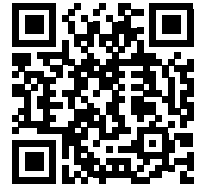


Waste Classification Report

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)



A2MUN-HNTDN-QTQBN

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

Job name

2585 - Houghton Retail

Description/Comments

Project

Site

Houghton Colliery

Classified by

Name: **Mike Taylor**
Date: **15 Feb 2023 17:18 GMT**
Telephone: **0191 478 3330**
Company: **Shadbolt Environmental Ltd**
18 Bewick Road
Gateshead
NE8 4DP

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:

-

Course

Hazardous Waste Classification

Date

-

Purpose of classification

2 - Material Characterisation

Address of the waste

Newbottle Street, Houghton le Spring

Post Code DH4 4AU

SIC for the process giving rise to the waste

41201 Construction of commercial buildings

Description of industry/producer giving rise to the waste

Remediation works for the development of former colliery at Houghton le Spring

Description of the specific process, sub-process and/or activity that created the waste

Potential treatment and /or removal of contamination hotspots and other material generated during cut / fill works

Description of the waste

Made ground comprising clay with varying amounts of sand gravel and cobbles of slag, sandstone, shale, brick, concrete and mudstone

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	TP-307	1.2	Non Hazardous		3
2	TP-309	1.2 - 1.3	Non Hazardous		6
3	TP-14	1.5	Non Hazardous		9
4	TP-08	0.50	Non Hazardous		11
5	TP-11	2.2	Non Hazardous		13

Related documents

#	Name	Description
1	Example waste stream template for contaminated soils	waste stream template used to create this Job

Report

Created by: Mike Taylor

Created date: 15 Feb 2023 17:18 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	15
Appendix B: Rationale for selection of metal species	16
Appendix C: Version	17

Classification of sample: TP-307

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

Sample details

Sample name:	LoW Code:	
TP-307	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1.2 m		
Moisture content:		
13%		
(no correction)		

Hazard properties

None identified

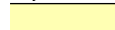



Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				13	mg/kg	1.32	17.164	mg/kg	0.00172 %		
	033-003-00-0	215-481-4	1327-53-3									
2	boron { diboron trioxide; boric oxide }				1.2	mg/kg	3.22	3.864	mg/kg	0.000386 %		
	005-008-00-8	215-125-8	1303-86-2									
3	cadmium { cadmium oxide }				0.8	mg/kg	1.142	0.914	mg/kg	0.0000914 %		
	048-002-00-0	215-146-2	1306-19-0									
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				5	mg/kg	1.462	7.308	mg/kg	0.000731 %		
		215-160-9	1308-38-9									
5	copper { dicopper oxide; copper (I) oxide }				54	mg/kg	1.126	60.798	mg/kg	0.00608 %		
	029-002-00-X	215-270-7	1317-39-1									
6	lead { lead chromate }			1	110	mg/kg	1.56	171.58	mg/kg	0.011 %		
	082-004-00-2	231-846-0	7758-97-6									
7	mercury { mercury dichloride }				0.1	mg/kg	1.353	0.135	mg/kg	0.0000135 %		
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel chromate }				17	mg/kg	2.976	50.597	mg/kg	0.00506 %		
	028-035-00-7	238-766-5	14721-18-7									
9	selenium { nickel selenate }				1.5	mg/kg	2.554	3.831	mg/kg	0.000383 %		
	028-031-00-5	239-125-2	15060-62-5									
10	zinc { zinc chromate }				160	mg/kg	2.774	443.863	mg/kg	0.0444 %		
	024-007-00-3	236-878-9	13530-65-9									
11	TPH (C6 to C40) petroleum group				95	mg/kg		95	mg/kg	0.0095 %		
			TPH									
12	confirm TPH has NOT arisen from diesel or petrol				<input checked="" type="checkbox"/>							
13	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
14	benzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
15	toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
16	ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
17	xylene 601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
18	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				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		<LOD
19	pH		PH		7.8	pH		7.8	pH	7.8 pH		
20	naphthalene 601-052-00-2	202-049-5	91-20-3		0.13	mg/kg		0.13	mg/kg	0.000013 %		
21	acenaphthylene	205-917-1	208-96-8		0.03	mg/kg		0.03	mg/kg	0.000003 %		
22	acenaphthene	201-469-6	83-32-9		0.03	mg/kg		0.03	mg/kg	0.000003 %		
23	fluorene	201-695-5	86-73-7		0.03	mg/kg		0.03	mg/kg	0.000003 %		
24	phenanthrene	201-581-5	85-01-8		0.27	mg/kg		0.27	mg/kg	0.000027 %		
25	anthracene	204-371-1	120-12-7		0.03	mg/kg		0.03	mg/kg	0.000003 %		
26	fluoranthene	205-912-4	206-44-0		0.07	mg/kg		0.07	mg/kg	0.000007 %		
27	pyrene	204-927-3	129-00-0		0.06	mg/kg		0.06	mg/kg	0.000006 %		
28	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		0.04	mg/kg		0.04	mg/kg	0.000004 %		
29	chrysene 601-048-00-0	205-923-4	218-01-9		0.07	mg/kg		0.07	mg/kg	0.000007 %		
30	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		0.05	mg/kg		0.05	mg/kg	0.000005 %		
31	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		0.03	mg/kg		0.03	mg/kg	0.000003 %		
32	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		0.03	mg/kg		0.03	mg/kg	0.000003 %		
33	indeno[123-cd]pyrene 205-893-2	193-39-5			0.03	mg/kg		0.03	mg/kg	0.000003 %		
34	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		0.03	mg/kg		0.03	mg/kg	0.000003 %		
35	benzo[ghi]perylene 205-883-8	191-24-2			0.03	mg/kg		0.03	mg/kg	0.000003 %		
36	phenol 604-001-00-2	203-632-7	108-95-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
37	1,1-dichloroethane and 1,2-dichloroethane (combined) 203-458-1, 200-863-5	107-06-2, 75-34-3			<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	tetrachloroethylene 602-028-00-4	204-825-9	127-18-4		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
39	carbon tetrachloride; tetrachloromethane 602-008-00-5	200-262-8	56-23-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
40	trichloroethylene; trichloroethene 602-027-00-9	201-167-4	79-01-6		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
41	vinyl chloride; chloroethylene 602-023-00-7	200-831-0	75-01-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
Total:										0.0795 %		

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 Material is ash / spoil from a colliery - non petrol or diesel


Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0095%)

Classification of sample: TP-309

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

Sample details

Sample name:	LoW Code:
TP-309	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1.2 - 1.3 m	
Moisture content:	
20%	
(no correction)	


Hazard properties

None identified

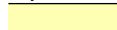



Determinands

Moisture content: 20% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				38 mg/kg	1.32	50.172 mg/kg	0.00502 %		
	033-003-00-0	215-481-4	1327-53-3							
2	boron { diboron trioxide; boric oxide }				1.1 mg/kg	3.22	3.542 mg/kg	0.000354 %		
	005-008-00-8	215-125-8	1303-86-2							
3	cadmium { cadmium oxide }				1.2 mg/kg	1.142	1.371 mg/kg	0.000137 %		
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
		215-160-9	1308-38-9							
5	copper { dicopper oxide; copper (I) oxide }				66 mg/kg	1.126	74.309 mg/kg	0.00743 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead chromate }			1	150 mg/kg	1.56	233.972 mg/kg	0.015 %		
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				0.06 mg/kg	1.353	0.0812 mg/kg	0.00000812 %		
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				29 mg/kg	2.976	86.312 mg/kg	0.00863 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				1.3 mg/kg	2.554	3.32 mg/kg	0.000332 %		
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				130 mg/kg	2.774	360.639 mg/kg	0.0361 %		
	024-007-00-3	236-878-9	13530-65-9							
11	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
12	confirm TPH has NOT arisen from diesel or petrol				<input checked="" type="checkbox"/>					
13	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
14	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
15	toluene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
16	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	xylene 601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
18	 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				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD
19	pH		PH		8.3 pH		8.3 pH	8.3 pH		
20	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
21	acenaphthylene 205-917-1	208-96-8			<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
22	acenaphthene 201-469-6	83-32-9			<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
23	fluorene 201-695-5	86-73-7			<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
24	phenanthrene 201-581-5	85-01-8			<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
25	anthracene 204-371-1	120-12-7			<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
26	fluoranthene 205-912-4	206-44-0			<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
27	pyrene 204-927-3	129-00-0			<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
28	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
29	chrysene 601-048-00-0	205-923-4	218-01-9		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
30	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
31	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
32	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
33	indeno[123-cd]pyrene 205-893-2	193-39-5			<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
34	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
35	benzo[ghi]perylene 205-883-8	191-24-2			<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
36	phenol 604-001-00-2	203-632-7	108-95-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
37	1,1-dichloroethane and 1,2-dichloroethane (combined) 203-458-1, 200-863-5		107-06-2, 75-34-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
38	tetrachloroethylene 602-028-00-4	204-825-9	127-18-4		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
39	carbon tetrachloride; tetrachloromethane 602-008-00-5	200-262-8	56-23-5		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
40	trichloroethylene; trichloroethene 602-027-00-9	201-167-4	79-01-6		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
41	vinyl chloride; chloroethylene 602-023-00-7	200-831-0	75-01-4		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
Total:								0.0763 %		

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

Classification of sample: TP-14

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

Sample details

Sample name:	LoW Code:	
TP-14	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1.5 m		
Moisture content:		
18%		
(no correction)		

Hazard properties

None identified

Determinands

Moisture content: 18% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide } 033-003-00-0 215-481-4 1327-53-3				22	mg/kg	1.32	29.047	mg/kg	0.0029 %		
2	boron { diboron trioxide; boric oxide } 005-008-00-8 215-125-8 1303-86-2				2.2	mg/kg	3.22	7.084	mg/kg	0.000708 %		
3	cadmium { cadmium oxide } 048-002-00-0 215-146-2 1306-19-0				0.7	mg/kg	1.142	0.8	mg/kg	0.00008 %		
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 1308-38-9				13	mg/kg	1.462	19	mg/kg	0.0019 %		
5	copper { dicopper oxide; copper (I) oxide } 029-002-00-X 215-270-7 1317-39-1				180	mg/kg	1.126	202.66	mg/kg	0.0203 %		
6	lead { lead chromate } 082-004-00-2 231-846-0 7758-97-6			1	120	mg/kg	1.56	187.178	mg/kg	0.012 %		
7	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				0.7	mg/kg	1.353	0.947	mg/kg	0.0000947 %		
8	nickel { nickel chromate } 028-035-00-7 238-766-5 14721-18-7				55	mg/kg	2.976	163.695	mg/kg	0.0164 %		
9	selenium { nickel selenate } 028-031-00-5 239-125-2 15060-62-5				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
10	zinc { zinc chromate } 024-007-00-3 236-878-9 13530-65-9				310	mg/kg	2.774	859.985	mg/kg	0.086 %		
11	TPH (C6 to C40) petroleum group TPH				260	mg/kg		260	mg/kg	0.026 %		
12	confirm TPH has NOT arisen from diesel or petrol				<input checked="" type="checkbox"/>							
13	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
14	pH PH				7.7	pH		7.7	pH	7.7 pH		
15	naphthalene 601-052-00-2 202-049-5 91-20-3				3.2	mg/kg		3.2	mg/kg	0.00032 %		

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
17	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
18	fluorene	201-695-5	86-73-7		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
19	phenanthrene	201-581-5	85-01-8		4.9 mg/kg		4.9 mg/kg	0.00049 %		
20	anthracene	204-371-1	120-12-7		0.32 mg/kg		0.32 mg/kg	0.000032 %		
21	fluoranthene	205-912-4	206-44-0		1.5 mg/kg		1.5 mg/kg	0.00015 %		
22	pyrene	204-927-3	129-00-0		1.3 mg/kg		1.3 mg/kg	0.00013 %		
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.89 mg/kg		0.89 mg/kg	0.000089 %		
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.98 mg/kg		0.98 mg/kg	0.000098 %		
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.84 mg/kg		0.84 mg/kg	0.000084 %		
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.24 mg/kg		0.24 mg/kg	0.000024 %		
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.49 mg/kg		0.49 mg/kg	0.000049 %		
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.25 mg/kg		0.25 mg/kg	0.000025 %		
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		0.43 mg/kg		0.43 mg/kg	0.000043 %		
Total:								0.168 %		

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 Material is ash / spoil from a colliery - non petrol or diesel

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.026%)

Classification of sample: TP-08

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

Sample details

Sample name:	LoW Code:	
TP-08	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.50 m		
Moisture content:		
9.1%		
(no correction)		

Hazard properties

None identified

Determinands

Moisture content: 9.1% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide } 033-003-00-0 215-481-4 1327-53-3				19	mg/kg	1.32	25.086	mg/kg	0.00251 %		
2	boron { diboron trioxide; boric oxide } 005-008-00-8 215-125-8 1303-86-2				1.4	mg/kg	3.22	4.508	mg/kg	0.000451 %		
3	cadmium { cadmium oxide } 048-002-00-0 215-146-2 1306-19-0				0.5	mg/kg	1.142	0.571	mg/kg	0.0000571 %		
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 1308-38-9				19	mg/kg	1.462	27.77	mg/kg	0.00278 %		
5	copper { dicopper oxide; copper (I) oxide } 029-002-00-X 215-270-7 1317-39-1				120	mg/kg	1.126	135.107	mg/kg	0.0135 %		
6	lead { lead chromate } 082-004-00-2 231-846-0 7758-97-6			1	220	mg/kg	1.56	343.159	mg/kg	0.022 %		
7	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				0.5	mg/kg	1.353	0.677	mg/kg	0.0000677 %		
8	nickel { nickel chromate } 028-035-00-7 238-766-5 14721-18-7				32	mg/kg	2.976	95.24	mg/kg	0.00952 %		
9	selenium { nickel selenate } 028-031-00-5 239-125-2 15060-62-5				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
10	zinc { zinc chromate } 024-007-00-3 236-878-9 13530-65-9				260	mg/kg	2.774	721.278	mg/kg	0.0721 %		
11	TPH (C6 to C40) petroleum group TPH				290	mg/kg		290	mg/kg	0.029 %		
12	confirm TPH has NOT arisen from diesel or petrol				<input checked="" type="checkbox"/>							
13	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
14	pH PH				8	pH		8	pH	8pH		
15	naphthalene 601-052-00-2 202-049-5 91-20-3				1	mg/kg		1	mg/kg	0.0001 %		

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
17	acenaphthene	201-469-6	83-32-9		0.34 mg/kg		0.34 mg/kg	0.000034 %		
18	fluorene	201-695-5	86-73-7		0.34 mg/kg		0.34 mg/kg	0.000034 %		
19	phenanthrene	201-581-5	85-01-8		3.8 mg/kg		3.8 mg/kg	0.00038 %		
20	anthracene	204-371-1	120-12-7		0.62 mg/kg		0.62 mg/kg	0.000062 %		
21	fluoranthene	205-912-4	206-44-0		4.2 mg/kg		4.2 mg/kg	0.00042 %		
22	pyrene	204-927-3	129-00-0		3.3 mg/kg		3.3 mg/kg	0.00033 %		
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	2.8 mg/kg		2.8 mg/kg	0.00028 %		
24	chrysene	601-048-00-0	205-923-4	218-01-9	2.1 mg/kg		2.1 mg/kg	0.00021 %		
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	2.8 mg/kg		2.8 mg/kg	0.00028 %		
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.95 mg/kg		0.95 mg/kg	0.000095 %		
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	2 mg/kg		2 mg/kg	0.0002 %		
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.91 mg/kg		0.91 mg/kg	0.000091 %		
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.42 mg/kg		0.42 mg/kg	0.000042 %		
30	benzo[ghi]perylene	205-883-8	191-24-2		1.4 mg/kg		1.4 mg/kg	0.00014 %		
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 Material is ash / spoil from a colliery - non petrol or diesel

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.029%)

Classification of sample: TP-11

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

Sample details

Sample name:	LoW Code:	
TP-11	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
2.2 m		
Moisture content:		
12%		
(no correction)		

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				6.1	mg/kg	1.32	8.054	mg/kg	0.000805 %		
	033-003-00-0	215-481-4	1327-53-3									
2	boron { diboron trioxide; boric oxide }				1.2	mg/kg	3.22	3.864	mg/kg	0.000386 %		
	005-008-00-8	215-125-8	1303-86-2									
3	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				30	mg/kg	1.462	43.847	mg/kg	0.00438 %		
		215-160-9	1308-38-9									
5	copper { dicopper oxide; copper (I) oxide }				26	mg/kg	1.126	29.273	mg/kg	0.00293 %		
	029-002-00-X	215-270-7	1317-39-1									
6	lead { lead chromate }			1	30	mg/kg	1.56	46.794	mg/kg	0.003 %		
	082-004-00-2	231-846-0	7758-97-6									
7	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									
8	nickel { nickel chromate }				29	mg/kg	2.976	86.312	mg/kg	0.00863 %		
	028-035-00-7	238-766-5	14721-18-7									
9	selenium { nickel selenate }				1.2	mg/kg	2.554	3.065	mg/kg	0.000306 %		
	028-031-00-5	239-125-2	15060-62-5									
10	zinc { zinc chromate }				68	mg/kg	2.774	188.642	mg/kg	0.0189 %		
	024-007-00-3	236-878-9	13530-65-9									
11	TPH (C6 to C40) petroleum group				190	mg/kg		190	mg/kg	0.019 %		
			TPH									
12	confirm TPH has NOT arisen from diesel or petrol				<input checked="" type="checkbox"/>							
13	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											
14	pH				8	pH		8	pH	8pH		
			PH									
15	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
17	acenaphthene	201-469-6	83-32-9		0.29 mg/kg		0.29 mg/kg	0.000029 %		
18	fluorene	201-695-5	86-73-7		0.33 mg/kg		0.33 mg/kg	0.000033 %		
19	phenanthrene	201-581-5	85-01-8		2.4 mg/kg		2.4 mg/kg	0.00024 %		
20	anthracene	204-371-1	120-12-7		0.42 mg/kg		0.42 mg/kg	0.000042 %		
21	fluoranthene	205-912-4	206-44-0		2.5 mg/kg		2.5 mg/kg	0.00025 %		
22	pyrene	204-927-3	129-00-0		2 mg/kg		2 mg/kg	0.0002 %		
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.79 mg/kg		0.79 mg/kg	0.000079 %		
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.79 mg/kg		0.79 mg/kg	0.000079 %		
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.98 mg/kg		0.98 mg/kg	0.000098 %		
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.56 mg/kg		0.56 mg/kg	0.000056 %		
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	1 mg/kg		1 mg/kg	0.0001 %		
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.49 mg/kg		0.49 mg/kg	0.000049 %		
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		0.81 mg/kg		0.81 mg/kg	0.000081 %		
Total:								0.0599 %		

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 Material is ash / spoil from a colliery - non petrol or diesel

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.019%)

Appendix A: Classifier defined and non GB MCL determinands

- **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

- **confirm TPH has NOT arisen from diesel or petrol**

Description/Comments: Chapter 3, section 4b requires a positive confirmation for benzo[a]pyrene to be used as a marker in evaluating Carc. 1B; H350 (HP 7) and Muta. 1B; H340 (HP 11)

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4

Description/Comments:

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

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

GB MCL index number: 006-007-00-5

Description/Comments: Conversion factor based on a worst case compound: sodium cyanide

Additional Hazard Statement(s): EUH032 >= 0.2 %

Reason for additional Hazards Statement(s):

20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **pH** (CAS Number: PH)

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

- **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

• **1,1-dichloroethane and 1,2-dichloroethane (combined)** (EC Number: 203-458-1, 200-863-5, CAS Number: 107-06-2, 75-34-3)

Description/Comments: Combines the hazard statements and risk phrases for 1,1-dichloroethane and 1,2-dichloroethane
Data source: N/a
Data source date: 14 Oct 2016
Hazard Statements: Flam. Liq. 2; H225 , Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 1B; H350 , Aquatic Chronic 3; H412

Appendix B: Rationale for selection of metal species

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 (edit as required)

boron {diboron trioxide; boric oxide}

Reasonable case CLP species based on hazard statements/ molecular weight, physical form and low solubility. Industrial sources include: fluxing agent for glass/enamels; additive for fibre optics, borosilicate glass (edit as required)

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. (edit as required) 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 (edit as required)

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 (edit as required)

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. (edit as required) Worst case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected. (edit as required)

lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

selenium {nickel selenate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

zinc {zinc chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

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}

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide] (edit as required)

Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition v1.2.GB - Oct 2021**

HazWasteOnline Classification Engine Version: 2023.25.5511.10206 (25 Jan 2023)

HazWasteOnline Database: 2023.25.5511.10206 (25 Jan 2023)

This classification utilises the following guidance and legislation:

WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021

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 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

GB MCL List - version 1.1 of 09 June 2021