Photo 39. Facing Portishead at 128m 22y

Photo 40. Facing Portbury Jcn at 128m 22y: Station Road Overbridge and disused platform

Prepared	DK	APPENDIX C - PHOTOS 39 to 40	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 41. Facing Portishead at 127m 1640y: Disused platform

Photo 42. Facing Portbury Jcn at 127m 1640y

Prepared	DK	APPENDIX C - PHOTOS 41 to 42	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 43. Facing Portishead at 127m 1407y

Photo 44. Facing Portbury Jcn at 127m 1548y

Prepared	DK	APPENDIX C - PHOTOS 43 to 44	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 45. Facing Portbury Jcn at 127m 1407y

Photo 46. Facing 4ft at 127m 1320y

Prepared	DK	APPENDIX C - PHOTOS 45 to 46	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 47. Facing Portishead at 127m 1179y

Photo 48. Facing Portbury Jcn at 127m 1179y

Prepared	DK	APPENDIX C - PHOTOS 47 to 48	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 49. Facing Portishead at 127m 1032y

Photo 50. Facing Portbury Jcn at 127m 1032y

Prepared	DK	APPENDIX C - PHOTOS 49 to 50	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 51. Facing Portbury Jcn at 127m 1027y

Photo 52. Facing Culvert at 127m 923y

Prepared	DK	APPENDIX C - PHOTOS 51 to 52	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 53. Facing Portishead at 127m 760y

Photo 54. Facing Portbury Jcn at 127m 760y

Prepared	DK	APPENDIX C - PHOTOS 53 to 54	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 55. Facing Portishead at 127m 636y

Photo 56. Facing Portbury Jcn at 127m 636y

Prepared	DK	APPENDIX C - PHOTOS 55 to 56	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 57. Facing Portbury Jcn at 127m 549y: Royal Portbury Dock Road Overbridge

Photo 58. Facing Portishead at 127m 266y

Prepared	DK	APPENDIX C - PHOTOS 57 to 58	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 59. Facing Portbury Jcn at 127m 266y

Photo 60. Facing Portishead at 127m 141y

Prepared	DK	APPENDIX C - PHOTOS 59 to 60	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 61. Facing Portbury Jcn at 127m 141y

Photo 62. Facing Portbury Jcn at 127m 71y: Marsh Lane Overbridge

Prepared	DK	APPENDIX C - PHOTOS 61 to 62	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 63. Facing Portishead at 127m 0y: Marsh Lane Overbridge

Photo 64. Facing Portishead at 126m 1700y

Prepared	DK	APPENDIX C - PHOTOS 63 to 64	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 65. Facing Portbury Jcn at 126m 1700y

Photo 66. Facing Portishead at 126m 1494y

Prepared	DK	APPENDIX C - PHOTOS 65 to 66	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 67. Facing Portbury Jcn at 126m 1494y

Photo 68. Facing Portishead at 126m 1385y

Prepared	DK	APPENDIX C - PHOTOS 67 to 68	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Photo 69. Facing Portbury Jcn at 126m 1385y: M5 Motorway Overbridge

Photo 70. Facing Portishead at 126m 1336y

Prepared	DK	APPENDIX C - PHOTOS 69 to 70	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Prepared	DK	APPENDIX C - PHOTOS 71 to 72	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Prepared	DK	APPENDIX C - PHOTOS 73 to 74	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Prepared	DK	APPENDIX C - PHOTOS 75 to 76	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Prepared	DK	APPENDIX C - PHOTOS 77 to 78	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Prepared	DK	APPENDIX C - PHOTOS 79 to 80	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

Prepared	DK	APPENDIX C - PHOTO 81	URS
Checked	CG	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Job No	47061344	SITE WALKOVER PHOTOGRAPHS (19/03/14)	
Date	Apr '14	POD - REVERSIBLE - 126m 1043y to 129m 616y	

APPENDIX D:

CHEMICAL RESULTS OF BALLAST SAMPLES

Network Rail Ballast Analytical Suite (2008)			Petroleum Hydro-carbons	Asbestos	Arsenic	Nickel	Lead	Copper	Zinc	Chromium
Sample	Miles	Yards								
ABS 1	126	1043	10	nd	1.2	172.9	1461.3	145.7	4952.3	1.2
ABS 2	126	1252	10	nd	10.1	97.2	139.2	119.5	590	28.7
ABS 3	126	1430	19	nd	1.2	166.7	1368.8	145.8	5032	1.2
ABS 4	126	1650	25	nd	1.2	76.1	301.2	92.5	913.1	21.9
ABS 5	127	61	10	nd	16.6	222.2	1741.5	269.4	5516.7	1.2
ABS 6	127	548	34	nd	17.3	57	14.1	13	67.8	27.3
ABS 7	127	760	10	nd	1.2	122.4	501.5	80.3	3956.7	12.1
ABS 8	127	827	10	nd	1.2	166.9	1558.1	233.6	8416.1	1.2
DP 9	127	915	13	nd	1.2	87.1	261.6	73.6	915.8	26.5
ABS 10	127	1206	12	nd	18.1	91.3	63.6	47.3	201.4	30.3
ABS 11	127	1320	10	nd	11.9	99.2	53.8	37.7	160.7	37.8
ABS 12	127	1350	60	nd	1.2	160.2	1363.2	186.7	3642.8	1.2
ABS 13	128	45	55	nd	1.2	166.7	316.9	102.7	1049.8	54.1
ABS 14	128	310	68	nd	1.2	370.4	769.8	111.8	1597.5	48.9
ABS 15	128	370	32	nd	1.2	383.4	2066.3	608.9	5128	1.2
ABS 16	128	722	25	nd	1.2	156	1696.5	315.2	3348.2	1.2
DP 17	128	913	90	nd	1.2	88.7	290.2	31.1	919.8	16.5
DP 18	128	923	15	nd	7.4	89.3	219.8	45.7	887.7	19.1
DP 19	128	1385	16	nd	5.8	58.3	37.7	13.6	129.1	17.7
DP 20	128	1463	14	nd	8.9	57.7	40	18.9	118.2	22.2
ABS 21	129	158	10	nd	8.1	97	28.5	33.8	107.4	38.1
ABS 22	129	364	98	nd	10	142.1	30.9	58.4	106.1	49.8
ABS 23	129	563	10	nd	10.5	70.8	38.4	33.3	105.7	24.9
ABS 24	129	616	10	nd	16.8	86.4	62.3	43.8	181.1	41

Units - mg kg-1 nd - None Detected NS - Not Specified

Prepared	DK	APPENDIX D	URS
Checked	CG	CHEMICAL RESULTS OF BALLAST SAMPLES	
Job No	47070043	**MetroWest Phase 1 (140569) - Trackbed Investigation**	
Date	Apr-14	POD - Reversible - 126m 1043y to 129m 616y	

Job name

Metrowest Phase 1 126m 1043y to 129m 616y

Waste stream

Track Excavation Waste

Comments

Waste classification of used track ballast.

Report

Created by: Ward, Chris
Created date: 02/05/2014 15:56

Job summary

#	Sample name	Depth	Classification result	Hazardous properties
1	ABS 1		Hazardous	H7, H13, H14
2	ABS 2		Hazardous	H7
3	ABS 3		Hazardous	H7, H13, H14
4	ABS 4		Hazardous	H7, H14
5	ABS 5		Hazardous	H7, H13, H14
6	ABS 6		Non Hazardous	
7	ABS 7		Hazardous	H7, H13, H14
8	ABS 8		Hazardous	H7, H13, H14
9	DP 9		Hazardous	H7, H14
10	ABS 10		Non Hazardous	
11	ABS 11		Non Hazardous	
12	ABS 12		Hazardous	H7, H13, H14
13	ABS 13		Hazardous	H7, H14
14	ABS 14		Hazardous	H7, H14
15	ABS 15		Hazardous	H7, H13, H14
16	ABS 16		Hazardous	H7, H14
17	DP 17		Hazardous	H7, H14
18	DP 18		Hazardous	H7
19	DP 19		Non Hazardous	
20	DP 20		Non Hazardous	
21	ABS 21		Non Hazardous	
22	ABS 22		Non Hazardous	
23	ABS 23		Non Hazardous	
24	ABS 24		Non Hazardous	

Classification

Hazardous Waste
Classified as **17 05 03 ***
in the European Waste Catalogue 2002

Classified by

Name:
Ward, Chris
Date:
02/05/2014 15:26
Telephone:
0

Company:
NetworkRail
The Quadrant
MK, Elder Gate
Milton Keynes
MK9 1EN

Sample details

Sample Name:
ABS 1
Site:

Project:

Sample Depth:
0 m
Dry Weight Moisture Content:
0%
Comments:

EWC 2002 code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing dangerous substances)

Hazard properties

H7: Carcinogenic "substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce cancer or increase its incidence."

Risk phrases hit:

R45 "May cause cancer"

Because of determinands:

Lead chromate: ("Note 1" conc.: 0.146%)
Zinc chromate: (compound conc.:1.374%)

H13: Sensitizing "substances and preparations which, if they are inhaled or if they penetrate the skin, are capable of eliciting a reaction of hypersensitization such that on further exposure to the substance or preparation, characteristic adverse effects are produced. [As far as testing methods are available]."

Risk phrases hit:

R43 "May cause sensitisation by skin contact"

Because of determinand:

Zinc chromate: (compound conc.:1.374%)

H14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment."

Risk phrases hit:

R50/53 "Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment"

Because of determinands:

Lead chromate: ("Note 1" conc.: 0.146%)
Zinc chromate: (compound conc.:1.374%)

Additional: Additional Risk Phrases "This is an additional risk phrase and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinand:

Lead chromate: (compound conc.:0.228%)

Determinands (Dry Weight Moisture Content: 0%)

Arsenic trioxide: (Cation conc. entered: 1.2 mg/kg, converted to compound conc.:1.584 mg/kg or 0.000158%)
Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex: (Cation conc. entered: 1.2 mg/kg, converted to compound conc.:2.308 mg/kg or 0.000231%)
Copper (I) oxide: (Cation conc. entered: 145.7 mg/kg, converted to compound conc.:164.042 mg/kg or 0.0164%)
Lead chromate: (Cation conc. entered: 1461.3 mg/kg, converted to compound conc.:2279.358 mg/kg or 0.228%, "Note 1" conc.: 0.146%)
Nickel dihydroxide: (Cation conc. entered: 172.9 mg/kg, converted to compound conc.:273.095 mg/kg or 0.0273%)
Zinc chromate: (Cation conc. entered: 4952.3 mg/kg, converted to compound conc.:13738.406 mg/kg or 1.374%)
TPH (C6 to C40) Petroleum Group: (Whole concentration entered as: 10 mg/kg or 0.001%)

User Defined and non CLP Substances

TPH (C6 to C40) Petroleum Group

Comments: Risk phrase data given on page A41
Data source: WM2 3rd edition, 2013
Data source date: 01/08/2013
Classification: R10, R45, R46, R51/53, R63, R65

Test settings

H3-B on R10: Force this test to non hazardous because: "Assumed to be non-flammable below 1000 mg/kg."

Notes utilised in assessment

Additional Risk Phrase Comments
from section: Table 2.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"This is an additional risk phrase and such a risk phrase alone will not cause a waste to be hazardous."

Note used on:

Test: "Additional on R33" for determinand: "Lead chromate"

C14.3: Step 4
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"identify whether any individual ecotoxic substance is present below a cut-off value shown in Table C14.1"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Arsenic trioxide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Copper (I) oxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Nickel dihydroxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "TPH (C6 to C40) Petroleum Group"

C14.3: Step 5, Equation 1
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"...only for the substances in the waste above the relevant generic cut-off value, use the four equations given in Table C14.2 to decide if the waste is hazardous by H14"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Lead chromate"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Zinc chromate"

Note 1
from section: 1.1.3.2, Annex VI in the document: "CLP Regulations"
"The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture."

Note used on:

Test: "H7 on R45" for determinand: "Lead chromate"
Test: "H10 on R60, R61" for determinand: "Lead chromate"
Test: "H10 on R62, R63" for determinand: "Lead chromate"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Lead chromate"

Substance notes

3.4.2
from section: 3.4.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"If the identity of the oil is unknown, and the petroleum group cannot be established, then the oil contaminating the waste can be classified as non-carcinogenic due to the presence of oil if all three of the following criteria are met:

- the waste contains benzo[a]pyrene (BaP) at a concentration of less than 0.01% (1/10,000th) of the TPH concentration (This is the carcinogenic limit specified in table 3.2 of the CLP for BaP)
- this has been determined by an appropriate and representative sampling approach in accordance with the principles set out in Appendix D, and
- the analysis clearly demonstrates, for example by carbon bands or chromatograph, and the laboratory has reasonably concluded that the hydrocarbons present have not arisen from petrol or diesel

"

Note used on:

determinand: "TPH (C6 to C40) Petroleum Group"

Note 1
from section: 1.1.3.2, Annex VI in the document: "CLP Regulations"
"The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture."

Note used on:

determinand: "Lead chromate"

Note A
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as '... compounds' or '... salts'. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4."

Note used on:

determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
determinand: "Zinc chromate"

Note E (Table 3.2)
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Substances with specific effects on human health (see Chapter 4 of Annex VI to Directive 67/548/EEC) that are classified as carcinogenic, mutagenic and/or toxic for reproduction in categories 1 or 2 are ascribed Note E if they are also classified as very toxic (T+), toxic (T) or harmful (Xn). For these substances, the risk phrases R20, R21, R22, R23, R24, R25, R26, R27, R28, R39, R68 (harmful), R48 and R65 and all combinations of these risk phrases shall be preceded by the word 'Also'."

Note used on:

determinand: "Arsenic trioxide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version

Classification utilises the following:
WM2 - Hazardous Waste Technical Guidance, 3rd Edition, August 2013
CLP Regulations - Regulation (EC) No 1272/2008 of the European Parliament and of the Council: 16 December 2008
1st ATP - 1st Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 26 September 2009; binding date 1 Dec 2010
2nd ATP - 2nd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 30 March 2011; binding date 1 Dec 2012 in respect of substances and 1 June 2015 in respect of mixtures
3rd ATP - 3rd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 31 July 2012; binding date 1 Dec 2013
4th ATP - 4th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 20 June 2013; binding date 1 Jun 2015
5th ATP - 5th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 13 August 2013; binding date 13 Aug 2013

HazWasteOnline Engine: WM2 version 3 (Aug 2013)
HazWasteOnline Engine Version: 1.0.2439.5273 (30 Apr 2014)
HazWasteOnline Database: 1.0.2428.5256 (06 Apr 2014)

Classification

Hazardous Waste
Classified as **17 05 03 ***
in the European Waste Catalogue 2002

Classified by

Name:
Ward, Chris
Date:
02/05/2014 15:26
Telephone:
0

Company:
NetworkRail
The Quadrant
MK, Elder Gate
Milton Keynes
MK9 1EN

Sample details

Sample Name:
ABS 2
Site:

Project:

Sample Depth:
0 m
Dry Weight Moisture Content:
0%
Comments:

EWC 2002 code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing dangerous substances)

Hazard properties

H7: Carcinogenic "substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce cancer or increase its incidence."

Risk phrases hit:

R45 "May cause cancer"

Because of determinand:

Zinc chromate: (compound conc.:0.164%)

Additional: Additional Risk Phrases "This is an additional risk phrase and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinand:

Lead chromate: (compound conc.:0.0217%)

Determinands (Dry Weight Moisture Content: 0%)

Arsenic trioxide: (Cation conc. entered: 10.1 mg/kg, converted to compound conc.:13.335 mg/kg or 0.00133%)
Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex: (Cation conc. entered: 28.7 mg/kg, converted to compound conc.:55.192 mg/kg or 0.00552%)
Copper (I) oxide: (Cation conc. entered: 119.5 mg/kg, converted to compound conc.:134.544 mg/kg or 0.0135%)

Lead chromate: (Cation conc. entered: 139.2 mg/kg, converted to compound conc.:217.126 mg/kg or 0.0217%, "Note 1" conc.: 0.0139%)
Nickel dihydroxide: (Cation conc. entered: 97.2 mg/kg, converted to compound conc.:153.527 mg/kg or 0.0154%)
Zinc chromate: (Cation conc. entered: 590 mg/kg, converted to compound conc.:1636.746 mg/kg or 0.164%)
TPH (C6 to C40) Petroleum Group: (Whole concentration entered as: 10 mg/kg or 0.001%)

User Defined and non CLP Substances

TPH (C6 to C40) Petroleum Group

Comments: Risk phrase data given on page A41
Data source: WM2 3rd edition, 2013
Data source date: 01/08/2013
Classification: R10, R45, R46, R51/53, R63, R65

Test settings

H3-B on R10: Force this test to non hazardous because: "Assumed to be non-flammable below 1000 mg/kg."

Notes utilised in assessment

Additional Risk Phrase Comments
from section: Table 2.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"This is an additional risk phrase and such a risk phrase alone will not cause a waste to be hazardous."

Note used on:

Test: "Additional on R33" for determinand: "Lead chromate"

C14.3: Step 4
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"identify whether any individual ecotoxic substance is present below a cut-off value shown in Table C14.1"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Arsenic trioxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Copper (I) oxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Lead chromate"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Nickel dihydroxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "TPH (C6 to C40) Petroleum Group"

Substance notes

3.4.2
from section: 3.4.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"If the identity of the oil is unknown, and the petroleum group cannot be established, then the oil contaminating the waste can be classified as non-carcinogenic due to the presence of oil if all three of the following criteria are met:

- the waste contains benzo[a]pyrene (BaP) at a concentration of less than 0.01% (1/10,000th) of the TPH concentration (This is the carcinogenic limit specified in table 3.2 of the CLP for BaP)
- this has been determined by an appropriate and representative sampling approach in accordance with the principles set out in Appendix D, and
- the analysis clearly demonstrates, for example by carbon bands or chromatograph, and the laboratory has reasonably concluded that the hydrocarbons present have not arisen from petrol or diesel

"

Note used on:

determinand: "TPH (C6 to C40) Petroleum Group"

Note 1
from section: 1.1.3.2, Annex VI in the document: "CLP Regulations"

"The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture."

Note used on:

determinand: "Lead chromate"

Note A
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as '... compounds' or '... salts'. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4."

Note used on:

determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
determinand: "Zinc chromate"

Note E (Table 3.2)
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Substances with specific effects on human health (see Chapter 4 of Annex VI to Directive 67/548/EEC) that are classified as carcinogenic, mutagenic and/or toxic for reproduction in categories 1 or 2 are ascribed Note E if they are also classified as very toxic (T+), toxic (T) or harmful (Xn). For these substances, the risk phrases R20, R21, R22, R23, R24, R25, R26, R27, R28, R39, R68 (harmful), R48 and R65 and all combinations of these risk phrases shall be preceded by the word 'Also'."

Note used on:

determinand: "Arsenic trioxide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version

Classification utilises the following:
WM2 - Hazardous Waste Technical Guidance, 3rd Edition, August 2013
CLP Regulations - Regulation (EC) No 1272/2008 of the European Parliament and of the Council: 16 December 2008
1st ATP - 1st Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 26 September 2009; binding date 1 Dec 2010
2nd ATP - 2nd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 30 March 2011; binding date 1 Dec 2012 in respect of substances and 1 June 2015 in respect of mixtures
3rd ATP - 3rd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 31 July 2012; binding date 1 Dec 2013
4th ATP - 4th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 20 June 2013; binding date 1 Jun 2015
5th ATP - 5th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 13 August 2013; binding date 13 Aug 2013

HazWasteOnline Engine: WM2 version 3 (Aug 2013)
HazWasteOnline Engine Version: 1.0.2439.5273 (30 Apr 2014)
HazWasteOnline Database: 1.0.2428.5256 (06 Apr 2014)

Classification

Hazardous Waste
Classified as **17 05 03 ***
in the European Waste Catalogue 2002

Classified by

Name:
Ward, Chris
Date:
02/05/2014 15:26
Telephone:
0

Company:
NetworkRail
The Quadrant
MK, Elder Gate
Milton Keynes
MK9 1EN

Sample details

Sample Name:
ABS 3
Site:

Project:

Sample Depth:
0 m
Dry Weight Moisture Content:
0%
Comments:

EWC 2002 code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing dangerous substances)

Hazard properties

H7: Carcinogenic "substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce cancer or increase its incidence."

Risk phrases hit:

R45 "May cause cancer"

Because of determinands:

Lead chromate: ("Note 1" conc.: 0.137%)
Zinc chromate: (compound conc.:1.396%)

H13: Sensitizing "substances and preparations which, if they are inhaled or if they penetrate the skin, are capable of eliciting a reaction of hypersensitization such that on further exposure to the substance or preparation, characteristic adverse effects are produced. [As far as testing methods are available]."

Risk phrases hit:

R43 "May cause sensitisation by skin contact"

Because of determinand:

Zinc chromate: (compound conc.:1.396%)

H14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment."

Risk phrases hit:

R50/53 "Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment"

Because of determinands:

Lead chromate: ("Note 1" conc.: 0.137%)
Zinc chromate: (compound conc.:1.396%)

Additional: Additional Risk Phrases "This is an additional risk phrase and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinand:

Lead chromate: (compound conc.:0.214%)

Determinands (Dry Weight Moisture Content: 0%)

Arsenic trioxide: (Cation conc. entered: 1.2 mg/kg, converted to compound conc.:1.584 mg/kg or 0.000158%)
Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex: (Cation conc. entered: 1.2 mg/kg, converted to compound conc.:2.308 mg/kg or 0.000231%)
Copper (I) oxide: (Cation conc. entered: 145.8 mg/kg, converted to compound conc.:164.155 mg/kg or 0.0164%)
Lead chromate: (Cation conc. entered: 1368.8 mg/kg, converted to compound conc.:2135.075 mg/kg or 0.214%, "Note 1" conc.: 0.137%)
Nickel dihydroxide: (Cation conc. entered: 166.7 mg/kg, converted to compound conc.:263.303 mg/kg or 0.0263%)
Zinc chromate: (Cation conc. entered: 5032 mg/kg, converted to compound conc.:13959.505 mg/kg or 1.396%)
TPH (C6 to C40) Petroleum Group: (Whole concentration entered as: 19 mg/kg or 0.0019%)

User Defined and non CLP Substances

TPH (C6 to C40) Petroleum Group

Comments: Risk phrase data given on page A41
Data source: WM2 3rd edition, 2013
Data source date: 01/08/2013
Classification: R10, R45, R46, R51/53, R63, R65

Test settings

H3-B on R10: Force this test to non hazardous because: "Assumed to be non-flammable below 1000 mg/kg."

Notes utilised in assessment

Additional Risk Phrase Comments
from section: Table 2.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"This is an additional risk phrase and such a risk phrase alone will not cause a waste to be hazardous."

Note used on:

Test: "Additional on R33" for determinand: "Lead chromate"

C14.3: Step 4
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"identify whether any individual ecotoxic substance is present below a cut-off value shown in Table C14.1"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Arsenic trioxide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Copper (I) oxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Nickel dihydroxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "TPH (C6 to C40) Petroleum Group"

C14.3: Step 5, Equation 1
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"...only for the substances in the waste above the relevant generic cut-off value, use the four equations given in Table C14.2 to decide if the waste is hazardous by H14"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Lead chromate"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Zinc chromate"

Substance notes

3.4.2
from section: 3.4.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"If the identity of the oil is unknown, and the petroleum group cannot be established, then the oil contaminating the waste can be classified as non-carcinogenic due to the presence of oil if all three of the following criteria are met:

- the waste contains benzo[a]pyrene (BaP) at a concentration of less than 0.01% (1/10,000th) of the TPH concentration (This is the carcinogenic limit specified in table 3.2 of the CLP for BaP)
- this has been determined by an appropriate and representative sampling approach in accordance with the principles set out in Appendix D, and
- the analysis clearly demonstrates, for example by carbon bands or chromatograph, and the laboratory has reasonably concluded that the hydrocarbons present have not arisen from petrol or diesel

"

Note used on:

determinand: "TPH (C6 to C40) Petroleum Group"

Note 1
from section: 1.1.3.2, Annex VI in the document: "CLP Regulations"
"The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture."

Note used on:

determinand: "Lead chromate"

Note A
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as '... compounds' or '... salts'. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4."

Note used on:

determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
determinand: "Zinc chromate"

Note E (Table 3.2)
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Substances with specific effects on human health (see Chapter 4 of Annex VI to Directive 67/548/EEC) that are classified as carcinogenic, mutagenic and/or toxic for reproduction in categories 1 or 2 are ascribed Note E if they are also classified as very toxic (T+), toxic (T) or harmful (Xn). For these substances, the risk phrases R20, R21, R22, R23, R24, R25, R26, R27, R28, R39, R68 (harmful), R48 and R65 and all combinations of these risk phrases shall be preceded by the word 'Also'."

Note used on:

determinand: "Arsenic trioxide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version

Classification utilises the following:
WM2 - Hazardous Waste Technical Guidance, 3rd Edition, August 2013
CLP Regulations - Regulation (EC) No 1272/2008 of the European Parliament and of the Council: 16 December 2008
1st ATP - 1st Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 26 September 2009; binding date 1 Dec 2010
2nd ATP - 2nd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 30 March 2011; binding date 1 Dec 2012 in respect of substances and 1 June 2015 in respect of mixtures
3rd ATP - 3rd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 31 July 2012; binding date 1 Dec 2013
4th ATP - 4th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 20 June 2013; binding date 1 Jun 2015
5th ATP - 5th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 13 August 2013; binding date 13 Aug 2013

HazWasteOnline Engine: WM2 version 3 (Aug 2013)
HazWasteOnline Engine Version: 1.0.2439.5273 (30 Apr 2014)
HazWasteOnline Database: 1.0.2428.5256 (06 Apr 2014)

Classification

Hazardous Waste
Classified as **17 05 03 ***
in the European Waste Catalogue 2002

Classified by

Name:
Ward, Chris
Date:
02/05/2014 15:26
Telephone:
0

Company:
NetworkRail
The Quadrant
MK, Elder Gate
Milton Keynes
MK9 1EN

Sample details

Sample Name:
ABS 4
Site:

Project:

Sample Depth:
0 m
Dry Weight Moisture Content:
0%
Comments:

EWC 2002 code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing dangerous substances)

Hazard properties

H7: Carcinogenic "substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce cancer or increase its incidence."

Risk phrases hit:

R45 "May cause cancer"

Because of determinand:

Zinc chromate: (compound conc.:0.253%)

H14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment."

Risk phrases hit:

R50/53 "Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment"

Because of determinand:

Zinc chromate: (compound conc.:0.253%)

Additional: Additional Risk Phrases "This is an additional risk phrase and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinand:

Lead chromate: (compound conc.:0.047%)

Determinands (Dry Weight Moisture Content: 0%)

Arsenic trioxide: (Cation conc. entered: 1.2 mg/kg, converted to compound conc.:1.584 mg/kg or 0.000158%)
Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex: (Cation conc. entered: 21.9 mg/kg, converted to compound conc.:42.115 mg/kg or 0.00421%)
Copper (I) oxide: (Cation conc. entered: 92.5 mg/kg, converted to compound conc.:104.145 mg/kg or 0.0104%)
Lead chromate: (Cation conc. entered: 301.2 mg/kg, converted to compound conc.:469.816 mg/kg or 0.047%, "Note 1" conc.: 0.0301%)
Nickel dihydroxide: (Cation conc. entered: 76.1 mg/kg, converted to compound conc.:120.2 mg/kg or 0.012%)
Zinc chromate: (Cation conc. entered: 913.1 mg/kg, converted to compound conc.:2533.073 mg/kg or 0.253%)
TPH (C6 to C40) Petroleum Group: (Whole concentration entered as: 25 mg/kg or 0.0025%)

User Defined and non CLP Substances

TPH (C6 to C40) Petroleum Group

Comments: Risk phrase data given on page A41
Data source: WM2 3rd edition, 2013
Data source date: 01/08/2013
Classification: R10, R45, R46, R51/53, R63, R65

Test settings

H3-B on R10: Force this test to non hazardous because: "Assumed to be non-flammable below 1000 mg/kg."

Notes utilised in assessment

Additional Risk Phrase Comments
from section: Table 2.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"This is an additional risk phrase and such a risk phrase alone will not cause a waste to be hazardous."

Note used on:

Test: "Additional on R33" for determinand: "Lead chromate"

C14.3: Step 4
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"identify whether any individual ecotoxic substance is present below a cut-off value shown in Table C14.1"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Arsenic trioxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Copper (I) oxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Lead chromate"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Nickel dihydroxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "TPH (C6 to C40) Petroleum Group"

C14.3: Step 5, Equation 1
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"...only for the substances in the waste above the relevant generic cut-off value, use the four equations given in Table C14.2 to decide if the waste is hazardous by H14"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Zinc chromate"

Substance notes

3.4.2
from section: 3.4.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"If the identity of the oil is unknown, and the petroleum group cannot be established, then the oil contaminating the waste can be classified as non-carcinogenic due to the presence of oil if all three of the following criteria are met:

- the waste contains benzo[a]pyrene (BaP) at a concentration of less than 0.01% (1/10,000th) of the TPH concentration (This is the carcinogenic limit specified in table 3.2 of the CLP for BaP)
- this has been determined by an appropriate and representative sampling approach in accordance with the principles set out in Appendix D, and
- the analysis clearly demonstrates, for example by carbon bands or chromatograph, and the laboratory has reasonably concluded that the hydrocarbons present have not arisen from petrol or diesel

"

Note used on:

determinand: "TPH (C6 to C40) Petroleum Group"

Note 1
from section: 1.1.3.2, Annex VI in the document: "CLP Regulations"
"The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture."

Note used on:

determinand: "Lead chromate"

Note A
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as '... compounds' or '... salts'. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4."

Note used on:

determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
determinand: "Zinc chromate"

Note E (Table 3.2)
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Substances with specific effects on human health (see Chapter 4 of Annex VI to Directive 67/548/EEC) that are classified as carcinogenic, mutagenic and/or toxic for reproduction in categories 1 or 2 are ascribed Note E if they are also classified as very toxic (T+), toxic (T) or harmful (Xn). For these substances, the risk phrases R20, R21, R22, R23, R24, R25, R26, R27, R28, R39, R68 (harmful), R48 and R65 and all combinations of these risk phrases shall be preceded by the word 'Also'."

Note used on:

determinand: "Arsenic trioxide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version

Classification utilises the following:
WM2 - Hazardous Waste Technical Guidance, 3rd Edition, August 2013
CLP Regulations - Regulation (EC) No 1272/2008 of the European Parliament and of the Council: 16 December 2008
1st ATP - 1st Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 26 September 2009; binding date 1 Dec 2010
2nd ATP - 2nd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 30 March 2011; binding date 1 Dec 2012 in respect of substances and 1 June 2015 in respect of mixtures
3rd ATP - 3rd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 31 July 2012; binding date 1 Dec 2013
4th ATP - 4th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 20 June 2013; binding date 1 Jun 2015
5th ATP - 5th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 13 August 2013; binding date 13 Aug 2013

HazWasteOnline Engine: WM2 version 3 (Aug 2013)
HazWasteOnline Engine Version: 1.0.2439.5273 (30 Apr 2014)
HazWasteOnline Database: 1.0.2428.5256 (06 Apr 2014)

Classification

Hazardous Waste
Classified as **17 05 03 ***
in the European Waste Catalogue 2002

Classified by

Name:
Ward, Chris
Date:
02/05/2014 15:26
Telephone:
0

Company:
NetworkRail
The Quadrant
MK, Elder Gate
Milton Keynes
MK9 1EN

Sample details

Sample Name:
ABS 5
Site:

Project:

Sample Depth:
0 m
Dry Weight Moisture Content:
0%
Comments:

EWC 2002 code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing dangerous substances)

Hazard properties

H7: Carcinogenic "substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce cancer or increase its incidence."

Risk phrases hit:

R45 "May cause cancer"

Because of determinands:

Lead chromate: ("Note 1" conc.: 0.174%)
Zinc chromate: (compound conc.:1.53%)

H13: Sensitizing "substances and preparations which, if they are inhaled or if they penetrate the skin, are capable of eliciting a reaction of hypersensitization such that on further exposure to the substance or preparation, characteristic adverse effects are produced. [As far as testing methods are available]."

Risk phrases hit:

R43 "May cause sensitisation by skin contact"

Because of determinand:

Zinc chromate: (compound conc.:1.53%)

H14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment."

Risk phrases hit:

R50/53 "Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment"

Because of determinands:

Lead chromate: ("Note 1" conc.: 0.174%)
Zinc chromate: (compound conc.:1.53%)

Additional: Additional Risk Phrases "This is an additional risk phrase and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinand:

Lead chromate: (compound conc.:0.272%)

Determinands (Dry Weight Moisture Content: 0%)

Arsenic trioxide: (Cation conc. entered: 16.6 mg/kg, converted to compound conc.:21.917 mg/kg or 0.00219%)
Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex: (Cation conc. entered: 1.2 mg/kg, converted to compound conc.:2.308 mg/kg or 0.000231%)
Copper (I) oxide: (Cation conc. entered: 269.4 mg/kg, converted to compound conc.:303.314 mg/kg or 0.0303%)
Lead chromate: (Cation conc. entered: 1741.5 mg/kg, converted to compound conc.:2716.418 mg/kg or 0.272%, "Note 1" conc.: 0.174%)
Nickel dihydroxide: (Cation conc. entered: 222.2 mg/kg, converted to compound conc.:350.965 mg/kg or 0.0351%)
Zinc chromate: (Cation conc. entered: 5516.7 mg/kg, converted to compound conc.:15304.134 mg/kg or 1.53%)
TPH (C6 to C40) Petroleum Group: (Whole concentration entered as: 10 mg/kg or 0.001%)

User Defined and non CLP Substances

TPH (C6 to C40) Petroleum Group

Comments: Risk phrase data given on page A41
Data source: WM2 3rd edition, 2013
Data source date: 01/08/2013
Classification: R10, R45, R46, R51/53, R63, R65

Test settings

H3-B on R10: Force this test to non hazardous because: "Assumed to be non-flammable below 1000 mg/kg."

Notes utilised in assessment

Additional Risk Phrase Comments
from section: Table 2.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"This is an additional risk phrase and such a risk phrase alone will not cause a waste to be hazardous."

Note used on:

Test: "Additional on R33" for determinand: "Lead chromate"

C14.3: Step 4
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"identify whether any individual ecotoxic substance is present below a cut-off value shown in Table C14.1"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Arsenic trioxide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Copper (I) oxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Nickel dihydroxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "TPH (C6 to C40) Petroleum Group"

C14.3: Step 5, Equation 1
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"...only for the substances in the waste above the relevant generic cut-off value, use the four equations given in Table C14.2 to decide if the waste is hazardous by H14"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Lead chromate"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Zinc chromate"

Substance notes

3.4.2
from section: 3.4.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"If the identity of the oil is unknown, and the petroleum group cannot be established, then the oil contaminating the waste can be classified as non-carcinogenic due to the presence of oil if all three of the following criteria are met:

- the waste contains benzo[a]pyrene (BaP) at a concentration of less than 0.01% (1/10,000th) of the TPH concentration (This is the carcinogenic limit specified in table 3.2 of the CLP for BaP)
- this has been determined by an appropriate and representative sampling approach in accordance with the principles set out in Appendix D, and
- the analysis clearly demonstrates, for example by carbon bands or chromatograph, and the laboratory has reasonably concluded that the hydrocarbons present have not arisen from petrol or diesel

"

Note used on:

determinand: "TPH (C6 to C40) Petroleum Group"

Note 1
from section: 1.1.3.2, Annex VI in the document: "CLP Regulations"
"The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture."

Note used on:

determinand: "Lead chromate"

Note A
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as '... compounds' or '... salts'. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4."

Note used on:

determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
determinand: "Zinc chromate"

Note E (Table 3.2)
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Substances with specific effects on human health (see Chapter 4 of Annex VI to Directive 67/548/EEC) that are classified as carcinogenic, mutagenic and/or toxic for reproduction in categories 1 or 2 are ascribed Note E if they are also classified as very toxic (T+), toxic (T) or harmful (Xn). For these substances, the risk phrases R20, R21, R22, R23, R24, R25, R26, R27, R28, R39, R68 (harmful), R48 and R65 and all combinations of these risk phrases shall be preceded by the word 'Also'."

Note used on:

determinand: "Arsenic trioxide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version

Classification utilises the following:
WM2 - Hazardous Waste Technical Guidance, 3rd Edition, August 2013
CLP Regulations - Regulation (EC) No 1272/2008 of the European Parliament and of the Council: 16 December 2008
1st ATP - 1st Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 26 September 2009; binding date 1 Dec 2010
2nd ATP - 2nd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 30 March 2011; binding date 1 Dec 2012 in respect of substances and 1 June 2015 in respect of mixtures
3rd ATP - 3rd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 31 July 2012; binding date 1 Dec 2013
4th ATP - 4th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 20 June 2013; binding date 1 Jun 2015
5th ATP - 5th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 13 August 2013; binding date 13 Aug 2013

HazWasteOnline Engine: WM2 version 3 (Aug 2013)
HazWasteOnline Engine Version: 1.0.2439.5273 (30 Apr 2014)
HazWasteOnline Database: 1.0.2428.5256 (06 Apr 2014)

Classification

Non Hazardous Waste
Classified as **17 05 04**
in the European Waste Catalogue 2002

Classified by

Name:
Ward, Chris
Date:
02/05/2014 15:26
Telephone:
0

Company:
NetworkRail
The Quadrant
MK, Elder Gate
Milton Keynes
MK9 1EN

Sample details

Sample Name:
ABS 6
Site:

Project:

Sample Depth:
0 m
Dry Weight Moisture Content:
0%
Comments:

EWC 2002 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

Additional: Additional Risk Phrases "This is an additional risk phrase and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinand:

Lead chromate: (compound conc.:0.0022%)

Determinands (Dry Weight Moisture Content: 0%)

Arsenic trioxide: (Cation conc. entered: 17.3 mg/kg, converted to compound conc.:22.842 mg/kg or 0.00228%)
Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex: (Cation conc. entered: 27.3 mg/kg, converted to compound conc.:52.5 mg/kg or 0.00525%)
Copper (I) oxide: (Cation conc. entered: 13 mg/kg, converted to compound conc.:14.637 mg/kg or 0.00146%)
Lead chromate: (Cation conc. entered: 14.1 mg/kg, converted to compound conc.:21.993 mg/kg or 0.0022%, "Note 1" conc.: 0.00141%)
Nickel dihydroxide: (Cation conc. entered: 57 mg/kg, converted to compound conc.:90.031 mg/kg or 0.009%)
Zinc chromate: (Cation conc. entered: 67.8 mg/kg, converted to compound conc.:188.087 mg/kg or 0.0188%)
TPH (C6 to C40) Petroleum Group: (Whole concentration entered as: 34 mg/kg or 0.0034%)

User Defined and non CLP Substances

TPH (C6 to C40) Petroleum Group

Comments: Risk phrase data given on page A41
Data source: WM2 3rd edition, 2013
Data source date: 01/08/2013
Classification: R10, R45, R46, R51/53, R63, R65

Test settings

H3-B on R10: Force this test to non hazardous because: "Assumed to be non-flammable below 1000 mg/kg."

Notes utilised in assessment

Additional Risk Phrase Comments
from section: Table 2.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"This is an additional risk phrase and such a risk phrase alone will not cause a waste to be hazardous."

Note used on:

Test: "Additional on R33" for determinand: "Lead chromate"

C14.3: Step 4
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"identify whether any individual ecotoxic substance is present below a cut-off value shown in Table C14.1"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Arsenic trioxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Copper (I) oxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Lead chromate"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Nickel dihydroxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Zinc chromate"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "TPH (C6 to C40) Petroleum Group"

Substance notes

3.4.2
from section: 3.4.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"If the identity of the oil is unknown, and the petroleum group cannot be established, then the oil contaminating the waste can be classified as non-carcinogenic due to the presence of oil if all three of the following criteria are met:

- the waste contains benzo[a]pyrene (BaP) at a concentration of less than 0.01% (1/10,000th) of the TPH concentration (This is the carcinogenic limit specified in table 3.2 of the CLP for BaP)
- this has been determined by an appropriate and representative sampling approach in accordance with the principles set out in Appendix D, and
- the analysis clearly demonstrates, for example by carbon bands or chromatograph, and the laboratory has reasonably concluded that the hydrocarbons present have not arisen from petrol or diesel

"

Note used on:

determinand: "TPH (C6 to C40) Petroleum Group"

Note 1
from section: 1.1.3.2, Annex VI in the document: "CLP Regulations"
"The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture."

Note used on:

determinand: "Lead chromate"

Note A
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as '... compounds' or '... salts'. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4."

Note used on:

determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
determinand: "Zinc chromate"

Note E (Table 3.2)
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Substances with specific effects on human health (see Chapter 4 of Annex VI to Directive 67/548/EEC) that are classified as carcinogenic, mutagenic and/or toxic for reproduction in categories 1 or 2 are ascribed Note E if they are also classified as very toxic (T+), toxic (T) or harmful (Xn). For these substances, the risk phrases R20, R21, R22, R23, R24, R25, R26, R27, R28, R39, R68 (harmful), R48 and R65 and all combinations of these risk phrases shall be preceded by the word 'Also'."

Note used on:

determinand: "Arsenic trioxide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version

Classification utilises the following:
WM2 - Hazardous Waste Technical Guidance, 3rd Edition, August 2013
CLP Regulations - Regulation (EC) No 1272/2008 of the European Parliament and of the Council: 16 December 2008
1st ATP - 1st Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 26 September 2009; binding date 1 Dec 2010
2nd ATP - 2nd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 30 March 2011; binding date 1 Dec 2012 in respect of substances and 1 June 2015 in respect of mixtures
3rd ATP - 3rd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 31 July 2012; binding date 1 Dec 2013
4th ATP - 4th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 20 June 2013; binding date 1 Jun 2015
5th ATP - 5th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 13 August 2013; binding date 13 Aug 2013

HazWasteOnline Engine: WM2 version 3 (Aug 2013)
HazWasteOnline Engine Version: 1.0.2439.5273 (30 Apr 2014)
HazWasteOnline Database: 1.0.2428.5256 (06 Apr 2014)

Classification

Hazardous Waste
Classified as **17 05 03 ***
in the European Waste Catalogue 2002

Classified by

Name:
Ward, Chris
Date:
02/05/2014 15:26
Telephone:
0

Company:
NetworkRail
The Quadrant
MK, Elder Gate
Milton Keynes
MK9 1EN

Sample details

Sample Name:
ABS 7
Site:

Project:

Sample Depth:
0 m
Dry Weight Moisture Content:
0%
Comments:

EWC 2002 code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing dangerous substances)

Hazard properties

H7: Carcinogenic "substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce cancer or increase its incidence."

Risk phrases hit:

R45 "May cause cancer"

Because of determinand:

Zinc chromate: (compound conc.:1.098%)

H13: Sensitizing "substances and preparations which, if they are inhaled or if they penetrate the skin, are capable of eliciting a reaction of hypersensitization such that on further exposure to the substance or preparation, characteristic adverse effects are produced. [As far as testing methods are available]."

Risk phrases hit:

R43 "May cause sensitisation by skin contact"

Because of determinand:

Zinc chromate: (compound conc.:1.098%)

H14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment."

Risk phrases hit:

R50/53 "Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment"

Because of determinand:

Zinc chromate: (compound conc.:1.098%)

Additional: Additional Risk Phrases "This is an additional risk phrase and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinand:

Lead chromate: (compound conc.:0.0782%)

Determinands (Dry Weight Moisture Content: 0%)

Arsenic trioxide: (Cation conc. entered: 1.2 mg/kg, converted to compound conc.:1.584 mg/kg or 0.000158%)
Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex: (Cation conc. entered: 12.1 mg/kg, converted to compound conc.:23.269 mg/kg or 0.00233%)
Copper (I) oxide: (Cation conc. entered: 80.3 mg/kg, converted to compound conc.:90.409 mg/kg or 0.00904%)
Lead chromate: (Cation conc. entered: 501.5 mg/kg, converted to compound conc.:782.247 mg/kg or 0.0782%, "Note 1" conc.: 0.0501%)
Nickel dihydroxide: (Cation conc. entered: 122.4 mg/kg, converted to compound conc.:193.331 mg/kg or 0.0193%)
Zinc chromate: (Cation conc. entered: 3956.7 mg/kg, converted to compound conc.:10976.466 mg/kg or 1.098%)
TPH (C6 to C40) Petroleum Group: (Whole concentration entered as: 10 mg/kg or 0.001%)

User Defined and non CLP Substances

TPH (C6 to C40) Petroleum Group

Comments: Risk phrase data given on page A41
Data source: WM2 3rd edition, 2013
Data source date: 01/08/2013
Classification: R10, R45, R46, R51/53, R63, R65

Test settings

H3-B on R10: Force this test to non hazardous because: "Assumed to be non-flammable below 1000 mg/kg."

Notes utilised in assessment

Additional Risk Phrase Comments
from section: Table 2.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"This is an additional risk phrase and such a risk phrase alone will not cause a waste to be hazardous."

Note used on:

Test: "Additional on R33" for determinand: "Lead chromate"

C14.3: Step 4
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"identify whether any individual ecotoxic substance is present below a cut-off value shown in Table C14.1"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Arsenic trioxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Copper (I) oxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Lead chromate"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Nickel dihydroxide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "TPH (C6 to C40) Petroleum Group"

C14.3: Step 5, Equation 1
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"...only for the substances in the waste above the relevant generic cut-off value, use the four equations given in Table C14.2 to decide if the waste is hazardous by H14"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Zinc chromate"

Substance notes

3.4.2
from section: 3.4.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"If the identity of the oil is unknown, and the petroleum group cannot be established, then the oil contaminating the waste can be classified as non-carcinogenic due to the presence of oil if all three of the following criteria are met:

- the waste contains benzo[a]pyrene (BaP) at a concentration of less than 0.01% (1/10,000th) of the TPH concentration (This is the carcinogenic limit specified in table 3.2 of the CLP for BaP)
- this has been determined by an appropriate and representative sampling approach in accordance with the principles set out in Appendix D, and
- the analysis clearly demonstrates, for example by carbon bands or chromatograph, and the laboratory has reasonably concluded that the hydrocarbons present have not arisen from petrol or diesel

"

Note used on:

determinand: "TPH (C6 to C40) Petroleum Group"

Note 1
from section: 1.1.3.2, Annex VI in the document: "CLP Regulations"
"The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture."

Note used on:

determinand: "Lead chromate"

Note A
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as '... compounds' or '... salts'. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4."

Note used on:

determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
determinand: "Zinc chromate"

Note E (Table 3.2)
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Substances with specific effects on human health (see Chapter 4 of Annex VI to Directive 67/548/EEC) that are classified as carcinogenic, mutagenic and/or toxic for reproduction in categories 1 or 2 are ascribed Note E if they are also classified as very toxic (T+), toxic (T) or harmful (Xn). For these substances, the risk phrases R20, R21, R22, R23, R24, R25, R26, R27, R28, R39, R68 (harmful), R48 and R65 and all combinations of these risk phrases shall be preceded by the word 'Also'."

Note used on:

determinand: "Arsenic trioxide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version

Classification utilises the following:
WM2 - Hazardous Waste Technical Guidance, 3rd Edition, August 2013
CLP Regulations - Regulation (EC) No 1272/2008 of the European Parliament and of the Council: 16 December 2008
1st ATP - 1st Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 26 September 2009; binding date 1 Dec 2010
2nd ATP - 2nd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 30 March 2011; binding date 1 Dec 2012 in respect of substances and 1 June 2015 in respect of mixtures
3rd ATP - 3rd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 31 July 2012; binding date 1 Dec 2013
4th ATP - 4th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 20 June 2013; binding date 1 Jun 2015
5th ATP - 5th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 13 August 2013; binding date 13 Aug 2013

HazWasteOnline Engine: WM2 version 3 (Aug 2013)
HazWasteOnline Engine Version: 1.0.2439.5273 (30 Apr 2014)
HazWasteOnline Database: 1.0.2428.5256 (06 Apr 2014)

Classification

Hazardous Waste
Classified as **17 05 03 ***
in the European Waste Catalogue 2002

Classified by

Name:
Ward, Chris
Date:
02/05/2014 15:26
Telephone:
0

Company:
NetworkRail
The Quadrant
MK, Elder Gate
Milton Keynes
MK9 1EN

Sample details

Sample Name:
ABS 8
Site:

Project:

Sample Depth:
0 m
Dry Weight Moisture Content:
0%
Comments:

EWC 2002 code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing dangerous substances)

Hazard properties

H7: Carcinogenic "substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce cancer or increase its incidence."

Risk phrases hit:

R45 "May cause cancer"

Because of determinands:

Lead chromate: ("Note 1" conc.: 0.156%)
Zinc chromate: (compound conc.:2.335%)

H13: Sensitizing "substances and preparations which, if they are inhaled or if they penetrate the skin, are capable of eliciting a reaction of hypersensitization such that on further exposure to the substance or preparation, characteristic adverse effects are produced. [As far as testing methods are available]."

Risk phrases hit:

R43 "May cause sensitisation by skin contact"

Because of determinand:

Zinc chromate: (compound conc.:2.335%)

H14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment."

Risk phrases hit:

R50/53 "Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment"

Because of determinands:

Lead chromate: ("Note 1" conc.: 0.156%)
Zinc chromate: (compound conc.:2.335%)

Additional: Additional Risk Phrases "This is an additional risk phrase and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinand:

Lead chromate: (compound conc.:0.243%)

Determinands (Dry Weight Moisture Content: 0%)

Arsenic trioxide: (Cation conc. entered: 1.2 mg/kg, converted to compound conc.:1.584 mg/kg or 0.000158%)
Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex: (Cation conc. entered: 1.2 mg/kg, converted to compound conc.:2.308 mg/kg or 0.000231%)
Copper (I) oxide: (Cation conc. entered: 233.6 mg/kg, converted to compound conc.:263.008 mg/kg or 0.0263%)
Lead chromate: (Cation conc. entered: 1558.1 mg/kg, converted to compound conc.:2430.348 mg/kg or 0.243%, "Note 1" conc.: 0.156%)
Nickel dihydroxide: (Cation conc. entered: 166.9 mg/kg, converted to compound conc.:263.618 mg/kg or 0.0264%)
Zinc chromate: (Cation conc. entered: 8416.1 mg/kg, converted to compound conc.:23347.495 mg/kg or 2.335%)
TPH (C6 to C40) Petroleum Group: (Whole concentration entered as: 10 mg/kg or 0.001%)

User Defined and non CLP Substances

TPH (C6 to C40) Petroleum Group

Comments: Risk phrase data given on page A41
Data source: WM2 3rd edition, 2013
Data source date: 01/08/2013
Classification: R10, R45, R46, R51/53, R63, R65

Test settings

H3-B on R10: Force this test to non hazardous because: "Assumed to be non-flammable below 1000 mg/kg."

Notes utilised in assessment

Additional Risk Phrase Comments
from section: Table 2.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"This is an additional risk phrase and such a risk phrase alone will not cause a waste to be hazardous."

Note used on:

Test: "Additional on R33" for determinand: "Lead chromate"

C14.3: Step 4
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"identify whether any individual ecotoxic substance is present below a cut-off value shown in Table C14.1"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Arsenic trioxide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Copper (I) oxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Nickel dihydroxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "TPH (C6 to C40) Petroleum Group"

C14.3: Step 5, Equation 1
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"...only for the substances in the waste above the relevant generic cut-off value, use the four equations given in Table C14.2 to decide if the waste is hazardous by H14"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Lead chromate"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Zinc chromate"

Substance notes

3.4.2
from section: 3.4.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"If the identity of the oil is unknown, and the petroleum group cannot be established, then the oil contaminating the waste can be classified as non-carcinogenic due to the presence of oil if all three of the following criteria are met:

- the waste contains benzo[a]pyrene (BaP) at a concentration of less than 0.01% (1/10,000th) of the TPH concentration (This is the carcinogenic limit specified in table 3.2 of the CLP for BaP)
- this has been determined by an appropriate and representative sampling approach in accordance with the principles set out in Appendix D, and
- the analysis clearly demonstrates, for example by carbon bands or chromatograph, and the laboratory has reasonably concluded that the hydrocarbons present have not arisen from petrol or diesel

"

Note used on:

determinand: "TPH (C6 to C40) Petroleum Group"

Note 1
from section: 1.1.3.2, Annex VI in the document: "CLP Regulations"
"The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture."

Note used on:

determinand: "Lead chromate"

Note A
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as '... compounds' or '... salts'. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4."

Note used on:

determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
determinand: "Zinc chromate"

Note E (Table 3.2)
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Substances with specific effects on human health (see Chapter 4 of Annex VI to Directive 67/548/EEC) that are classified as carcinogenic, mutagenic and/or toxic for reproduction in categories 1 or 2 are ascribed Note E if they are also classified as very toxic (T+), toxic (T) or harmful (Xn). For these substances, the risk phrases R20, R21, R22, R23, R24, R25, R26, R27, R28, R39, R68 (harmful), R48 and R65 and all combinations of these risk phrases shall be preceded by the word 'Also'."

Note used on:

determinand: "Arsenic trioxide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version

Classification utilises the following:
WM2 - Hazardous Waste Technical Guidance, 3rd Edition, August 2013
CLP Regulations - Regulation (EC) No 1272/2008 of the European Parliament and of the Council: 16 December 2008
1st ATP - 1st Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 26 September 2009; binding date 1 Dec 2010
2nd ATP - 2nd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 30 March 2011; binding date 1 Dec 2012 in respect of substances and 1 June 2015 in respect of mixtures
3rd ATP - 3rd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 31 July 2012; binding date 1 Dec 2013
4th ATP - 4th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 20 June 2013; binding date 1 Jun 2015
5th ATP - 5th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 13 August 2013; binding date 13 Aug 2013

HazWasteOnline Engine: WM2 version 3 (Aug 2013)
HazWasteOnline Engine Version: 1.0.2439.5273 (30 Apr 2014)
HazWasteOnline Database: 1.0.2428.5256 (06 Apr 2014)

Classification

Hazardous Waste
Classified as **17 05 03 ***
in the European Waste Catalogue 2002

Classified by

Name:
Ward, Chris
Date:
02/05/2014 15:26
Telephone:
0

Company:
NetworkRail
The Quadrant
MK, Elder Gate
Milton Keynes
MK9 1EN

Sample details

Sample Name:
DP 9
Site:

Project:

Sample Depth:
0 m
Dry Weight Moisture Content:
0%
Comments:

EWC 2002 code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing dangerous substances)

Hazard properties

H7: Carcinogenic "substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce cancer or increase its incidence."

Risk phrases hit:

R45 "May cause cancer"

Because of determinand:

Zinc chromate: (compound conc.:0.254%)

H14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment."

Risk phrases hit:

R50/53 "Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment"

Because of determinand:

Zinc chromate: (compound conc.:0.254%)

Additional: Additional Risk Phrases "This is an additional risk phrase and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinand:

Lead chromate: (compound conc.:0.0408%)

Determinands (Dry Weight Moisture Content: 0%)

Arsenic trioxide: (Cation conc. entered: 1.2 mg/kg, converted to compound conc.:1.584 mg/kg or 0.000158%)
Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex: (Cation conc. entered: 26.5 mg/kg, converted to compound conc.:50.962 mg/kg or 0.0051%)
Copper (I) oxide: (Cation conc. entered: 73.6 mg/kg, converted to compound conc.:82.865 mg/kg or 0.00829%)
Lead chromate: (Cation conc. entered: 261.6 mg/kg, converted to compound conc.:408.048 mg/kg or 0.0408%, "Note 1" conc.: 0.0262%)
Nickel dihydroxide: (Cation conc. entered: 87.1 mg/kg, converted to compound conc.:137.574 mg/kg or 0.0138%)
Zinc chromate: (Cation conc. entered: 915.8 mg/kg, converted to compound conc.:2540.563 mg/kg or 0.254%)
TPH (C6 to C40) Petroleum Group: (Whole concentration entered as: 13 mg/kg or 0.0013%)

User Defined and non CLP Substances

TPH (C6 to C40) Petroleum Group

Comments: Risk phrase data given on page A41
Data source: WM2 3rd edition, 2013
Data source date: 01/08/2013
Classification: R10, R45, R46, R51/53, R63, R65

Test settings

H3-B on R10: Force this test to non hazardous because: "Assumed to be non-flammable below 1000 mg/kg."

Notes utilised in assessment

Additional Risk Phrase Comments
from section: Table 2.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"This is an additional risk phrase and such a risk phrase alone will not cause a waste to be hazardous."

Note used on:

Test: "Additional on R33" for determinand: "Lead chromate"

C14.3: Step 4
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"identify whether any individual ecotoxic substance is present below a cut-off value shown in Table C14.1"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Arsenic trioxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Copper (I) oxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Lead chromate"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Nickel dihydroxide"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "TPH (C6 to C40) Petroleum Group"

C14.3: Step 5, Equation 1
from section: C14.3 in the document: "WM2 - Hazardous Waste Technical Guidance"
"...only for the substances in the waste above the relevant generic cut-off value, use the four equations given in Table C14.2 to decide if the waste is hazardous by H14"

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Zinc chromate"

Substance notes

3.4.2
from section: 3.4.2 in the document: "WM2 - Hazardous Waste Technical Guidance"
"If the identity of the oil is unknown, and the petroleum group cannot be established, then the oil contaminating the waste can be classified as non-carcinogenic due to the presence of oil if all three of the following criteria are met:

- the waste contains benzo[a]pyrene (BaP) at a concentration of less than 0.01% (1/10,000th) of the TPH concentration (This is the carcinogenic limit specified in table 3.2 of the CLP for BaP)
- this has been determined by an appropriate and representative sampling approach in accordance with the principles set out in Appendix D, and
- the analysis clearly demonstrates, for example by carbon bands or chromatograph, and the laboratory has reasonably concluded that the hydrocarbons present have not arisen from petrol or diesel

"

Note used on:

determinand: "TPH (C6 to C40) Petroleum Group"

Note 1
from section: 1.1.3.2, Annex VI in the document: "CLP Regulations"
"The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture."

Note used on:

determinand: "Lead chromate"

Note A
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as '... compounds' or '... salts'. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4."

Note used on:

determinand: "Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex"
determinand: "Zinc chromate"

Note E (Table 3.2)
from section: 1.1.3.1, Annex VI in the document: "CLP Regulations"
"Substances with specific effects on human health (see Chapter 4 of Annex VI to Directive 67/548/EEC) that are classified as carcinogenic, mutagenic and/or toxic for reproduction in categories 1 or 2 are ascribed Note E if they are also classified as very toxic (T+), toxic (T) or harmful (Xn). For these substances, the risk phrases R20, R21, R22, R23, R24, R25, R26, R27, R28, R39, R68 (harmful), R48 and R65 and all combinations of these risk phrases shall be preceded by the word 'Also'."

Note used on:

determinand: "Arsenic trioxide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version

Classification utilises the following:
WM2 - Hazardous Waste Technical Guidance, 3rd Edition, August 2013
CLP Regulations - Regulation (EC) No 1272/2008 of the European Parliament and of the Council: 16 December 2008
1st ATP - 1st Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 26 September 2009; binding date 1 Dec 2010
2nd ATP - 2nd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 30 March 2011; binding date 1 Dec 2012 in respect of substances and 1 June 2015 in respect of mixtures
3rd ATP - 3rd Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 31 July 2012; binding date 1 Dec 2013
4th ATP - 4th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 20 June 2013; binding date 1 Jun 2015
5th ATP - 5th Adaptation to Technical Progress for European Regulation 1272/2008: Date entered into force 13 August 2013; binding date 13 Aug 2013

HazWasteOnline Engine: WM2 version 3 (Aug 2013)
HazWasteOnline Engine Version: 1.0.2439.5273 (30 Apr 2014)
HazWasteOnline Database: 1.0.2428.5256 (06 Apr 2014)

Classification

Non Hazardous Waste
Classified as **17 05 04**
in the European Waste Catalogue 2002

Classified by

Name:
Ward, Chris
Date:
02/05/2014 15:26
Telephone:
0

Company:
NetworkRail
The Quadrant
MK, Elder Gate
Milton Keynes
MK9 1EN

Sample details

Sample Name:
ABS 10
Site:

Project:

Sample Depth:
0 m
Dry Weight Moisture Content:
0%
Comments:

EWC 2002 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

Additional: Additional Risk Phrases "This is an additional risk phrase and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinand:

Lead chromate: (compound conc.:0.00992%)

Determinands (Dry Weight Moisture Content: 0%)

Arsenic trioxide: (Cation conc. entered: 18.1 mg/kg, converted to compound conc.:23.898 mg/kg or 0.00239%)
Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex: (Cation conc. entered: 30.3 mg/kg, converted to compound conc.:58.269 mg/kg or 0.00583%)
Copper (I) oxide: (Cation conc. entered: 47.3 mg/kg, converted to compound conc.:53.255 mg/kg or 0.00533%)
Lead chromate: (Cation conc. entered: 63.6 mg/kg, converted to compound conc.:99.204 mg/kg or 0.00992%, "Note 1" conc.: 0.00636%)
Nickel dihydroxide: (Cation conc. entered: 91.3 mg/kg, converted to compound conc.:144.208 mg/kg or 0.0144%)
Zinc chromate: (Cation conc. entered: 201.4 mg/kg, converted to compound conc.:558.713 mg/kg or 0.0559%)
TPH (C6 to C40) Petroleum Group: (Whole concentration entered as: 12 mg/kg or 0.0012%)