the assessment we have considered the 'worst or most reasonable case' metals compounds as laboratory reports only provide total concentrations of a metal e.g. Cu but not which compound(s) (species) of the metal present within the respective soil samples e.g. CuSO4. If the assessment is non-hazardous based on these worst case species no further 'species' consideration is required. With TPH, WM3 (EA) require assessment of the potential presence of an unknown 'oil' by assessing the TPH range C6 – C40. Where the concentration of TPH is >0.1% (1000mg/kg) the 'soil' will be classed as HP 7 Carcinogenic and HP 11 Mutagenic, unless the concentration of the marker benzo(a)pyrene is <0.01% of the TPH concentration and confirmation is received that the TPH result has not arisen from petrol or diesel sources. Note that samples consider moisture content correction factors. In the case of any samples exceeding the 1000mg/kg TPH value and also the marker benzo(a)pyrene at <0.01% of the TPH concentration, the moisture correction factor could make it 'non-hazardous'. It is the responsibility of the geo-environmental consultant to target the laboratory analysis suite and testing to appropriately reflect the nature of the site, its activities and its impact on surrounding soils. WM3 states that the assessment of asbestos containing waste considers both the presence of asbestos as a) fibres that are free and dispersed, and b) identifiable pieces of asbestos containing material. If the waste contains fibres that are free and dispersed then the waste will be hazardous if the waste as a whole contains 0.1% or more asbestos. Where the waste contains identifiable pieces of asbestos containing material (i.e. any size that can be identified as potentially being asbestos by a competent person by the naked eye) it is deemed hazardous.

Project

Waste Classification

Site

Vine Street

Classified by

Name:
Daniel Enon
Company:
RJT Consulting Partnerships Ltd
Date:
29 Jun 2021 15:03 GMT
Telephone:
0161 706 0402

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: **CERTIFIED**

Course	Date
Hazardous Waste Classification	18 Sep 2019

Next 3 year Refresher due by Sep 2022

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	SP101		Non Hazardous		3
2	SP102		Non Hazardous		5
3	SP103		Non Hazardous		7

Related documents

#	Name	Description
1	E3P I2 Characterisation Suite 4	waste stream template used to create this Job

Report

Created by: Daniel Enon
Created date: 29 Jun 2021 15:03 GMT

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Classification of sample: SP101

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
SP101
Moisture content:
9%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	pH PH		7.8 pH		7.8 pH	7.8 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**
3	phenol 604-001-00-2 / 203-632-7 / 108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
4	naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**
5	acenaphthylene 205-917-1 / 208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**
6	acenaphthene 201-469-6 / 83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**
7	fluorene 201-695-5 / 86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**
8	phenanthrene 201-581-5 / 85-01-8		1.6 mg/kg		1.468 mg/kg	0.000147 %	✓	
9	anthracene 204-371-1 / 120-12-7		0.42 mg/kg		0.385 mg/kg	0.0000385 %	✓	
10	fluoranthene 205-912-4 / 206-44-0		3.7 mg/kg		3.394 mg/kg	0.000339 %	✓	
11	pyrene 204-927-3 / 129-00-0		3.4 mg/kg		3.119 mg/kg	0.000312 %	✓	
12	benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		2 mg/kg		1.835 mg/kg	0.000183 %	✓	
13	chrysene 601-048-00-0 / 205-923-4 / 218-01-9		1.4 mg/kg		1.284 mg/kg	0.000128 %	✓	
14	benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		2 mg/kg		1.835 mg/kg	0.000183 %	✓	
15	benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		0.7 mg/kg		0.642 mg/kg	0.0000642 %	✓	
16	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		1.6 mg/kg		1.468 mg/kg	0.000147 %	✓	
17	indeno[123-cd]pyrene 205-893-2 / 193-39-5		1.2 mg/kg		1.101 mg/kg	0.00011 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
18		dibenz[a,h]anthracene				0.33	mg/kg		0.303	mg/kg	0.0000303 %	✓	
		601-041-00-2	200-181-8	53-70-3									
19		benzo[ghi]perylene				1.4	mg/kg		1.284	mg/kg	0.000128 %	✓	
			205-883-8	191-24-2									
20		arsenic { arsenic trioxide }				13	mg/kg	1.32	15.747	mg/kg	0.00157 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
21		cadmium { cadmium oxide }				0.5	mg/kg	1.142	0.524	mg/kg	0.0000524 %	✓	
		048-002-00-0	215-146-2	1306-19-0									
22		chromium in chromium(VI) compounds { chromium(VI) oxide }				<4	mg/kg	1.923	<7.692	mg/kg	<0.000769 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
23		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				21	mg/kg	1.462	28.158	mg/kg	0.00282 %	✓	
			215-160-9	1308-38-9									
24		copper { dicopper oxide; copper (I) oxide }				45	mg/kg	1.126	46.482	mg/kg	0.00465 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
25		lead { lead chromate }			1	150	mg/kg	1.56	214.653	mg/kg	0.0138 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
26		mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
27		nickel { nickel chromate }				20	mg/kg	2.976	54.61	mg/kg	0.00546 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
28		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
		034-002-00-8											
29		zinc { zinc chromate }				150	mg/kg	2.774	381.763	mg/kg	0.0382 %	✓	
		024-007-00-3	236-878-9	13530-65-9									
30		TPH (C6 to C40) petroleum group				330	mg/kg		302.752	mg/kg	0.0303 %	✓	
				TPH									
										Total:	0.0998 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because HP3(I) - Flammable relates to liquids. However this assessment was undertaken on a solid soil sample and therefore this hazardous property does not apply.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0303%)

Classification of sample: SP102

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
SP102
Moisture content:
2.4%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 2.4% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	pH			PH		8 pH		8 pH	8pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**
3	phenol	604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
4	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**
5	acenaphthylene		205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**
6	acenaphthene		201-469-6	83-32-9		0.64 mg/kg		0.625 mg/kg	0.0000625 %	✓	
7	fluorene		201-695-5	86-73-7		0.47 mg/kg		0.459 mg/kg	0.0000459 %	✓	
8	phenanthrene		201-581-5	85-01-8		4.6 mg/kg		4.492 mg/kg	0.000449 %	✓	
9	anthracene		204-371-1	120-12-7		1.1 mg/kg		1.074 mg/kg	0.000107 %	✓	
10	fluoranthene		205-912-4	206-44-0		6.2 mg/kg		6.055 mg/kg	0.000605 %	✓	
11	pyrene		204-927-3	129-00-0		5.5 mg/kg		5.371 mg/kg	0.000537 %	✓	
12	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		3.3 mg/kg		3.223 mg/kg	0.000322 %	✓	
13	chrysene	601-048-00-0	205-923-4	218-01-9		2.1 mg/kg		2.051 mg/kg	0.000205 %	✓	
14	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		3.2 mg/kg		3.125 mg/kg	0.000313 %	✓	
15	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		1.1 mg/kg		1.074 mg/kg	0.000107 %	✓	
16	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		2.7 mg/kg		2.637 mg/kg	0.000264 %	✓	
17	indeno[123-cd]pyrene		205-893-2	193-39-5		1.8 mg/kg		1.758 mg/kg	0.000176 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
18		dibenz[a,h]anthracene				0.54	mg/kg		0.527	mg/kg	0.0000527 %	✓	
		601-041-00-2	200-181-8	53-70-3									
19		benzo[ghi]perylene				2.2	mg/kg		2.148	mg/kg	0.000215 %	✓	
			205-883-8	191-24-2									
20		arsenic { arsenic trioxide }				14	mg/kg	1.32	18.051	mg/kg	0.00181 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
21		cadmium { cadmium oxide }				0.5	mg/kg	1.142	0.558	mg/kg	0.0000558 %	✓	
		048-002-00-0	215-146-2	1306-19-0									
22		chromium in chromium(VI) compounds { chromium(VI) oxide }				<4	mg/kg	1.923	<7.692	mg/kg	<0.000769 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
23		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				27	mg/kg	1.462	38.537	mg/kg	0.00385 %	✓	
			215-160-9	1308-38-9									
24		copper { dicopper oxide; copper (I) oxide }				52	mg/kg	1.126	57.174	mg/kg	0.00572 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
25		lead { lead chromate }			1	140	mg/kg	1.56	213.256	mg/kg	0.0137 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
26		mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
27		nickel { nickel chromate }				31	mg/kg	2.976	90.102	mg/kg	0.00901 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
28		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
		034-002-00-8											
29		zinc { zinc chromate }				130	mg/kg	2.774	352.187	mg/kg	0.0352 %	✓	
		024-007-00-3	236-878-9	13530-65-9									
30		TPH (C6 to C40) petroleum group				300	mg/kg		292.969	mg/kg	0.0293 %	✓	
				TPH									
										Total:	0.103 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because HP3(I) - Flammable relates to liquids. However this assessment was undertaken on a solid soil sample and therefore this hazardous property does not apply.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0293%)

Classification of sample: SP103

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
SP103
Moisture content:
3.3%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 3.3% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	pH PH		8.1 pH		8.1 pH	8.1 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**
3	phenol 604-001-00-2 / 203-632-7 / 108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
4	naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**
5	acenaphthylene 205-917-1 / 208-96-8		0.22 mg/kg		0.213 mg/kg	0.0000213 %	✓	
6	acenaphthene 201-469-6 / 83-32-9		3 mg/kg		2.904 mg/kg	0.00029 %	✓	
7	fluorene 201-695-5 / 86-73-7		4.3 mg/kg		4.163 mg/kg	0.000416 %	✓	
8	phenanthrene 201-581-5 / 85-01-8		50 mg/kg		48.403 mg/kg	0.00484 %	✓	
9	anthracene 204-371-1 / 120-12-7		15 mg/kg		14.521 mg/kg	0.00145 %	✓	
10	fluoranthene 205-912-4 / 206-44-0		54 mg/kg		52.275 mg/kg	0.00523 %	✓	
11	pyrene 204-927-3 / 129-00-0		43 mg/kg		41.626 mg/kg	0.00416 %	✓	
12	benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		22 mg/kg		21.297 mg/kg	0.00213 %	✓	
13	chrysene 601-048-00-0 / 205-923-4 / 218-01-9		16 mg/kg		15.489 mg/kg	0.00155 %	✓	
14	benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		16 mg/kg		15.489 mg/kg	0.00155 %	✓	
15	benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		7.9 mg/kg		7.648 mg/kg	0.000765 %	✓	
16	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		15 mg/kg		14.521 mg/kg	0.00145 %	✓	
17	indeno[123-cd]pyrene 205-893-2 / 193-39-5		9.4 mg/kg		9.1 mg/kg	0.00091 %	✓	

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
18		dibenz[a,h]anthracene 601-041-00-2 / 200-181-8 / 53-70-3		2.8 mg/kg		2.711 mg/kg	0.000271 %	✓	
19		benzo[ghi]perylene 205-883-8 / 191-24-2		10 mg/kg		9.681 mg/kg	0.000968 %	✓	
20		arsenic { arsenic trioxide } 033-003-00-0 / 215-481-4 / 1327-53-3		15 mg/kg	1.32	19.172 mg/kg	0.00192 %	✓	
21		cadmium { cadmium oxide } 048-002-00-0 / 215-146-2 / 1306-19-0		0.6 mg/kg	1.142	0.664 mg/kg	0.0000664 %	✓	
22		chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 / 215-607-8 / 1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
23		chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 / 1308-38-9		26 mg/kg	1.462	36.786 mg/kg	0.00368 %	✓	
24		copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		51 mg/kg	1.126	55.586 mg/kg	0.00556 %	✓	
25		lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	120 mg/kg	1.56	181.198 mg/kg	0.0116 %	✓	
26		mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
27		nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		28 mg/kg	2.976	80.673 mg/kg	0.00807 %	✓	
28		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
29		zinc { zinc chromate } 024-007-00-3 / 236-878-9 / 13530-65-9		160 mg/kg	2.774	429.684 mg/kg	0.043 %	✓	
30		TPH (C6 to C40) petroleum group TPH		560 mg/kg		542.11 mg/kg	0.0542 %	✓	
						Total:	0.155 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because HP3(I) - Flammable relates to liquids. However this assessment was undertaken on a solid soil sample and therefore this hazardous property does not apply.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0542%)

Appendix A: Classifier defined and non CLP determinands

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst Case

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected.

lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil.

zinc {zinc chromate}

Worst case CLP species based on hazard statements/molecular weight

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2021.162.4804.9151 (21 Jun 2021)
HazWasteOnline Database: 2021.162.4804.9151 (21 Jun 2021)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2019 - UK: 2019 No. 720 of 27th March 2019
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
POPs Regulation 2019 - Regulation (EU) 2019/1021 of 20 June 2019