

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:

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



3L5TN-CAGF2-N75SV

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

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

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

Hazardous Waste Classification

Date

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:	LoW Code:
SP101	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
9%	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
(dry weight correction)	Entry:

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				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 }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
3	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
4	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
5	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
6	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
7	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
8	phenanthrene				1.6 mg/kg		1.468 mg/kg	0.000147 %	✓	
		201-581-5	85-01-8							
9	anthracene				0.42 mg/kg		0.385 mg/kg	0.0000385 %	✓	
		204-371-1	120-12-7							
10	fluoranthene				3.7 mg/kg		3.394 mg/kg	0.000339 %	✓	
		205-912-4	206-44-0							
11	pyrene				3.4 mg/kg		3.119 mg/kg	0.000312 %	✓	
		204-927-3	129-00-0							
12	benzo[a]anthracene				2 mg/kg		1.835 mg/kg	0.000183 %	✓	
	601-033-00-9	200-280-6	56-55-3							
13	chrysene				1.4 mg/kg		1.284 mg/kg	0.000128 %	✓	
	601-048-00-0	205-923-4	218-01-9							
14	benzo[b]fluoranthene				2 mg/kg		1.835 mg/kg	0.000183 %	✓	
	601-034-00-4	205-911-9	205-99-2							
15	benzo[k]fluoranthene				0.7 mg/kg		0.642 mg/kg	0.0000642 %	✓	
	601-036-00-5	205-916-6	207-08-9							
16	benzo[a]pyrene; benzo[def]chrysene				1.6 mg/kg		1.468 mg/kg	0.000147 %	✓	
	601-032-00-3	200-028-5	50-32-8							
17	indeno[123-cd]pyrene				1.2 mg/kg		1.101 mg/kg	0.00011 %	✓	
		205-893-2	193-39-5							

#	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		TPH		330	mg/kg		302.752	mg/kg	0.0303 %	✓	
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 Determinand - 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:	LoW Code:
SP102	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
2.4% (dry weight correction)	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 Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	● 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 }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
3	● phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
4	● naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
5	● acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
6	● acenaphthene				0.64 mg/kg		0.625 mg/kg	0.0000625 %	✓	
		201-469-6	83-32-9							
7	● fluorene				0.47 mg/kg		0.459 mg/kg	0.0000459 %	✓	
		201-695-5	86-73-7							
8	● phenanthrene				4.6 mg/kg		4.492 mg/kg	0.000449 %	✓	
		201-581-5	85-01-8							
9	● anthracene				1.1 mg/kg		1.074 mg/kg	0.000107 %	✓	
		204-371-1	120-12-7							
10	● fluoranthene				6.2 mg/kg		6.055 mg/kg	0.000605 %	✓	
		205-912-4	206-44-0							
11	● pyrene				5.5 mg/kg		5.371 mg/kg	0.000537 %	✓	
		204-927-3	129-00-0							
12	benzo[a]anthracene				3.3 mg/kg		3.223 mg/kg	0.000322 %	✓	
	601-033-00-9	200-280-6	56-55-3							
13	chrysene				2.1 mg/kg		2.051 mg/kg	0.000205 %	✓	
	601-048-00-0	205-923-4	218-01-9							
14	benzo[b]fluoranthene				3.2 mg/kg		3.125 mg/kg	0.000313 %	✓	
	601-034-00-4	205-911-9	205-99-2							
15	benzo[k]fluoranthene				1.1 mg/kg		1.074 mg/kg	0.000107 %	✓	
	601-036-00-5	205-916-6	207-08-9							
16	benzo[a]pyrene; benzo[def]chrysene				2.7 mg/kg		2.637 mg/kg	0.000264 %	✓	
	601-032-00-3	200-028-5	50-32-8							
17	● indeno[123-cd]pyrene				1.8 mg/kg		1.758 mg/kg	0.000176 %	✓	
		205-893-2	193-39-5							

#		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 Determinand - 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:	LoW Code:
SP103	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
3.3% (dry weight correction)	

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				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 }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
3	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
4	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
5	acenaphthylene				0.22 mg/kg		0.213 mg/kg	0.0000213 %	✓	
		205-917-1	208-96-8							
6	acenaphthene				3 mg/kg		2.904 mg/kg	0.00029 %	✓	
		201-469-6	83-32-9							
7	fluorene				4.3 mg/kg		4.163 mg/kg	0.000416 %	✓	
		201-695-5	86-73-7							
8	phenanthrene				50 mg/kg		48.403 mg/kg	0.00484 %	✓	
		201-581-5	85-01-8							
9	anthracene				15 mg/kg		14.521 mg/kg	0.00145 %	✓	
		204-371-1	120-12-7							
10	fluoranthene				54 mg/kg		52.275 mg/kg	0.00523 %	✓	
		205-912-4	206-44-0							
11	pyrene				43 mg/kg		41.626 mg/kg	0.00416 %	✓	
		204-927-3	129-00-0							
12	benzo[a]anthracene				22 mg/kg		21.297 mg/kg	0.00213 %	✓	
	601-033-00-9	200-280-6	56-55-3							
13	chrysene				16 mg/kg		15.489 mg/kg	0.00155 %	✓	
	601-048-00-0	205-923-4	218-01-9							
14	benzo[b]fluoranthene				16 mg/kg		15.489 mg/kg	0.00155 %	✓	
	601-034-00-4	205-911-9	205-99-2							
15	benzo[k]fluoranthene				7.9 mg/kg		7.648 mg/kg	0.000765 %	✓	
	601-036-00-5	205-916-6	207-08-9							
16	benzo[a]pyrene; benzo[def]chrysene				15 mg/kg		14.521 mg/kg	0.00145 %	✓	
	601-032-00-3	200-028-5	50-32-8							
17	indeno[123-cd]pyrene				9.4 mg/kg		9.1 mg/kg	0.00091 %	✓	
		205-893-2	193-39-5							

#	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				2.8	mg/kg		2.711	mg/kg	0.000271 %	✓	
	601-041-00-2	200-181-8	53-70-3									
19	benzo[ghi]perylene				10	mg/kg		9.681	mg/kg	0.000968 %	✓	
		205-883-8	191-24-2									
20	arsenic { arsenic trioxide }				15	mg/kg	1.32	19.172	mg/kg	0.00192 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
21	cadmium { cadmium oxide }				0.6	mg/kg	1.142	0.664	mg/kg	0.0000664 %	✓	
	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) }				26	mg/kg	1.462	36.786	mg/kg	0.00368 %	✓	
		215-160-9	1308-38-9									
24	copper { dicopper oxide; copper (I) oxide }				51	mg/kg	1.126	55.586	mg/kg	0.00556 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
25	lead { lead chromate }			1	120	mg/kg	1.56	181.198	mg/kg	0.0116 %	✓	
	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 }				28	mg/kg	2.976	80.673	mg/kg	0.00807 %	✓	
	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 }				160	mg/kg	2.774	429.684	mg/kg	0.043 %	✓	
	024-007-00-3	236-878-9	13530-65-9									
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 Determinand - 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 sulposelenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulposelenide 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