

4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP
Wales
www.arup.com

t +44 29 2047 3727
f +44 29 2047 2277
d +44 29 20266____

Project title	WAST AFSRC Wrexham	Job number 213833
cc	Sergio Solera Daymon Brocklebank	File reference P030-ARU-RP-ARC-C008
Prepared by	Katherine Iles/Agnieszka Lopez-Parodi David Lynesmith	Date 4 October 2012
Subject	Mounds Re-use Technical Note	

1.0 Purpose of this summary

This summary provides a geotechnical and geo-environmental assessment of the suitability of the soil mounds on the AFSRC Wrexham site for re-use as general fill on the site, and an interpretation of the factual information from exploratory holes excavated in the mounds provided by the following ground investigation reports:

- Ian Farmers Associates, Report No 40882, June 2011
- CC Geotechnical, Soil Mounds Report No 6693, July 2012

This mound re-use technical note has been prepared for BAM to provide information on the suitability of re-using the mound material on site to raise site levels, predominantly beneath hardstanding and to provide advice on appropriate off-site disposal should this be necessary.

The aim of this note is also to provide reassurance to the Local Planning Authority that the mounds materials, particularly where previous investigations encountered refuse materials, are suitably assessed in relation to potential reuse with respect to potential risk to controlled waters and human health.

2.0 Proposed development

It is proposed to redevelop the site as an ambulance depot comprising buildings and associated access road and car parking areas. This will result in the majority of the site being covered by either by hard standing or buildings, with limited planting areas as presented on Figure 3. It is also proposed to place a minimum of 300mm of clean imported topsoil materials in the area of planting.

Due to the flood defense requirement the development platform has been set at between 90 and 92mOD, up to 2.8m above the existing ground level. This will result in substantial cut and fill activities as part of the enabling works as presented on Figure 2. Current earthworks balance indicates that some 9500m³ of additional fill materials will be required to achieve the desirable level.

Therefore it is proposed to reuse the materials currently contained within the mounds if they are proven suitable. The volume of the mounds has been estimated at 13,000m³ as detailed in Table 8. The suitability of reuse of these materials in relation to controlled waters and end site users has been assessed as outlined in the following sections of the note.

3.0 Initial conceptual site model

The purpose of this initial conceptual site model is to present the proposed development and the environmental setting of the site to show plausible contamination source, pathway and receptor linkages.

The following information has been reviewed to inform the conceptual site model:

- o Envirocheck report - obtained for an adjacent site on 21 July 2010 comprising datasheets, historical plans, geology, coal mining report and site sensitivity plan
- o geotechnical design technical note – detailing the site, site history and geology
- o ‘what’s in your back yard’ section of the EA’s website <http://maps.environment-agency.gov.uk/wiyby>
- o ground investigation reports listed in Section 1 above
- o proposed development plan, Figure 3
- o site walkover

The site is centred on National Grid Reference 332093, 350292 west of Wrexham town centre, north-east Wales. The site is an approximately triangular area of relatively flat open undeveloped grassed land south of Wrexham Maelor Hospital and associated car park. This technical note relates to four mounds of soil that are present on the site. The origin of the mound material and exact date placed is currently unknown. The locations of the mounds are presented on Figure 1.

The typical composition of the mounds has been described as reddish brown slightly silty clayey gravelly sand with low cobble content and occasional man-made inclusion. Details on the composition of each of the four mounds from exploratory investigations are detailed in Section 5 below.

Historical maps dated between 1879 to 2010 shows the site to have remained open undeveloped land, and the Wrexham & Mineral Great Western Railway line ran along the northern part of the site in the location of the existing hospital car park, shown from 1879 until 1992, where it is last shown as dismantled.

Review of the 1:50,000 scale geological plan, shows the site is underlain predominantly by glacio-fluvial deposits and a tract of alluvium along the Gwenfro River. The solid geology is the Pennine Lower Coal Measures comprising of mudstone, siltstone and sandstone.

There are no EA or Local Authority recorded landfill sites within or adjacent to the site boundary.

The only reported pollution licence within 1 km of the site, is held by Wrexham Maelor Hospital, located north of the site, a licence (ref CE0265) is held to release radioactive substances to a sewer.

The Gwenfro River flows in an easterly direction along the southern site boundary. The river Gwenfro has a protected 15m ‘ecology corridor’ along its entire length, as shown on Figure 3, where no development is permitted.

The superficial deposit and bedrock are designated as a Secondary A aquifer. Secondary A aquifers are defined by the EA as *‘permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers’*

There are no source protection zones or nitrate vulnerable zones within the site boundary or within 1km of the site boundary.

Source – Pathway - Receptor

The proposed development comprises predominantly buildings and hardstandings with peripheral areas of low level herbaceous planting. It is understood that the mound material is proposed to be placed as fill across the site to raise levels primarily beneath hardstanding and buildings, as shown on Figures 2 and 3. The sources – pathway – receptor pollution linkages have taken this into account and a summary of the sources-pathways-receptor relationship is provided below:

Sources	pathways	receptors
Mound material from unknown origin to be placed as fill (predominantly beneath buildings and hardstandings)	Direct contact, dermal absorption, soil ingestion during earthworks Vapour inhalation across the site during site end use. Lateral and vertical migration of contaminants (including leachate generation) via permeable unsaturated strata associated with planting areas. Uptake via root system	Human health - of construction workers involved in the development, site end users and maintenance workers Gwenfro River Groundwater – Secondary A Aquifer Proposed Buildings and structures Proposed planting - in proposed low level herbaceous peripheral areas

Summary

The proposed development will result in the majority of the site covered in hardstanding and buildings with a minimum of 300mm of topsoil within the planting areas. Consequently the direct pathways of exposure of end site users such as ingestion of soil and dust, and dermal contact to the fill materials will be eliminated. However, the proposed planting plots are to be located within the area of the development where up filling operations are currently proposed. Therefore the exposure scenario with vapour inhalation particularly of volatile hydrocarbon compounds remains viable.

In addition, rainwater infiltration in the areas of planting may result in leaching of contaminants from the fill materials via the unsaturated zone into the underlying aquifer. This contamination may then be transported laterally into the Gwenfro River. Therefore these pollution linkages will be assessed based on soil and leachate results from both 2011 and 2012 ground investigations.

For the purpose of risks to site end users it is proposed to use the published Soil Guidance Values (SGVs) and Generic Assessment Criteria (GAC) for a commercial and industrial land use scenarios as this most closely correlates with the proposed development.

4.0 Volume and location of mounds

The locations of the mounds and the trial pits undertaken are shown on **Figure 1**. The total volumes of the mounds are provided in Table 8, and have been estimated using the software Microstation InRoads.

5.0 Ground Investigations

10No. exploratory holes from the 2011 investigation were undertaken on the mounds and an additional 24No. trial pits were undertaken on the mounds in 2012. The exploratory holes undertaken on each mound are summarised in the **Table 1** below, and are shown on **Figure 1**.

Table 1: Exploratory holes undertaken on the soil mounds

Ground Investigation	Mound 1	Mound 2	Mound 3	Mound 4
2011 Ian Farmers investigation	BH01, TP14, TP15, TP28	TP16, TP17, TP27, BH02, TP26	TP29	-
2012 CC-G investigation	TPM01 – TPM05, TPM24	TPM06 – TPM18, TPM21	TPM18 – TPM20	TPM22, TPM23

Samples from the 2011 and 2012 investigations were taken from representative locations within the mounds, including the middle and base. The trial pitting and associated sampling was overseen by an environmental engineer from Arup.

All strata within the stockpiles were sampled, with the exception of any domestic refuse encountered. Any domestic refuse within the stockpiles will not be suitable for re-use and will therefore require off-site disposal at a suitable domestic landfill site. It was therefore not considered necessary to analyse any samples of refuse during the trial pitting investigation.

Testing for re-usability was undertaken in accordance with the following recommendations:

- Moisture content/Atterberg Limits: 1No/500m³
- Gradings and pipettes : 1No/750m³
- Compaction (2.5kg hammer): 1No/2000m³
- Hand vanes in situ to any clay found in the mounds during excavation for sampling purposes.
- Full suite of BRE SD1 sulphate tests (acid, soluble, pH and sulphur): 1No/1500m³
- Soils leachate analyses

In order to confirm the contaminative nature of materials within the stockpile, dry weight analyses were undertaken. Potential suitability for re-use will be determined on the basis of the dry weight results as well as leachability analyses (L/S 2).

In order to ascertain to which landfill class the materials can be disposed of should off-site disposal be necessary, Waste Acceptance Criteria testing was also undertaken, which consisted of a suite of both dry weight and WAC leachate parameters.

The frequency of testing for dry weight analysis was approximately 1 per 250m³ and for leachability analysis 1 per 500m³ material.

The logs are included within the factual reports from the 2011 and 2012 ground investigations.

6.0 Description of material encountered in mounds

The material encountered within the 4No. Mounds present on the site have been described based on review of both 2011 and 2012 ground investigation logs.

Generally, the mounds comprise three different types of material. These include:

1. Mounds 1 and 2 – Reddish/brown gravelly sand / silty clay
2. Eastern plateau to Mound 2 - Domestic refuse
3. Mound 3 - Brown topsoil, clayey sand and gravel
4. Mound 4 – Reddish/brown silty clay / clayey gravelly sand

A summary of the composition of each mound is presented below:

Mound 1

The material encountered in exploratory holes BH01, TP14, TP15 and TP28 during the 2011 GI and TPM1, TPM2, TPM3, TPM4 and TPM5 during the 2012 GI in Mound 1 was generally described as a reddish brown slightly silty clayey gravelly sand with low cobble content, with rare inclusions of red brick, coal and clinker in TPM1, 2, and 3 and rare to occasional pockets of brown sandy gravelly clay in TPM4 and TPM5 within the eastern part of the mound. TP14 and TP15 were excavated within the southern slopes of the mound, tarmac road surface was encountered in at 92.8m OD within an old road beneath the southern edge of Mound 1. Rare breeze blocks were encountered towards the base of Mound 1 at 93.1mAOD in TPM3 in the central area of the mound.

TPM24 excavated within the southern perimeter of Mound 1 encountered a former road comprising of tarmac and sub base hardcore materials.

Mound 2

The material encountered in trial pits TP16 and TP17, TPM6, 7, 8, 9, 10, 11, 13 and 14 was described as reddish brown silty sandy gravelly clay / silty clayey gravelly sand / with pockets of organic clay and rare inclusions of brick fragments, coal, clinker, ceramics and tarmac fragments. Some scrap plastic material was encountered in TP17 at 3.6m depth and plastic yellow pipe was encountered in TPM8. Blue plastic sheeting, plastic bottle and wire fencing and cobbles and small boulders of concrete at 1.5m depth were encountered in TPM17. TP27 at the southern end of Mound 2 encountered slightly silty very gravelly sand. At the top of the south-eastern slope to Mound 2 a 3.5m thickness of topsoil material encountered much anthropogenic material such as red brick, concrete, ceramic, glass, breeze block, insulation block, tile fragments and rare plastic. A boulder of concrete was encountered at 2m below the top of the mound.

Eastern plateau of Mound 2

BH2, TPM12 and TPM21 were excavated within the lower eastern plateau to Mound 2. BH2 encountered brown to dark grey brown sandy gravelly clay to 1.2m depth then a 2.7m thick layer of domestic refuse to 3.9m depth. Domestic refuse was also encountered in TPM12 and TPM21 from surface to 1.1m and 2.1m respectively, comprising of dark brown gravelly silt with inclusions of clothing, fabric, food packets, plastic bags, bin bags, drink cans, rope, carpet, barbed wire and glass.

TP26 located to the east of Mound 1 encountered a slightly clayey, gravelly, slightly organic, fine to coarse SAND.

Mound 3

The material encountered at Mound 3 in TP29, TPM18, TPM19 and TPM20 was described as a topsoil comprising brown and dark brown very sandy, gravelly clay / silt and gravelly sand, with occasional rootlets and gravel of sandstone, limestone and quartzite.

Mound 4

In Mound 4, material was similar to that encountered in Mounds 1 and 2. TPM22 and TPM23 encountered a reddish brown sandy gravelly clay / clayey gravelly sand, with rare brown pockets of clay and rare inclusions of black plastic pipe and black ceramics, brick and tarmac fragments.

A strong putrid organic odour was encountered at the base of Mound 4 at 92.35mAOD in TPM22 and 92.58mAOD in TPM23, below this a former compacted road surface was encountered comprising grey silty sandy gravel.

7.0 Geo-environmental Assessment of the suitability of the mounds for re-use

7.1 Geo-environmental assessment

Mound 2 – lower eastern plateau

Approximately 10% (720m³) of Mound 2 is estimated to be domestic refuse. This comprises the lower eastern plateau of Mound 2. No domestic waste was found in other mounds.

There are however, but in no significant quantities, rare inclusions of red brick fragments, coal, and some clinker throughout the reddish brown material. There are also very localised occurrences of scrap plastic and wire fencing within the reddish brown material. However, these were localised and not domestic waste similar to that encountered in the lower eastern plateau of Mound 2. Rare breeze blocks were also encountered towards the base and in the central area of Mound 1.

No laboratory analyses have been undertaken on the domestic waste material as this alone deems it unacceptable for re-use and should be disposed of off-site at a suitably licensed landfill.

Geo-environmental assessment of Mounds 1, 2, 3 and 4 (excluding domestic waste in lower eastern plateau)

Introduction

A total of 45No. soil samples were taken from all four mounds as part of both 2011 and 2012 ground investigations and submitted to a suitably accredited laboratory. In addition, 2:1 leachate and Waste Acceptance Criteria (WAC) testing was also undertaken on the soil samples. The number of samples analysed from each mound for each type of analyses are summarised in Table 2 below:

Table 2: Number of samples analysed in each mound

Mound	Number of soil dry weight analyses		Number of 2:1 soil leachate		Number of 2:1 soil leachate as part of WAC suite	
	2011	2012	2011	2012	2011	2012
Ground Investigation						
1	6	5	-	2	2	5
Perimeter & beneath Mound 1 (TPM24)	-	2	-	1	-	2
2	5	18	-	12	1	17
3	1	4	-	2	1	4
4	0	4	-	3	0	4
Total	12	33	-	20	4	32

The laboratory testing suite comprised of metals, non-metals inorganics, asbestos screen, speciated Polycyclic Aromatic Hydrocarbons (PAHs), Total Petroleum Hydrocarbons (TPHs) with carbon banding C6-C40, TPH aromatics and aliphatics C5-C35, Benzene, Toluene, Ethylbenzene, Xylene (BTEX), Volatile Organic Compounds (VOCs), semi-Volatile Organic Compounds (sVOCs), 2:1 soil leachate analyses and Waste Acceptance Criteria (WAC) testing.

A location plan of the trial pits are presented on Figure 1. Comparison with screening values is presented in Appendix A.

Assessment Methodologies

The assessment methodologies are presented in Table 3 below:

Table 3: Assessment Methodologies

	Chemical Results	Assessment Criteria	Purpose
1	Soil dry weight	Commercial SGVs or GACs	Human health Re-use
2	2:1 Soil leachate	Environmental Quality Standards (EQS)	Re-use
3	Waste Acceptance Criteria testing	Hazardous / non-hazardous assessment and comparison with landfill waste acceptance criteria limit values	Off-site disposal

Note: SGV denotes Soil Guideline Values, GAC denotes Generic Assessment Criteria

The assessment methodologies listed in **Table 3** above are described below:

1. The soil dry weight results have been compared to commercial soil screening values for human health risk assessment and re-use assessment. Each mound material has been assessed separately.
2. 2:1 soil leachate results and 2:1 soil leachate results from the Waste Acceptance Criteria (WAC) suite have been compared to Environmental Quality Standards (EQS), where the EQS is dependent on water hardness; the water hardness of the receiving surface water body has been applied. The Environment Agency has provided the water hardness of the Gwenfro of 343mg/l. Therefore for hardness dependent compounds have been assessed against EQS for hardness range above 250 mg/l.
3. The results of the dry weight analyses have been assessed using the HazWasteOnline™ computer package. This software allows an accurate classification of materials as hazardous or non-hazardous on the basis of the concentrations of “worst case compounds” contained within the samples. Once it is ascertained as to whether the materials are hazardous or non-hazardous, the results of the WAC leachate analyses are compared to Waste Acceptance Criteria for the relevant landfill class (inert, non hazardous, stable non-reactive hazardous).

In summary, the laboratory analyses results of the samples obtained from the site have been assessed to:

- Identify whether the materials are hazardous or non-hazardous (using HazWasteOnline computer model and dry weight analyses);
- Identify to which landfill class materials would be accepted in accordance with current Waste Acceptance Criteria (based on WAC leachate analyses results – including additional limited dry weight analyses).

Soil Dry Weight Assessment

The soil chemical results comparison are presented in the **Appendix A**.

A detailed review of the 45No soil analytical results has been carried out on the mounds material for contamination screening purposes with respect to human health and is presented in **Appendix A**. This assessment indicates the all of contaminants were measured at concentrations below the screening values.

Soil Leachate Assessment

As identified in Section 3 potential controlled waters receptors are the Gwenfro River and underlying groundwater classified as secondary A aquifer. Therefore soil and leachate testing was undertaken to inform the assessment of risk in relation to these receptors.

The soil leachate results comparison are presented in **Appendix A**. Cadmium, chromium, mercury and two of PAHs (indeno(123cd)pyrene and benzo(ghi)perylene) were measured with laboratory detection levels higher

than the applied assessment criteria. Consequently, the assessment of potential risk to controlled waters cannot be undertaken for these compounds.

The majority of determinands were measured below the applied assessment criteria in the mounds materials except for a single slight exceedance of the applied assessment criterion for lead in one sample obtained from Mound 3 in TPM18 at 1.3m and PAHs measured at slightly elevated concentrations in two samples obtained from Mound 2 in TPM10 at 4m and TPM17 at 1.2m:

- o lead was measured at 9 µg/l slightly above the applied EQS of 7.2 µg/l in Mound 3 in TPM18 at 1.3m
- o two benzo(b)fluoranthene (0.05 µg/l and 0.06 µg/l) and two benzo(k)fluoranthene (0.03 µg/l and 0.04 µg/l) concentrations in TPM10 at 4m and TPM17 at 1.2m (Mound 2) are above the combined EQS of 0.03 µg/l.
- o benzo(a)pyrene concentrations of 0.06 µg/l in TPM17 at 1.2m (Mound 2) measured above the EQS of 0.05 µg/l
- o two indeno(123-cd)pyrene (0.01 µg/l and 0.03 µg/l) and benzo(ghi)perylene (0.01 µg/l and 0.05 µg/l) concentrations in TPM10 at 4m and TPM17 at 1.2m (Mound 2) are above the combined EQS of 0.002 µg/l.

This initial assessment identified marginal exceedances of the applied assessment criteria for lead in sample and PAHs in 2 samples (benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(123-cd)pyrene and benzo(ghi)perylene). These soil samples were obtained from Mounds 3 and 2 respectively.

7.1.1 Geo-environmental Summary

Soils

In summary, a detailed review of the 45No soil analytical results has been carried out on the mound material for contamination screening purposes with respect to human health **Appendix A**. This indicates that these mound materials are suitable for use within the proposed development in relation to site end-users.

In addition, the risk to site operatives during the earthworks is considered low and therefore the use of standard PPE (such as long sleeved site jackets and trousers, gloves and eye protection) and provision of standard welfare facilities is deemed sufficient except for handling of the refuse like materials. Operatives involved in these operations particularly where a direct contact with these materials is likely, as a minimum, should be equipped with disposable overalls, eyes protection, face masks, and chemically and puncture resistant gloves.

Leachate

An assessment of soil leachate results has been undertaken in relation to the nearest surface water receptor, the Gwenfro, which flows along the southern boundary to the site. The majority of the proposed development is to be covered in hardstanding, which will significantly reduce if not eliminate the rainwater infiltration through the fill materials. However, in the areas of proposed planting the infiltration is expected to remain relatively high.

The identified exceedances, are not considered significant. However to prevent any impact on the quality of controlled water receptors, particularly from PAH compounds, it is recommended that the materials from Mound 2 are placed only in areas of proposed hardstanding and buildings.

7.1.2 Recommendations in relation to re-useability

A summary of the contamination assessment results is presented below in relation to human health and re-use, see **Table 4** below. The last three columns of the table indicate the reuseability of the mound material based on chemical assessment of the materials.

It is estimated that 796m³ of domestic refuse is present at the eastern side / eastern plateau of Mound 2. This domestic refuse is distinctively different from the Mound 2 material/soils. In terms of practicalities, removal of the domestic refuse from along the eastern side / plateau of mound 2 is anticipated to be straight forward by visually inspection as the material is removed. The domestic refuse should be disposed off site at a suitably licensed landfill.

Table 4: Summary of Suitability based on Contamination Assessment only

Mound & approx volume	Soil	Leachate	Re-use	Re-use: Suitable	Re-use: Not suitable
1 3,590m ³	✓	✓	Yes	100%	0%
2 7,164m ³	✓	✓	Yes, under hardstanding	100%	0%
2 - Eastern Plateau 796m ³	-	-	No, domestic refuse. To be disposed off site at a domestic landfill	0%	100%
3 610m ³	✓	✓	Yes	100%	0%
4 670m ³	✓	✓	Yes	100%	0%
ground beneath Mound 1 and 2	✓	✓	Yes	-	-
Total mounds 12,830 m³	-	-	Total:	12,034m³	796 m³

Table 4 above provides a summary of the suitability of re-using the mound materials in the proposed development based on the contamination assessment only.

7.1.3 Geo-environmental conclusions

The assessments undertaken in relation potential risks to human health and controlled waters have indicated that the majority of the mounds materials except for the refuse materials within Mound 2 – eastern plateau are suitable for re-use within the proposed development.

It is however recommended that the Mound 2 materials identified as suitable for reuse (approximately 7,164m³) are placed beneath the hardstanding and buildings only. This is to prevent any potential impacts on the quality of controlled waters receptors.

8.0 Geotechnical Assessment of re-usability

Particle Size Distribution (PSD) tests, hand shear vane tests, moisture content and Atterberg limit tests, 2.5kg compaction tests and pH and sulphate tests were undertaken on samples from the trial pits.

The re-use of the materials encountered has been assessed in accordance with the Specification of Highway Works, Series 600 Earthworks. The materials encountered have been classified as follows:

Class 1 – General Granular Fill. Any material with less than 15% of particles passing the 63µm sieve. Material that had natural moisture contents slightly above or below the optimum moisture content in the compaction tests, and may require a small amount of wetting/drying before compaction. Material generally described as gravelly SAND or sandy GRAVEL.

Class 2 – General Cohesive Fill. Any material with over 15% of particles passing the 63µm sieve and with a minimum undrained shear strength of 50kPa. Material that had natural moisture contents slightly above the optimum moisture content in the compaction tests, and would require some drying before compaction. Material generally described as slightly clayey SAND or slightly clayey GRAVEL.

Class U1A – Unacceptable material, unless treated. Any material with over 15% of particles passing the 63µm sieve and with a minimum undrained shear strength of 50kPa, similar to Class 2 but material that had natural moisture contents above the optimum moisture content in the compaction tests, and would require significant drying / treatment to become suitable for Class 2. Material generally described as very clayey SAND or GRAVEL and material described as CLAY.

Class U1B – Unacceptable material that is contaminated or domestic refuse, as identified in the geo-environmental assessment. This material is unacceptable for re-use and must be sent to landfill.

From the geo-environmental assessment, approximately 10% of Mound 2 is domestic refuse is unsuitable for re-use. For the remaining material, the following percentages of Class 1, Class 2 and Class U1A have been estimated:

Table 5: Percentages of Class 1, Class 2 and Class U1A of the remaining material that isn't Class U1B

Mound	Class 1	Class 2	Class U1A
1	30	20	50
2	35	20	45
3	0	75	25
4	0	0	100

In Mound 1, the Class 1 material was the top 2m of TPM01, TPM04 & TPM05 with Class U1A underneath. TPM02 was all Class 2 and TPM03 was all Class U1A.

In Mound 2, the Northern end (TPM06, TPM07, TPM08, TPM10) was predominately Class U1A, with a small amount of Class 2 in TPM06 and the Northern end contained all of the Class U1A in Mound 2. The Southern end was predominantly Class 1 or 2. Class 1 was generally on the top 1- 3m (TPM09, TPM11, TPM13, TPM14, TPM15, TPM16, TPM17) with Class 2 below. TPM13 was the exception, with Class 2 over Class 1 and TPM09 encountered Class U1A rather than Class 2 under the Class 1. The eastern plateau of Mound 2 was domestic refuse (TPM12, TPM21).

Mound 3 was generally Class 2, TPM20 had some Class U1A from 1 – 2.2m depth. Mound 4 was all Class U1A, encountered in TPM22 & TPM23.

The pH and sulphate test results undertaken fall within the BRE Special Digest 1 Design Sulphate Class DS-1 and assuming mobile groundwater conditions, the Aggressive Chemical Environment for Concrete (ACEC) class is AC-1. Therefore, suitable fill could be placed with 500mm of concrete if required.

As the ARC and Fire Training building will be plied with a suspended floor slab, the soils could be used as general fill, or Class 2 as defined in the specification for highway works. General access roads in embankments could be constructed with these soils, but capped with granular soils to get a CBR = 15%.

The material classed as Class U1A could be used as Class 2 if some treatment is undertaken.

- The material could be allowed to dry out. However, bearing in mind the typical British weather this is unlikely to happen.
- Alternatively, the material could be treated by adding 1-3% of lime. The assumption that 1% lime reduces the moisture content by approx. 3% is a good starting point. Laboratory tests (swelling) and field trials will be required to assess the suitability of the Class 2 soils for lime treatment. This is outside Arup's current brief, and will require discussions with specialist sub-contractors.
- The third option is to mix the Class 1 and Class 2 soils to try to get the moisture content down to an acceptable level. This can only be verified during the site operations by testing the mixed soils. However, bearing in mind that only 30% of soils that isn't domestic refuse are Class 1 it can be assumed that there is insufficient material to treat all the unsuitable Class 2. On this basis, it is suggested that only half of the Class U1A can be treated in this way, subject to confirmation during the site operations by laboratory testing of the moisture content.

Table 8 summarises the total volume of the mounds and the estimated percentage of unacceptable Class U1B material and the estimated total percentages of Classes 1, 2 and U1A material.

9.0 Waste Characterisation Assessment

It is understood that there may be a requirement to remove some/all of the material mounds currently on the site. Should this occur, offsite disposal to landfill is considered likely, and therefore the materials require assessment in order to determine to which landfill class they could be disposed.

In accordance with the European Waste Catalogue (EWC), the materials encountered within the trial pits excavated have been classed as:

Mounds 1 to 4: 17 05 03*: Soil and stones containing dangerous substances (mirror entry)

Eastern plateau of Mound 2 (refuse): 20 03 01: mixed municipal wastes

Consequently, the dry weight analyses results (45No.) obtained from all four mounds have been initially assessed in accordance with current waste management guidelines, in order to determine whether they contain any hazardous properties. A separate assessment has been undertaken for each of the four mounds.

The results of the initial waste assessment (based on the dry weight analyses results) are presented below. It should be noted that should the contaminants recorded be identified to have potentially hazardous properties, they are (dependent on the associated hazards) either deemed to be hazardous without further assessment or are assessed further to confirm whether they are "truly hazardous".

Initial Waste Classification Results

The results of the initial waste classification, using the HazWasteOnline model are enclosed within **Appendix B**.

It is noted that domestic refuse materials were encountered within the eastern plateau of Mound 2. As detailed in Section 5 of the EA's guidance on 'Waste Acceptance at Landfills' ¹ a non hazardous landfill can accept municipal / domestic waste and therefore these materials were not analysed or assessed to determine potential landfill disposal options.

The initial assessment undertaken on the dry weight analyses results from each of the four mounds (excluding the eastern plateau of mound 2) of soil indicates the following:

Table 6: Identified Hazard Property

Sample Location	Sample location	Hazardous Property [Risk Phrase]	Contaminant	Initial Classification
Mound 1	BH01 at 0.5m	H12: produces hazardous gases when in contact with air, water or acid R32: "contact with acids liberates very toxic gas"	Total Cyanide (0.2mg/kg or 0.000020%)	Potentially hazardous
Mound 2	TP17 at 1m	H12: produces hazardous gases when in contact with air, water or acid R32: "contact with acids liberates very toxic gas"	Total Cyanide (0.1mg/kg or 0.000010%)	Potentially hazardous
Mound 3	-	-	-	Non hazardous
Mound 4	-	-	-	Non hazardous

Mound 1 and Mound 2

An initial potentially hazardous classification has arisen due to total Cyanide in BH01 at 0.5m (0.2mg/kg or 0.000020%) and TP17 at 1m (0.1mg/kg or 0.000010%). Any detectable concentration of cyanide is conservatively identified to fall under Hazard Class H12 "Waste which releases toxic or very toxic gases in contact with water, air or an acid."

The potential hazard class has been assigned Risk Phrase R32 (defined in WM2¹ Hazardous Waste Guidance and Annex II of the revised Waste Framework Directive as 'contact with acids liberates very toxic gas'). Following review of the guidance set out in Appendix C12 of the Technical Guidance WM2, it is noted that the recorded percentage make-up of cyanide in each sample (0.00002% and 0.00001% in BH1 and TP17 respectively) is far less than the lowest threshold concentration (0.2%) provided in the guidance for cyanide reactions resulting in toxic gas (under risk phrase R32).

The recorded percentage concentrations of cyanide are considered to be very low. It is noted that the test detection limit applied to the cyanide analyses was predominantly 1mg/kg (which is greater than the detected concentrations in BH1 and TP17), and all concentrations recorded at less than detectable concentrations have not been identified as potentially hazardous.

¹ Hazardous Waste - Interpretation of the definition and classification of hazardous waste. Technical Guidance WM2. Second Edition, version 2.2). Environment Agency, Scottish Environment Protection Agency, Northern Ireland Environment Agency April 2011.

On account of the above, the material sampled from BH1 and TP17 is not considered to be hazardous by virtue of hazard class H12, and therefore a **non-hazardous** classification is deemed most appropriate.

Mounds 3 & 4

No hazardous properties have been identified within the materials within mounds 3 and 4 and therefore these are considered to be **non-hazardous**.

Waste Acceptance Criteria

Non-hazardous materials can be disposed of to non-hazardous landfill sites without the need for further assessment, or can be assessed further against the criteria for disposal at an inert landfill site.

A total of 34 No samples obtained from the mounds were analysed for the Inert Waste Acceptance Criteria suite (with the exception of the refuse materials within the eastern plateau of Mound 2). The results of the analyses undertaken have been screened against the inert landfill criteria, the results of which are summarised below:

Mound 1

The results of the WAC analyses undertaken on soil samples obtained from Mound 1 indicate the material to be compliant with the inert criteria.

Mound 2

Omitting the eastern plateau of mound 2 (which contains domestic refuse and is therefore suitable for non-hazardous disposal only) the results of the samples analysed meet the inert waste acceptance criteria.

Mound 3:

Analyses of samples from TP19 at 1.15m and 4.2m (within Mound 3) indicated total organic carbon to be present at levels (3.8% and 3.6% respectively) in excess of the inert waste acceptance criteria of 3%. Consequently, non-hazardous disposal is considered the most appropriate option for materials within Mound 3. It is noted however that some inert landfill sites may be permitted to receive materials with up to 6% TOC. Consequently, it may be considered prudent in the first instance, to confirm potential acceptance of the materials with an inert landfill operator. If considered unacceptable for inert disposal (by inert landfill operators) disposal at a non-hazardous landfill will be required.

Waste Classification Summary

Review of both the dry weight and WAC leachate analyses results in accordance with current waste management guidelines indicates the following disposal options for the material mounds currently on site.

Table 7: Waste Acceptance Criteria assessment

Location	Acceptable Landfill Class
Mound 1	Inert Landfill Disposal
Mound 2	Inert Landfill Disposal
Mound 2 eastern plateau - domestic waste	Non-hazardous Landfill Disposal
Mound 3	Non-Hazardous Landfill Disposal – Possible Inert landfill disposal following confirmation with landfill operator.
Mound 4	Inert Landfill Disposal

10.0 Conclusions and recommendations

The proposed development will result in a substantial cut and fill exercise. Current earthworks balance indicates that some 9,500m³ of additional fill materials will be required to achieve the desirable final development level. Therefore it is proposed to reuse the materials currently contained within four mounds located on site. The approximate volume of these materials has been estimated at 12,830m³. The suitability of these materials for reuse as fill has been assessed in terms of geo-environmental and geotechnical re-use criteria.

These assessments concluded that 49% of these materials (approximately 6,230 m³) may be classified as Class 1 and 2, which means that they are suitable for reuse as general fill without any treatment. Further 45% (approximately 5,800m³) requires treatment prior to reuse. Therefore, the mounds materials will be sufficient to balance the shortage of fill materials. In addition, it is recommended that any surplus mounds materials designated for disposal should be materials from mounds identified as suitable for disposal at inert landfill facilities such as Mound 1, 2 and 4 as this attracts the lowest costs.

The geo-environmental assessment identified some 800m³ of mound materials as unsuitable for reuse (refuse materials in Mound 2) and which requires disposal. The waste characterisation assessment indicated that these materials are suitable for disposal at a non-hazardous landfill facility.

Figures and Appendices

Figures

Figure 1 Exploratory Hole Location Plans

Figure 2 Proposed Formation Levels / Cut and Fill

Figure 3 Proposed Development

Appendices

Appendix A Soil and Leachate Results Comparison with Screening Values (tables and detailed assessment)

Appendix B Initial Waste Classification

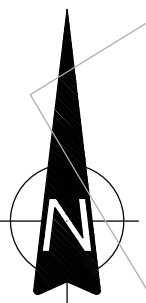
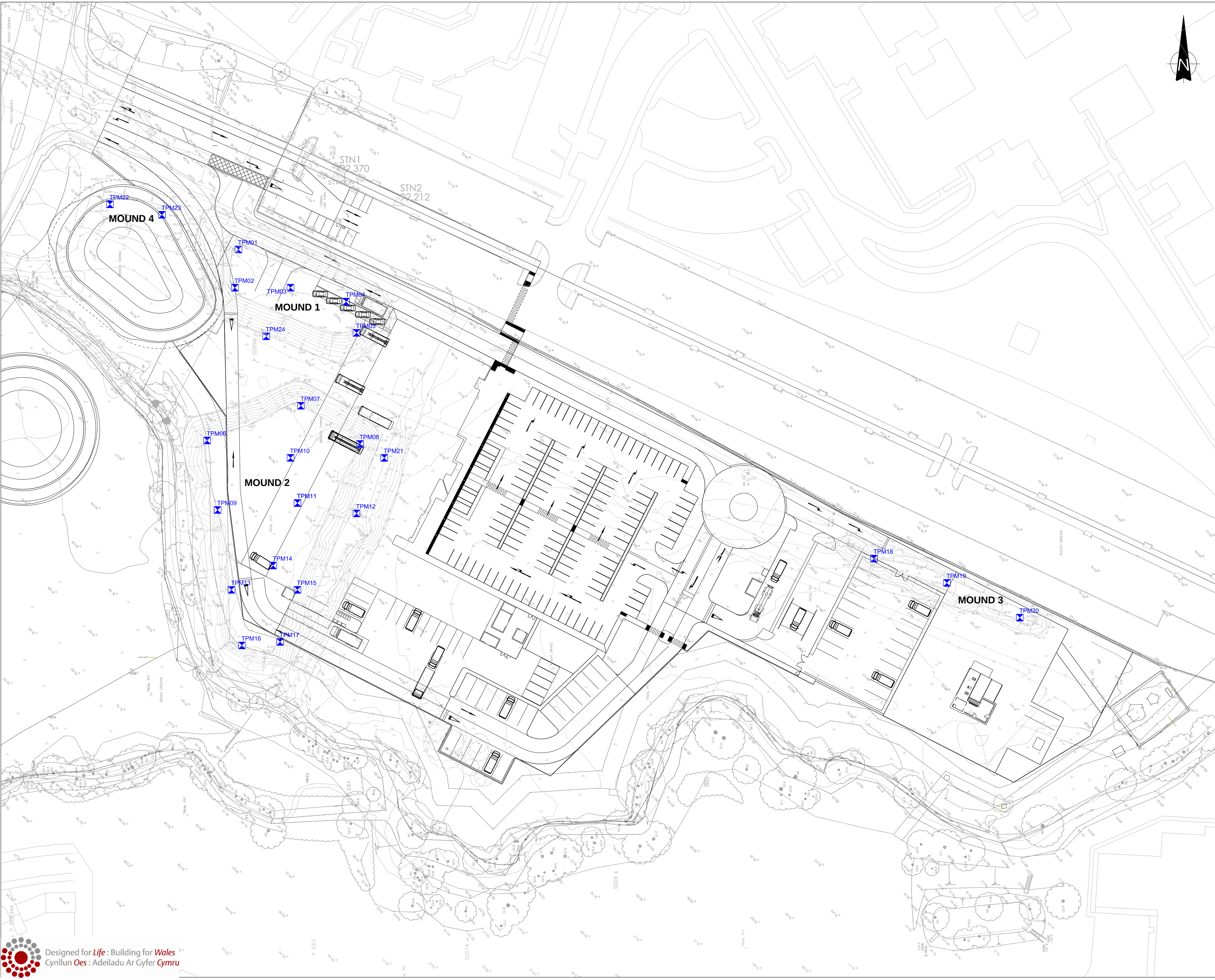
Mound	Total Volume	Unacceptable material due to man-made inclusions / domestic refuse* (Class U1B)	%	Unacceptable as Class 2 unless treated (Class U1A)	%	Acceptable as General Granular Fill (Class 1)	%	Acceptable as General Cohesive Fill (Class 2)	%
1	3590	0	0	1795	50	1077	30	718	20
2	7960	796*	10*	3184	40	2388	30	1592	20
3	610	0	0	153	25	0	0	457	75
4	670	0	0	670	100	0	0	0	0
Total	12830	796	8	5802	45	3465	27	2767	22

Table 8: Estimate of the total volume and percentage of material classed as Class 1 / Class2 / Class U1A and U1B. Volumes are in m³.

DOCUMENT CHECKING

	Prepared by	Checked by	Approved by
Name	Katherine Iles / Agnieszka Lopez-Parodi/ David Lynesmith	Sergio Solera / Charlie Martin	Sergio Solera
Signature			

Figures



Legend:-
2012 CC-Geotechnical Investigation
Trial Pit

Note:-
Refer to Geotechnical Design Technical Note for locations of 2011 Ian Farmers Associates Investigation.

Mark	Date	Details	By	Rvd
REVISIONS				
Trust: Welsh Ambulance Services NHS Trust North Wales Fire and Rescue Services				
Supply Chain Partner: 				
Project Title: WAST AFSRC Wrexham				
Key Plan:				
Scales: 1:500 for the Original Drawing Size: A1				
Drn By: CB	Chkd By: PC	Passed By: GD	Date: AUG '12	
Drawing Status:				
INFORMATION				
Drawing Originator:				
ARUP 4 Pierhead St, Capital Waterside Cardiff, CF10 4QP T +44(0)29 20473727 F +44(0)29 20472277 www.arup.com				
Drawing Title: Mounds Re-use Technical Note - Figure 1 Trial Pit Location Plan				
Job No:	Drawing No:	Revision:		
213833	P030-ARU-C-A00-GR-GA-304			
Do NOT scale this drawing. Refer to Architects for details of current building layouts				

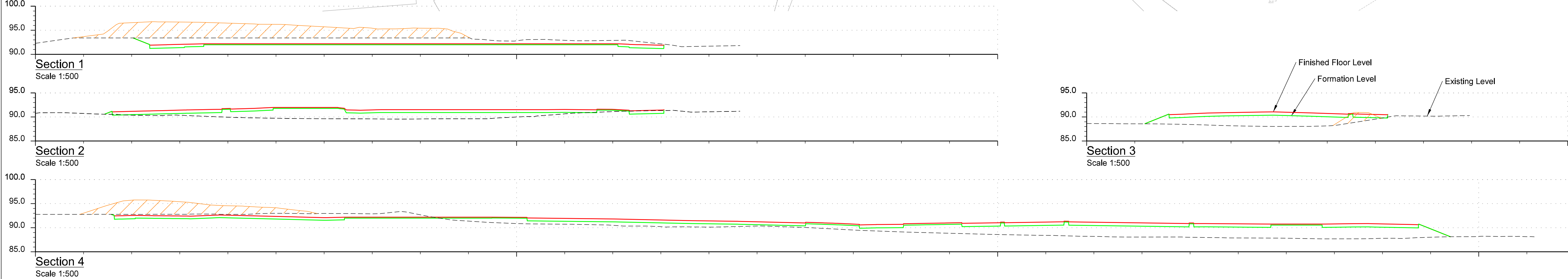
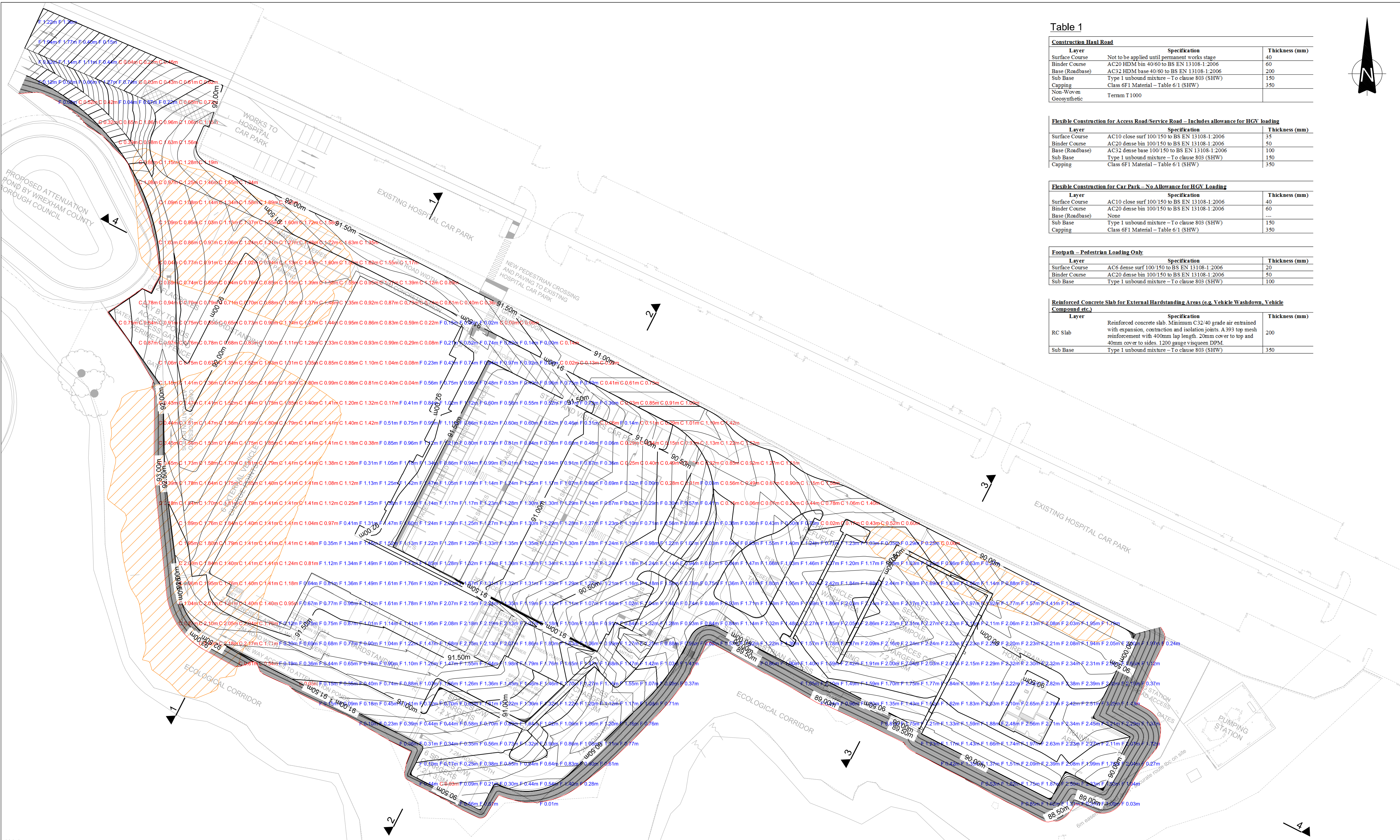


Table 1

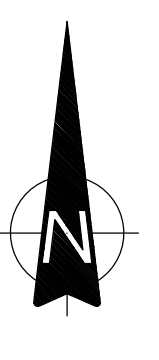
Construction Haul Road		
Layer	Specification	Thickness (mm)
Surface Course	Not to be applied until permanent works stage	40
Binder Course	AC20 HDM bin 40/60 to BS EN 13108-1:2006	60
Base (Roadbase)	AC32 HDM base 40/60 to BS EN 13108-1:2006	200
Sub Base	Type 1 unbound mixture – To clause 803 (SHW)	150
Capping	Class 6F1 Material – Table 6/1 (SHW)	350
Non-Woven Geosynthetic	Termat T1000	

Flexible Construction for Access Road/Service Road – Includes allowance for HGV loading		
Layer	Specification	Thickness (mm)
Surface Course	AC10 close surf 100/150 to BS EN 13108-1:2006	35
Binder Course	AC20 dense bin 100/150 to BS EN 13108-1:2006	50
Base (Roadbase)	AC32 dense base 100/150 to BS EN 13108-1:2006	100
Sub Base	Type 1 unbound mixture – To clause 803 (SHW)	150
Capping	Class 6F1 Material – Table 6/1 (SHW)	350

Flexible Construction for Car Park – No Allowance for HGV Loading		
Layer	Specification	Thickness (mm)
Surface Course	AC10 close surf 100/150 to BS EN 13108-1:2006	40
Binder Course	AC20 dense bin 100/150 to BS EN 13108-1:2006	60
Base (Roadbase)	None	—
Sub Base	Type 1 unbound mixture – To clause 803 (SHW)	150
Capping	Class 6F1 Material – Table 6/1 (SHW)	350

Footpath – Pedestrian Loading Only		
Layer	Specification	Thickness (mm)
Surface Course	AC6 dense surf 100/150 to BS EN 13108-1:2006	20
Binder Course	AC20 dense bin 100/150 to BS EN 13108-1:2006	50
Sub Base	Type 1 unbound mixture – To clause 803 (SHW)	100

Reinforced Concrete Slab for External Handstanding Areas (e.g. Vehicle Washdown, Vehicle Compound etc.)		
Layer	Specification	Thickness (mm)
RC Slab	Reinforced concrete slab, Minimum C32/40 grade air entrained with expansion, contraction and isolation joints. A393 top mesh reinforcement with 400mm lap length. 20mm cover to top and 40mm cover to sides. 1200 gauge visqueen DPM.	200
Sub Base	Type 1 unbound mixture – To clause 803 (SHW)	350



Legend

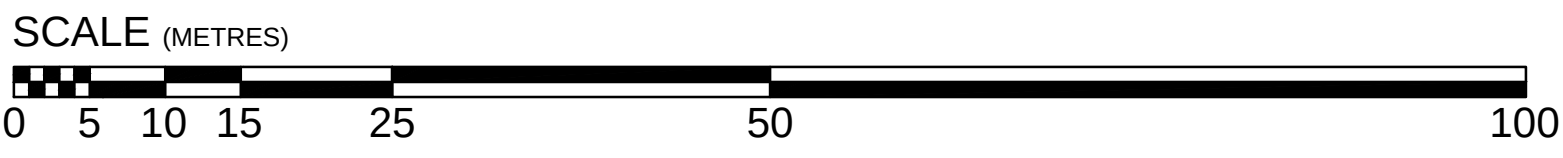
- C 1.02m Depth of cut to formation level
- F 0.86m Depth of fill to formation level
- Finished floor level
- Formation level
- Existing level
- Location of existing bunds

- Notes**
- All dimensions shown are in millimetres unless stated otherwise.
 - The cut and fill depths and volumes shown on this drawing are to the formation level and not the FFL.
 - The contours shown on this drawing are associated with the formation level and not the FFL.
 - The cut and fill depths and volumes shown on drawing are based on the values in Table 1. Depth of landscaped areas assumed to be 300mm. This is based on an assumed CBR value of 2% to 5%.
 - The cut and fill depths and volumes do not take account of the soil heaps located on the site. The volume of material contained within these bunds is estimated at 13,000m³.
 - The volume calculation is based on the assumption that, where required, site won material can be utilised for raising the site levels.

Volume Report
Original Surface: cgmt01-no_bunds
Design Surface: cgfm02-3d
Cut Factor: 1.000
Fill Factor: 1.000

Cut: 8786.830 cu m
Fill: 18260.570 cu m
Net: -9473.740 cu m

P2	20/08/12	FBC Stage Issue	DS	PC			
P1	28/05/12	Issued for Package Pricing	DS	GD			
Mark	Date	Details	By	Rvd			
REVISIONS							
Trust: 							
Supply Chain Partner: 							
Project Title: WAST AFSRC Wrexham							
Key Plan:							
Scales: 1:500 for the Original Drawing Size: A1							
Drn By:	DS	Chkd By:	PC	Passed By:	GD	Date:	MAY '12
Drawing Status: PRELIMINARY							
Drawing Originator: ARUP 4 Plarhead St, Capital Waterside Cardiff, CF10 4QP T +44(0)29 20473727 F +44(0)29 20472277 www.arup.com							
Drawing Title: Proposed Formation Levels (For CBR 2% - 5%)							
Job No:	213833		Drawing No:	P030-ARU-C-A00-GR-GA-300		Revision:	P2
Do NOT scale this drawing. Refer to Architects for details of current building layouts							



LEGEND

- MACADAM SURFACE
- NATURAL FINISHED CONCRETE SURFACE
- MAX 15M ECOLOGICAL CORRIDOR RETAINED
- REFER TO LANDSCAPE PROPOSALS DRAWING
- PAVED PEDESTRIAN AREAS MARSHALLS OR SIMILAR
- DESIGNATED PEDESTRIAN ROUTE/ CYCLE WAY TO SITE (MACADAM)
- WATER COURSE/ PONDS
- EXISTING TREES RETAINED (MAIN TREES ONLY INDICATED)

FOR NEW PLANTING PROPOSAL, SIZES AND LOCATIONS REFER TO DRAWING AR-ARC-00-PL-100-024

BOLLARDS, LOCATIONS SUBJECT TO FURTHER DESIGN (20 NO TOTAL)

AREAS NOT COLOURED TO BE MADE GOOD AROUND SITE WORKS WHERE NECESSARY/ RETAINED IN EXISTING CONDITION

LEGEND

- INDICATES LINE OF 15M ECOLOGICAL ZONE FROM LINE OF RIVER BANK
- SITE BOUNDARY
- NEW SECURITY FENCE TO SITE BOUNDARY AND WITHIN SITE AS INDICATED
- SECTION OF NEW SECURITY FENCE TO INCLUDE OTTER PROOF MESH AND BASE
- RIVER BANK TAKEN FROM SITE SURVEY AND PRECISE LINE TO BE USED WILL REQUIRE MARKING OUT ON SITE TO ESTABLISH ACTUAL ECOLOGICAL CORRIDOR LINE TO SATISFACTION OF ENVIRONMENT AGENCY AND PLANNING OFFICERS
- INDICATES MINIMUM 800MM DEEP x 1200MM WIDE (ACTUAL WIDTH TO MATCH PAVING IF WIDER) AREA OF COLOUR CONTRASTING 'BLISTER' TACTILE PAVING COMPLETE WITH DROP KERBS AND TRANSITION KERBS
- INDICATES COLOUR CONTRASTING HAZARD WARNING 'CORRIDORY' PAVING MIN 1200MM DEEP WHERE INDICATED

VEHICLE AREAS

STAFF PARKING:
131 SPACES
+6 DISABLED SPACES
INCLUDES 5 MARKED SPACES FOR AMBULANCE
RESERVES TBA AND VISITOR SPACES
BICYCLE PARKING AREA - 20 BICYCLES
MOTORCYCLE PARKING AREA

SECURE COMPOUND:
19 SPACES INCLUDING VEHICLE CHARGE POINTS

WAST VEHICLE HARDSTANDING:
20 SPACES INCLUDING VEHICLE CHARGE POINTS
5 ISO CONTAINERS

VEHICLE REFUELLING AREA:
10,000 L DIESEL ABOVE GROUND TANK INDICATED CW
INTEGRAL BUND (MIN 110% OF INNER TANK)
3800MM L 1840MM W 2200MM H
ONE FUEL DISPENSING PUMP WITH 4M HOSE
INDICATED
CONCRETE BASE TO EXTEND MIN 300MM BEYOND
MAXIMUM DIMENSIONS OF THE TANK TO BS 5410
BOLLARDS TO PREVENT VEHICLE IMPACT
SCREEN FENCE TO BE AGREED

**BUND INDICATED BETWEEN REFUELLING AREA AND
WASH DOWN AREA, REFUEL AREA TO BE AT LOWER
LEVEL TO PREVENT CROSS CONTAMINATION**

VEHICLE WASH AREA:
ONE VEHICLE WASH POINT CW SCREEN, HOUSING
AND RECYCLE WATER TANK TO DETAIL DESIGN

NWFRS TRAINING AREA:
AREA PROVIDED FOR RTC TRAINING INCLUDING MOCK
OF OF ARTICULATED LORRY REAR, MOTORWAY
BARRIER, REMOVEABLE BOLLARDS AND CONCRETE
RAMP

WAST VEHICLE COMPOUND AND SERVICE YARD:
FOR TEMPORARY VEHICLE PARKING AND VEHICLE
DELIVERY BY LOW LEVEL PICK UP TRUCK

WORKS TO HOSPITAL CAR PARK:
REALIGNMENT OF KERBS AND ROAD LAYOUT TO
PROVIDE NEW VEHICULAR ACCESS AND EGRESS
REQUIRING LOSS OF APPROX 14 CAR PARKING BAYS
SUBJECT TO FURTHER DETAIL DESIGN

No Design Risk Register

G	17/08/12	REVISIONS TO SITE PLAN FOR PLANNING: GRAPHICAL AMENDMENTS TO COLOURS ROAD BOUNDARY LINE, HARDSTANDING AND STORAGE COMPOUND PARKING BAYS ALL AMENDED
F	11/07/12	REVISIONS TO SITE PLAN FOR PLANNING: MATERIALS CLARIFIED REVISIONS INSTRUCTED BY MACE TRANSITION PAVING ADDED, OIL STORE ADDED, HOSPITAL ENTRANCE REVISED, COVERED PARKING BAYS OMITTED. NOTES REVISED TO SUIT REVISIONS
E	26/06/12	REVISIONS TO SITE PLAN AS AGREED AT MEETING WITH WAST AND NWFRS 14/06/12 INCORPORATING ADDITIONAL WAST VEHICLE PARKING, 15M ECD CORRIDOR, RELOCATED SECURE COMPOUND WITH STAFF PEDESTRIAN ACCESS, REDUCED REFUELLING AND WASH AREAS, MRB AND FLEET GARAGE REVISED DESIGN
D	22/06/12	SITE ENTRANCE REVISED AS ARUP DESIGN
C	19/06/12	VEHICLE WASH AND REFUELLING AREAS AMENDED AS INSTRUCTED BY BAM 19/06/12. NOTES UPDATED
B	01/05/12	PROJECT TITLE REVISED TO CLIENT REQUIREMENTS CONFIRMED 01.05.12 NO CHANGES TO SITE LAYOUT
A	30/04/12	REVISED AS AGREED 25.04.12 RELOCATION OF BUILDING AND ADJACENT DELIVERY BAYS/PARKING, SITE ENTRANCE RATIONALISED AND CYCLE ROUTE/PEDESTRIAN ROUTES REVISED, FIRE TRAINING AREA MOVED

Rev	Date	Revision Notes
		Client / Contractor Wrexham Ambulance Services NHS Trust North Wales Fire and Rescue Services BAM Construction Limited

NIGHTINGALE
associates
www.nightingaleassociates.com

Project
AMBULANCE AND FIRE SERVICES
RESOURCE CENTRE
WREXHAM

Drawing Title
PROPOSED SITE PLAN

Job No 09044	Date 17/04/12	Scale@A0 1:500
Status PLANNING		

Drawing No	Zone	Level	Type	Content	Sequential	Rev
AR-ARC-00	PL	100	021			G

Appendix A

Soil and soil leachate laboratory testing results

Soils: Metals and non-metal inorganics

TP	Depth (m)	Lab ref	Date Sampled	Mound	Stone Content	Arsenic**	Cadmium**	Chromium**	Lead**	Mercury**	Nickel**	Copper**	Zinc**	Selenium**	Hexavalent Chromium	Water Soluble Boron	pH Value**	Total Cyanide**	Total Monohydric Phenols**	Total Organic Carbon	Asbestos screen
					(%)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	no units	mg/kg	mg/kg	%	
Commercial soil screening values						640	230	30400	7300	3600	1800	71700	662000	13000	35	192000		78	3200		
TPM01	1.90	42075	19/06/12	1	11	7.8	1.0	12	52	<0.5	12	14	47	2.0	<2	<0.5	7.9	<1	<1	0.8	No asbestos identified
TPM02	4.20	42076	19/06/12	1	<1	9.1	0.8	19	57	<0.5	19	19	69	1.2	<2	<0.5	7.9	<1	<1	1.3	No asbestos identified
TPM03	2.50	42077	19/06/12	1	<1	8.6	<0.5	15	48	<0.5	15	16	59	0.7	<2	<0.5	8.1	<1	<1	2.2	No asbestos identified
TPM04	1.00	42078	19/06/12	1	5	<5	<0.5	6	24	<0.5	8	10	26	<0.5	<2	<0.5	8.2	<1	<1	0.2	No asbestos identified
TPM05	3.00	42079	19/06/12	1	6	5.2	<0.5	10	27	<0.5	13	11	38	<0.5	<2	<0.5	8.0	<1	<1	0.4	No asbestos identified
BH01	0.50	321751	02/03/11	1		6.0	0.5	13	38	<0.05	12	11	43	<0.5			8.7	0.2			No asbestos identified
TP14	1.00	321785	02/03/11	1		5.5	0.2	9	27	<0.05	8	8	27	<0.5			8.3	<0.1			No asbestos identified
TP15	0.50	321786	01/03/11	1		4.1	0.2	7	23	<0.05	8	8	23	<0.5			8.4	<0.1			No asbestos identified
TP28	0.50	321810	01/03/11	1		4.8	0.2	10	25	<0.05	9	7	27	<0.5			8.4	<0.1			No asbestos identified
TP28	1.00	321811	01/03/11	1		4.6	0.2	11	24	<0.05	10	8	28	0.5			8.4	<0.1			No asbestos identified
TP28	3.00	321812	01/03/11	1		4.9	0.3	13	32	<0.05	9	8	33	<0.5			8.4				No asbestos identified
TPM06	1.00	42080	19/06/12	2	7	15.7	<0.5	26	99	<0.5	39	32	84	1.1	<2	<0.5	8.0	<1	<1	0.4	No asbestos identified
TPM07	2.50	42081	19/06/12	2	17	6.6	<0.5	13	29	<0.5	14	18	46	0.5	<2	<0.5	8.1	<1	<1	1.2	No asbestos identified
TPM08	1.00	42082	19/06/12	2	19	10.1	<0.5	20	55	<0.5	20	20	61	0.6	<2	<0.5	8.2	<1	<1	0.8	No asbestos identified
TPM08	4.40	42083	19/06/12	2	11	6.2	<0.5	11	25	<0.5	14	14	40	<0.5	<2	<0.5	8.0	<1	<1	0.3	No asbestos identified
TPM09	2.00	42084	19/06/12	2	9	5.6	<0.5	10	31	<0.5	12	12	38	<0.5	<2	<0.5	8.2	<1	<1	0.3	No asbestos identified
TPM10	1.00	42085	20/06/12	2	14	6.8	<0.5	14	29	<0.5	17	16	51	<0.5	<2	<0.5	8.0	<1	<1	0.5	No asbestos identified
TPM10	4.00	42086	20/06/12	2	17	10.3	<0.5	21	91	<0.5	20	26	97	1.3	<2	<0.5	8.2	<1	<1	1.6	No asbestos identified
TPM11	1.10	42087	20/06/12	2	24	7.3	<0.5	27	24	<0.5	30	18	51	<0.5	<2	<0.5	8.2	<1	<1	0.4	No asbestos identified
TPM11	2.00	42088	20/06/12	2	11	12.1	<0.5	11	26	<0.5	13	16	39	<0.5	<2	<0.5	8.2	<1	<1	0.4	No asbestos identified
TPM12	4.50	42089	20/06/12	2	33	15.5	0.8	21	69	<0.5	49	22	91	1.1	<2	<0.5	8.3	<1	<1	0.5	
TPM13	1.00	42090	20/06/12	2	<1	15.5	0.7	24	134	<0.5	123	32	116	1.8	<2	<0.5	8.1	<1	<1	1.9	No asbestos identified
TPM13	4.00	42091	20/06/12	2	18	<5	<0.5	7	26	<0.5	11	12	32	<0.5	<2	<0.5	8.3	<1	<1	0.3	No asbestos identified
TPM14	1.40	42092	20/06/12	2	12	<5	<0.5	8	21	<0.5	10	10	36	<0.5	<2	<0.5	8.2	<1	<1	0.2	No asbestos identified
TPM14	3.00	42093	20/06/12	2	10	8.1	<0.5	24	28	<0.5	32	22	60	<0.5	<2	<0.5	8.1	<1	<1	0.2	No asbestos identified
TPM15	2.20	42094	20/06/12	2	10	<5	<0.5	8	31	<0.5	11	13	35	<0.5	<2	<0.5	8.0	<1	<1	<0.1	No asbestos identified
TPM16	0.20	42095	20/06/12	2	16	7.4	<0.5	11	50	<0.5	15	15	47	1.4	<2	<0.5	8.0	<1	<1	0.2	No asbestos identified
TPM16	2.00	42107	20/06/12	2	9	7.1	<0.5	8	51	<0.5	12	15	43	1.5	<2	<0.5	8.0	<1	<1	1.1	No asbestos identified
TPM17	1.20	42096	20/06/12	2	10	<5	<0.5	8	29	<0.5	10	12	39	0.5	<2	<0.5	8.0	<1	<1	0.5	No asbestos identified
TP16	0.50	321787	01/03/11	2		6.8	0.4	19	26	<0.05	23	17	51	<0.5			8.4	<0.1			No asbestos identified
TP17	1.00	321789	01/03/11	2		7.3	0.6	22	59	0.05	14	15	83	0.1			8.3	0.1			No asbestos identified
TP27	0.50	321807	01/03/11	2		5.5	0.3	17	38	<0.05	10	11	37	<0.5			8.4	<0.1			No asbestos identified
TP27	1.00	321808	01/03/11	2		5.1	0.3	11	34	<0.05	10	9	37	<0.5			8.6	<0.1			No asbestos identified
TP27	3.00	321809	01/03/11	2		5.9	0.3	14	38	<0.05	10	11	45	<0.5			8.6				
TPM18	1.30	42097	21/06/12	3	10	6.5	<0.5	10	201	<0.5	16	17	92	1.5	<2	<0.5	8.1	<1	<1	0.4	No asbestos identified
TPM19	1.15	42098	21/06/12	3	14	5.1	<0.5	17	129	<0.5	27	26	95	1.7	<2	<0.5	7.8	<1	<1	3.3	No asbestos identified
TPM19	4.20	42099	21/06/12	3	31	7.9	<0.5	16	54	<0.5	18	11	39	0.6	<2	<0.5	7.7	<1	<1	2.4	
TPM20	0.80	42100	21/06/12	3	6	10.6	1.1	17	341	<0.5	33	40	314	2.1	<2	<0.5	7.2	<1	<1	0.5	No asbestos identified
TP29	0.50	321813	01/03/11	3		6.4	0.5	15	35	<0.05	19	13	45	<0.5			8.5	<0.1			No asbestos identified
TPM22	1.10	42101	21/06/12	4	<1	6.5	<0.5	6	56	<0.5	14	16	69	0.8	<2	<0.5	7.2	<1	<1	1.8	No asbestos identified
TPM22	3.10	42102	21/06/12	4	39	<5	<0.5	10	11	<0.5	8	33	10	0.9	<2	<0.5	8.3	<1	<1	1.0	No asbestos identified
TPM23	1.10	42103	21/06/12	4	<1	6.4	<0.5	17	47	<0.5	13	15	13	0.8	<2	<0.5	7.3	<1	<1	1.6	No asbestos identified
TPM23	2.45	42104	21/06/12	4	<1	6.2	<0.5	12	45	<0.5	14	15	60	0.6	<2	<0.5	7.5	<1	<1	0.8	No asbestos identified
TPM24	0.60	42105	21/06/12	P1	19	10.7	<0.5	12	36	<0.5	22	20	68	1.5	<2	<0.5	8.3	<1	<1	2.2	No asbestos identified
TPM24	1.40	42106	21/06/12	P1	36	6.4	<0.5	11	391	<0.5	15	11	43	0.9	<2	<0.5	8.2	<1	<1	3.9	
Minimum					<1	4.1	0.2	6	11	<0.05	8	7	10	<0.5	<2	<0.5	7	<0.1	<1	<0.1	
Maximum					39	16	1.1	27	391	0.5	123	40	314	2.1	<2	<0.5	9	<1	<1	4	
Total number					33	45	45	45	45	45	45	45	45	45	33	33	45	43	33	33	

Notes

All results expressed on dry weight basis

** - MCERTS accredited test

* - UKAS accredited test

soil dry weight result above commercial soil screening value

P1 Perimeter of mound 1

Soils: Speciated PAHs

PAHs from sVOC suite	TP	Depth (m)	Lab ref	Date Sampled	Mound	Acenaphthene	Acenaphthyl ene	Anthracene	Benz(a)anthr acene	Benzo(a)pyre ne	Benzo(b)fluoranth ene	Benzo(ghi)p erylene	Benzo(k)flu oranthene	Chrysene	Dibenz(ah)a nthracene	Fluoranthene	Fluorene	Indeno(123- cd)pyrene	Naphthalene	Phenanthren e	Pyrene	Total PAH
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Commercial soil screening values				84900	84300	525000	90	14	100	654	141	137	13	22600	63500	60	204	21900	54200	
*	TPM01	1.9	42075	19/06/12	1	<0.01	<0.01	<0.01	0.012	0.015	0.018	0.019	0.017	0.020	<0.01	0.027	<0.01	0.011	<0.01	0.012	<0.01	
	TPM02	4.20	42076	19/06/12	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPM03	2.50	42077	19/06/12	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPM04	1.00	42078	19/06/12	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPM05	3.00	42079	19/06/12	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPM06	1.00	42080	19/06/12	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	BH01	0.50	321751	02/03/11	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.6
	TP14	1.00	321785	02/03/11	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.6
	TP15	0.50	321786	01/03/11	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.6
	TP28	0.50	321810	01/03/11	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.6
	TP28	1.00	321811	01/03/11	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.6
	TPM07	2.50	42081	19/06/12	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
*	TPM08	1	42082	19/06/12	2	0.012	0.037	0.079	0.492	1.264	1.285	1.233	0.929	0.624	0.146	0.681	0.011	1.124	0.025	0.117	0.713	
	TPM08	4.40	42083	19/06/12	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPM09	2.00	42084	20/06/12	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
*	TPM10	1	42085	20/06/12	2	<0.01	0.014	0.130	0.130	0.159	0.156	0.153	0.128	0.138	0.016	0.168	<0.01	0.122	<0.01	0.054	0.166	
	TPM10	4.00	42086	20/06/12	2	<0.1	<0.1	<0.1	1.6	1.9	1.9	1.6	1.9	2.0	<0.1	2.7	<0.1	1.7	<0.1	1.3	2.4	19.1
*	TPM11	1.1	42087	20/06/12	2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.059	<0.01	<0.01	<0.01	0.016	0.054	
	TPM11	2.00	42088	20/06/12	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPM12	4.50	42089	20/06/12	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
*	TPM13	1	42090	20/06/12	2	0.014	0.034	0.046	0.418	0.661	0.744	0.817	0.537	0.469	0.084	0.557	<0.01	0.590	0.030	0.122	0.567	
	TPM13	4.00	42091	20/06/12	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
*	TPM14	1.4	42092	20/06/12	2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	TPM14	3.00	42093	20/06/12	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
*	TPM15	2.2	42094	20/06/12	2	<0.01	<0.01	<0.01	0.014	0.013	0.017	0.014	0.010	0.017	<0.01	0.026	<0.01	<0.01	<0.01	<0.01	0.023	
	TPM16	0.20	42095	20/06/12	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
*	TPM16	2	42107	20/06/12	2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	TPM17	1.20	42096	20/06/12	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TP16	0.50	321787	01/03/11	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.6
	TP17	1.00	321789	01/03/11	2	<0.1	<0.1	<0.1	1.2	3.1	2.5	1.9	1.1	1.3	0.7	3.6	<0.1	2.0	<0.1	<0.1	3.4	21.0
	TP27	0.50	321807	01/03/11	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.6
	TP27	1.00	321808	01/03/11	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.6
	TP29	0.50	321813	01/03/11	3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.6
	TPM18	1.30	42097	21/06/12	3	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	<0.1	0.6	0.8	<0.1	0.7	<0.1	<0.1	<0.1	<0.1	0.6	3.1
*	TPM19	1.15	42098	21/06/12	3	<0.01	0.018	0.036	0.215	0.239	0.165	0.251	0.193	0.260	0.029	0.404	<0.01	0.183	0.033	0.140	0.377	
	TPM19	4.20	42099	21/06/12	3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPM20	0.80	42100	21/06/12	3	<0.1	<0.1	<0.1	1.0	1.2	1.2	1.0	1.4	1.6	<0.1	1.6	<0.1	1.1	<0.1	<0.1	1.4	11.4
*	TPM22	1.1	42101	21/06/12	4	<0.01	<0.01	<0.01	0.029	0.044	0.038	0.036	0.031	0.040	<0.01	0.059	<0.01	0.024	<0.01	0.019	0.046	
*	TPM22	3.1	42102	21/06/12	4	<0.01	<0.01	<0.01	<0.01	<0.01	0.022	0.019	0.010	0.045	<0.01	0.028	0.013	<0.01	0.066	0.261	0.016	
*	TPM23	1.1	42103	21/06/12	4	<0.01	<0.01	<0.01	0.013	0.016	0.013	0.019	0.019	0.018	<0.01	0.030	<0.01	0.013	<0.01	<0.01	0.024	
*	TPM23	2.45	42104	21/06/12	4	<0.01	<0.01	<0.01	0.016	0.026	0.013	0.021	0.019	0.026	<0.01	0.045	<0.01	0.017	<0.01	0.025	0.038	
*	TPM24	0.6	42105	21/06/12	P1	<0.01	<0.01	<0.01	0.012	0.011	0.017	0.024	0.010	0.024	<0.01	0.025	<0.01	0.012	<0.01	0.032	0.019	
	TPM24	1.40	42106	21/06/12	P1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Minimum						<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Maximum						0.014	0.037	0.130	1.6	3.1	2.5	1.9	1.9	2.0	0.7	3.6	<0.1	2.0	0.066	1.3	3.4	21.0
Total number						29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29

Notes
All results expressed on dry weight basis
All PAH results MCERTS accredited test
soil dry weight result above commercial soil screening value
P1 Perimeter of mound 1

Soils: Total Petroleum Hydrocarbons (TPH) with carbon banding

TP	Depth (m)	Lab ref	Date Sampled	Mound	C ₆ -C ₁₀	>C ₁₀ -C ₂₀	>C ₂₀ -C ₃₀	>C ₃₀ -C ₄₀	Total Petroleum Hydrocarbons
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Commercial soil screening values					3380*	16900*	28400*	28400*	
TPM04	1.00	42078	19/06/12	1	<0.1	2.8	0.3	0.2	3.3
TPM05	3.00	42079	19/06/12	1	2.3	3.6	0.3	1.5	7.7
TPM08	4.40	42083	19/06/12	2	1.2	2.9	12.5	2.6	19.2
TPM11	2.00	42088	20/06/12	2	1.3	1.6	2.4	0.6	5.9
TPM12	4.50	42089	20/06/12	2	1.9	3.2	1.1	0.2	6.4
TPM15	2.20	42094	20/06/12	2	2.1	3.6	1.3	0.4	7.4
TPM18	1.30	42097	21/06/12	3	1.8	3.0	2.4	0.1	7.3
TPM19	4.20	42099	21/06/12	3	2.1	2.3	0.6	0.4	5.4
TPM22	1.10	42101	21/06/12	4	1.9	3.5	0.3	0.2	5.9
TPM24	1.40	42106	21/06/12	P1	2.2	3.5	1.1	0.3	7.1

Minimum					<0.1	1.6	0.3	0.1	3.3
Maximum					2.3	3.6	12.5	2.6	19.2
Total number					10	10	10	10	10

Notes
* Conservatively, the lowest of the aliphatic or aromatic screening values have been applied in the absence of directly comparable screening values to screen the results

Soils: Total Petroleum Hydrocarbons (TPH) Criteria Working Group Series (CWG)

Aromatic												Aliphatic											
TP	Depth (m)	Lab ref	Date Sampled	Mound	>EC ₅ -EC ₇	>EC ₇ -EC ₈	>EC ₈ -EC ₁₀	>EC ₁₀ -EC ₁₂	>EC ₁₂ -EC ₁₆	>EC ₁₆ -EC ₂₁	>EC ₂₁ -EC ₃₅	>EC ₅ -EC ₆	>EC ₆ -EC ₈	>EC ₈ -EC ₁₀	>EC ₁₀ -EC ₁₂	>EC ₁₂ -EC ₁₆	>EC ₁₆ -EC ₂₁	>EC ₂₁ -EC ₃₅	TPH (C ₅ - C ₃₅)	Benzene	Toluene	Ethyl Benzene	Xylenes
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Commercial soil screening values					28000	59000	3700	17000	36000	28000	28000	3400	8300	2100	10000	61000	1600000	1600000		95000	4400000	280000	3200000
TPM01	1.90	42075	19/06/12	1	<0.01	<0.01	<0.1	<0.1	<0.1	0.1	4.9	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.4	5.4	<10	<10	<10	<10
TPM02	4.20	42076	19/06/12	1	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	1.4	<0.01	<0.01	<0.1	0.2	0.1	0.1	<0.1	1.8	<10	<10	<10	<10
TPM03	2.50	42077	19/06/12	1	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	1.8	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.3	2.1	<10	<10	<10	<10
BH01	0.50	321751	02/03/11	1	<0.01	<0.01	<0.01	<1.5	<1.2	<1.5	<3.4	<0.01	<0.01	<0.01	<0.9	<0.5	<0.6	<1.4	<10				
TP14	1.00	321785	02/03/11	1	<0.01	<0.01	<0.01	<1.5	<1.2	<1.5	<3.4	<0.01	<0.01	<0.01	<0.9	<0.5	<0.6	<1.1	<10				
TP15	0.50	321786	01/03/11	1	<0.01	<0.01	<0.01	<1.5	<1.2	<1.5	<3.4	<0.01	<0.01	<0.01	<0.9	<0.5	<0.6	<1.4	<10				
TP28	0.50	321810	01/03/11	1	<0.01	<0.01	<0.01	<1.5	<1.2	<1.5	<3.4	<0.01	<0.01	<0.01	<0.9	<0.5	<0.6	<1.4	<10				
TP28	1.00	321811	01/03/11	1	<0.01	<0.01	<0.01	<1.5	<1.2	<1.5	<3.4	<0.01	<0.01	<0.01	<0.9	<0.5	<0.6	<1.4	<10				
TPM06	1.00	42080	19/06/12	2	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	3.9	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.5	4.4	<10	<10	<10	<10
TPM07	2.50	42081	19/06/12	2	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	2.8	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.2	3.0	<10	<10	<10	<10
TPM08	1.00	42082	19/06/12	2	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.8	<0.01	<0.01	<0.1	<0.1	<0.1	0.6	17.7	59.6	<10	<10	<10	<10
TPM09	2.00	42084	20/06/12	2	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	8.4	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.7	9.1	<10	<10	<10	<10
TPM10	1.00	42085	20/06/12	2	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	4.1	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.1	4.2	<10	<10	<10	<10
TPM10	4.00	42086	20/06/12	2	<0.01	<0.01	<0.1	<0.1	0.2	3.2	74.5	<0.01	<0.01	<0.1	<0.1	0.7	5.6	113.9	198.1	<10	<10	<10	<10
TPM11	1.10	42087	20/06/12	2	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	6.3	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	1.6	7.9	<10	<10	<10	<10
TPM13	1.00	42090	20/06/12	2	<0.01	<0.01	<0.1	<0.1	<0.1	0.1	4.1	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.3	4.5	<10	<10	<10	<10
TPM13	4.00	42091	20/06/12	2	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	1.7	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.4	2.1	<10	<10	<10	<10
TPM14	1.40	42092	20/06/12	2	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	1.1	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.6	1.7	<10	<10	<10	<10
TPM14	3.00	42093	20/06/12	2	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.7	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.7	1.4	<10	<10	<10	<10
TPM16	0.20	42095	20/06/12	2	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.9	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.7	1.5	<10	<10	<10	<10
TPM16	2.00	42107	20/06/12	2	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<10	<10	<10
TPM17	1.20	42096	20/06/12	2	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	0.6	<0.01	<0.01	<0.1	<0.1	<0.1	0.1	0.7	1.4	<10	<10	<10	<10
TP16	0.50	321787	01/03/11	2	<0.01	<0.01	<0.01	<1.5	<1.2	<1.5	<3.4	<0.01	<0.01	<0.01	<0.9	<0.5	<0.6	<1.4	<10				
TP17	1.00	321789	01/03/11	2	<0.01	<0.01	<0.01	<1.5	<1.2	1.7	70.0	<0.01	<0.01	<0.01	<0.9	<0.5	9.6	210.0	290.0				
TP27	0.50	321807	01/03/11	2	<0.01	<0.01	<0.01	<1.5	<1.2	<1.5	<3.4	<0.01	<0.01	<0.01	<0.9	<0.5	<0.6	<1.4	<10				
TP27	1.00	321808	01/03/11	2	<0.01	<0.01	<0.01	<1.5	<1.2	<1.5	<3.4	<0.01	<0.01	<0.01	<0.9	<0.5	<0.6	<1.4	<10				
TPM19	1.15	42098	21/06/12	3	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	1.2	<0.01	<0.01	<0.1	<0.1	<0.1	0.2	0.6	2.0	<10	<10	<10	<10
TPM20	0.80	42100	21/06/12	3	<0.01	<0.01	<0.1	<0.1	<0.1	0.8	11.5	<0.01	<0.01	<0.1	<0.1	0.1	0.5	2.2	15.2	<10	<10	<10	<10
TP29	0.50	321813	01/03/11	3	<0.01	<0.01	<0.01	<1.5	<1.2	<1.5	<3.4	<0.01	<0.01	<0.01	<0.9	<0.5	<0.6	<1.4	<10				
TPM22	3.10	42102	21/06/12	4	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	2.1	<0.01	<0.01	<0.1	<0.1	<0.1	0.1	<0.1	2.2	<10	<10	<10	<10
TPM23	1.10	42103	21/06/12	4	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	1.0	<0.01	<0.01	<0.1	<0.1	<0.1	0.2	0.7	1.9	<10	<10	<10	<10
TPM23	2.45	42104	21/06/12	4	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	1.4	<0.01	<0.01	<0.1	<0.1	<0.1	0.2	0.3	1.8	<10	<10	<10	<10
TPM24	0.60	42105	21/06/12	P1	<0.01	<0.01	<0.1	<0.1	<0.1	0.2	3.9	<0.01	<0.01	<0.1	<0.1	<0.1	0.4	1.0	5.5	<10	<10	<10	<10

Minimum					<0.01	<0.01	<0.01	<0.1	0.1	0.1	0.1	<0.01	<0.01	<0.01	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<10	<10	<10
Maximum					<0.01	<0.01	0.1	1.5	1.2	3.2	74.5	<0.01	<0.01	<0.1	0.9	0.7	9.6	210.0	290.0	<10	<10	<10	<10
Total number					33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	23	23	23	23

Notes
All results expressed on dry weight basis
All PAH results MCERTS accredited test
soil dry weight result above commercial soil screening value

P1 Perimeter of mound 1

Soils: Volatile Organic Compounds (VOC)

Soils: Volatile Organic Compounds (VOC)

TP	Depth (m)	Lab ref	Date Sampled	Mound	Styrene	Propylbenzene	2-Chlorotoluene	1, 2, 4-Trimethylbenzene	4-Chlorotoluene	t-Butylbenzene	Trimethylbenzene	1-Methylpropylbenzene	o-Cymene	1, 4-Dichlorobenzene	Butylbenzene	1, 2-Dibromo-3-chloropropane	Hexachlorobutadiene	1, 2, 3-Trichlorobenzene	1, 2, 4-Trichlorobenzene	1, 3-Dichlorobenzene	1, 2-Dichlorobenzene	Bromoform
					µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Commercial soil screening values																						
TPM01	1.90	42075	19/06/12	1	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TPM08	1.00	42082	19/06/12	2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TPM10	1.00	42085	20/06/12	2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TPM11	1.10	42087	20/06/12	2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TPM13	1.00	42090	20/06/12	2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TPM14	1.40	42092	20/06/12	2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TPM15	2.20	42094	20/06/12	2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TPM16	2.00	42107	20/06/12	2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TPM19	1.15	42098	21/06/12	3	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TPM22	1.10	42101	21/06/12	4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TPM22	3.10	42102	21/06/12	4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TPM23	1.10	42103	21/06/12	4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TPM23	2.45	42104	21/06/12	4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TPM24	0.60	42105	21/06/12	P1	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Minimum					<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Maximum					<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Total number					14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14

Soils: Semi-Volatile Organic Compounds (sVOC)

Soils: Semi-Volatile Organic Compounds (sVOC)

TP	Depth (m)	Lab ref	Date Sampled	Mound	1,3-Dinitrobenzene	3-Nitroaniline	Acenaphthene	Dibenzofuran	2,4-Dinitrotoluene	2,3,4,6-Tetrachlorophenol,	2,3,5,6-Tetrachlorophenol,	Diethylphthalate	Fluorene	Diphenylamine	Azobenzene	4-Bromophenyl phenyl ether	Hexachlorobenzene	Pentachlorophenol	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzylbutylphthalate	Bis(2-ethylhexyl)adipate	Benzo(a)anthracene	Chrysene	Bis(2-ethylhexyl)phthalate	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno[1,2,3-cd]pyrene	Dibenz(ah)anthracene	Benzo(ghi)perylene
					µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Commercial soil screening values																																	
TPM01	1.90	42075	19/06/12	1	<10	<10	---	<10	<10	<10	<10	55	---	<10	<10	<10	<10	<10	---	---	---	---	<10	<10	---	---	<10	---	---	---	---	---	---
TPM08	1.00	42082	19/06/12	2	<10	<10	---	13	<10	<10	<10	70	---	<10	<10	<10	<10	<10	---	---	---	---	<10	<10	---	---	<10	---	---	---	---	---	---
TPM10	1.00	42085	20/06/12	2	<10	<10	---	<10	<10	<10	<10	46	---	<10	<10	<10	<10	<10	---	---	---	---	<10	<10	---	---	<10	---	---	---	---	---	---
TPM11	1.10	42087	20/06/12	2	<10	<10	---	<10	<10	<10	<10	42	---	<10	<10	<10	<10	<10	---	---	---	---	<10	<10	---	---	<10	---	---	---	---	---	---
TPM13	1.00	42090	20/06/12	2	<10	<10	---	24	<10	<10	<10	45	---	<10	<10	<10	<10	<10	---	---	---	---	<10	<10	---	---	<10	---	---	---	---	---	---
TPM14	1.40	42092	20/06/12	2	<10	<10	---	<10	<10	<10	<10	<10	---	<10	<10	<10	<10	<10	---	---	---	---	<10	<10	---	---	<10	---	---	---	---	---	---
TPM15	2.20	42094	20/06/12	2	<10	<10	---	<10	<10	<10	<10	39	---	<10	<10	<10	<10	<10	---	---	---	---	<10	<10	---	---	<10	---	---	---	---	---	---
TPM16	2.00	42107	20/06/12	2	<10	<10	---	20	<10	<10	<10	33	---	<10	<10	<10	<10	<10	---	---	---	---	<10	<10	---	---	<10	---	---	---	---	---	---
TPM19	1.15	42098	21/06/12	3	<10	<10	---	<10	<10	<10	<10	39	---	<10	<10	<10	<10	<10	---	---	---	---	<10	<10	---	---	<10	---	---	---	---	---	---
TPM22	1.10	42101	21/06/12	4	<10	<10	---	<10	<10	<10	<10	<10	---	<10	<10	<10	<10	<10	---	---	---	---	<10	<10	---	---	<10	---	---	---	---	---	---
TPM22	3.10	42102	21/06/12	4	<10	<10	---	223	<10	<10	<10	64	---	<10	<10	<10	<10	<10	---	---	---	---	<10	<10	---	---	<10	---	---	---	---	---	---
TPM23	1.10	42103	21/06/12	4	<10	<10	---	<10	<10	<10	<10	35	---	<10	<10	<10	<10	<10	---	---	---	---	<10	<10	---	---	<10	---	---	---	---	---	---
TPM23	2.45	42104	21/06/12	4	<10	<10	---	<10	<10	<10	<10	<10	---	<10	<10	<10	<10	<10	---	---	---	---	<10	<10	---	---	<10	---	---	---	---	---	---
TPM24	0.60	42105	21/06/12	P1	<10	<10	---	<10	<10	<10	<10	<10	---	<10	<10	<10	<10	<10	---	---	---	---	<10	<10	---	---	<10	---	---	---	---	---	---
Minimum					<10	<10		<10	<10	<10	<10	<10		<10	<10	<10	<10	<10					<10	<10			<10						
Maximum					<10	<10		223	<10	<10	<10	70		<10	<10	<10	<10	<10					<10	<10			<10						
Total number					14	14		14	14	14	14	14		14	14	14	14	14					14	14			14						

Notes
P1 Perimeter of mound 1

2:1 Leachate (soil): Metals and non-metal inorganics including 2:1 leachate from Waste Acceptance Criteria (WAC) suite

TP	Depth (m)	Lab ref	Date Sampled	Mound	Arsenic	Cadmium	Chromium	Lead	Nickel	Copper	Zinc	Mercury	Selenium	pH Value	Total Cyanide	From WAC suite
					µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l		µg/l	
Environmental Quality Standard (EQS)					50	0.25*	4.7	7.2	20	28*	125*	0.05	10**	6 to 9	1	
TPM01	1.90	42075	19/06/12	1	<5	<1	<5	<1	<1	<5	6	<0.1	<5	7.6	<5	
TPM02	4.20	42076	19/06/12	1	<5	<1	<5	<1	<5	8	20	<0.1	<5	8.1		*
TPM03	2.50	42077	19/06/12	1	<5	<1	<5	<1	<1	5	<5	<0.1	<5	7.7	<5	
TPM04	1.00	42078	19/06/12	1	<5	<1	<5	<1	<5	<5	<5	<0.1	<5	7.9		*
TPM05	3.00	42079	19/06/12	1	<5	<1	<5	<1	<5	<5	<5	<0.1	<5	8.0		*
TP14	1.60	321837	12/04/11	1	1	<2	<5	<4	<10	3	<1	<0.05	<3			*
TP15	1.00	321839	12/04/11	1	<1	<2	<5	<4	<10	<2	<1	<0.05	<3			*
TP28	1.00	321845	12/04/11	1	<1	<2	<5	<4	<10	<2	<1	<0.05	<3			*
TPM06	1.00	42080	19/06/12	2	<5	<1	<5	3	1	<5	8	<0.1	<5	7.5	<5	
TPM07	2.50	42081	19/06/12	2	<5	<1	<5	<1	<5	5	6	<0.1	<5	8.1		*
TPM08	1.00	42082	19/06/12	2	<5	<1	<5	<1	<1	<5	<5	<0.1	<5	7.6	<5	
TPM09	2.00	42084	20/06/12	2	<5	<1	<5	<1	<1	<5	<5	<0.1	<5	7.7	<5	
TPM10	1.00	42085	20/06/12	2	<5	<1	<5	<1	<1	<5	6	<0.1	<5	7.6	<5	
TPM10	4.00	42086	20/06/12	2	<5	<1	<5	<1	<1	6	5	<0.1	<5	7.4	<5	
TPM11	1.10	42087	20/06/12	2	<5	<1	<5	<1	<1	<5	<5	<0.1	<5	7.5	<5	
TPM11	2.00	42088	20/06/12	2	<5	<1	<5	<1	<5	<5	6	<0.1	<5	8.0		*
TPM12	4.50	42089	20/06/12	2	<5	<1	<5	<1	<5	<5	<5	<0.1	<5	8.0		*
TPM13	1.00	42090	20/06/12	2	<5	<1	<5	<1	<1	6	<5	<0.1	<5	7.5	<5	
TPM13	4.00	42091	20/06/12	2	<5	<1	<5	<1	<1	<5	9	<0.1	<5	7.2	<5	
TPM14	1.40	42092	20/06/12	2	<5	<1	<5	<1	<1	<5	8	<0.1	<5	7.3	<5	
TPM14	3.00	42093	20/06/12	2	<5	<1	<5	<1	<5	<5	<5	<0.1	<5	7.7		*
TPM15	2.20	42094	20/06/12	2	<5	<1	<5	<1	<5	<5	<5	<0.1	<5	7.8		*
TPM16	0.20	42095	20/06/12	2	<5	<1	<5	<1	<1	<5	20	<0.1	<5	7.3	<5	
TPM16	2.00	42107	20/06/12	2	<5	<1	<5	<1	1	<5	13	<0.1	<5	7.5	<5	
TPM17	1.20	42096	20/06/12	2	<5	<1	<5	<1	<1	<5	<5	<0.1	<5	8.1	<5	
TP17	2.00	321841	12/04/11	2	<1	<2	<5	<4	<10	5	4	<0.05	<3			*
TP27	1.00	321843	12/04/11	2	<1	<2	<5	<4	<10	<2	<1	<0.05	<3			*
TPM18	1.30	42097	21/06/12	3	<5	<1	<5	9	<5	<5	8	<0.1	<5	8.0		*
TPM19	1.15	42098	21/06/12	3	<5	<1	<5	<1	<1	5	6	<0.1	<5	7.6	<5	
TPM19	4.20	42099	21/06/12	3	<5	<1	<5	<1	<5	<5	9	<0.1	<5	7.7		*
TPM20	0.80	42100	21/06/12	3	<5	<1	<5	2	<1	12	25	<0.1	<5	7.2	<5	
TP29	0.5	321847	12/04/11	3	<1	<2	<5	<4	<10	<2	<1	<0.05	<3			*
TPM22	1.10	42101	21/06/12	4	<5	<1	<5	<1	<5	7	<5	<0.1	<5	8.2		*
TPM22	3.10	42102	21/06/12	4	<5	<1	<5	<1	<1	<5	9	<0.1	<5	7.3	<5	
TPM23	1.10	42103	21/06/12	4	<5	<1	<5	<1	<1	8	5	<0.1	<5	7.1	<5	
TPM23	2.45	42104	21/06/12	4	<5	<1	<5	<1	1	14	7	<0.1	<5	7.5	<5	
TPM24	0.60	42105	21/06/12	P1	<5	<1	<5	<1	<1	<5	<5	<0.1	<5	7.6	<5	
TPM24	1.40	42106	21/06/12	P1	<5	<1	<5	<1	<5	<5	5	<0.1	<5	8.4	<5	

Minimum					<1	<1	<5	<1	<1	<2	<1	<0.05	<3	7.1	<5	
Maximum					<5	<2	<5	9	10	14	25	<0.1	<5	8.4	<5	
Total number					38	38	38	38	38	38	38	38	38	32	21	

2:1 Leachate (soil): Speciated PAHs

TP	Depth (m)	Lab ref	Date Sampled	Mound	Napthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(123-cd)pyrene	Benzo(ghi)perylene	Dibenz(ah)anthracene	Total PAH
					µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Environmental Quality Standard (EQS)					2.4	n/a	n/a	n/a	n/a	n/a	0.1	n/a	n/a	n/a	0.03	0.05	0.002	n/a	n/a	n/a	n/a
TPM01	1.90	42075	19/06/12	1	0.32	0.03	0.06	0.08	0.11	0.03	0.03	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.68
TPM03	2.50	42077	19/06/12	1	0.22	0.02	0.05	0.07	0.10	0.02	0.03	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.53
TPM06	1.00	42080	19/06/12	2	0.14	0.03	0.07	0.08	0.09	0.03	0.04	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.50
TPM08	1.00	42082	19/06/12	2	0.19	0.02	0.04	0.06	0.07	0.03	0.03	0.20	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.64
TPM09	2.00	42084	20/06/12	2	0.39	0.03	0.06	0.06	0.09	0.03	0.04	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.72
TPM10	1.00	42085	20/06/12	2	0.17	0.03	0.12	0.11	0.14	0.05	0.05	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.70
TPM10	4.00	42086	20/06/12	2	0.19	0.03	0.13	0.09	0.14	0.05	0.05	0.04	0.04	0.07	0.05	0.03	0.02	0.01	0.01	<0.01	0.95
TPM11	1.10	42087	20/06/12	2	0.60	0.04	0.07	0.07	0.09	0.02	0.03	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.94
TPM13	1.00	42090	20/06/12	2	0.17	0.01	0.05	0.06	0.08	0.03	0.03	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.45
TPM13	4.00	42091	20/06/12	2	0.13	0.01	0.02	0.03	0.06	0.02	0.03	0.02	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.33
TPM14	1.40	42092	20/06/12	2	0.13	0.01	0.04	0.05	0.09	0.04	0.03	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.41
TPM16	0.20	42095	20/06/12	2	0.12	0.01	0.03	0.05	0.11	0.03	0.03	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.40
TPM16	2.00	42107	20/06/12	2	0.18	0.02	0.04	0.06	0.09	0.03	0.03	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.47
TPM17	1.20	42096	20/06/12	2	0.09	0.01	0.02	0.02	0.08	0.02	0.05	0.05	0.03	0.05	0.06	0.04	0.06	0.03	0.05	<0.01	0.66
TPM19	1.15	42098	21/06/12	3	0.28	0.03	0.05	0.07	0.12	0.04	0.04	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.66
TPM20	0.80	42100	21/06/12	3	0.13	0.01	0.03	0.05	0.08	0.03	0.03	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.38
TPM22	3.10	42102	21/06/12	4	0.06	<0.01	0.01	0.01	0.03	0.01	0.10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.22
TPM23	1.10	42103	21/06/12	4	0.18	0.02	0.04	0.04	0.06	0.02	0.02	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.39
TPM23	2.45	42104	21/06/12	4	0.12	0.01	0.03	0.04	0.08	0.02	0.02	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.33
TPM24	0.60	42105	21/06/12	P1	0.25	0.02	0.03	0.05	0.07	0.02	0.02	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.47

Minimum					0.06	<0.01	0.01	0.01	0.03	0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.22
Maximum					0.60	0.04	0.13	0.11	0.14	0.05	0.10	0.20	0.04	0.07	0.06	0.04	0.06	0.03	0.05	<0.01	0.95
Total number					20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20

Notes

*water hardness dependent
**Drinking Water standard

EQS based on water hardness of 343mg/l for Gwenfro (provided by the Environment Agency)

EQS values applied are freshwater annual averages for inland waters

P1 Perimeter of mound 1

2:1 leachate result is above the EQS value

laboratory limit of detection is above the EQS

Appendix B

Waste classification



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
					CLIENT:		CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42075			Landfill Waste Acceptance Criterina			
					Limits			
Sampling Date		19/06/12			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID		TPM01						
Depth		1.90						
Solid Waste Analysis								
TOC (%)		0.9			3%	5%	6%	
Loss on Ignition (%)**		2.2			-	-	10%	
BTEX (mg/kg)**		<0.01			6	-	-	
Sum of PCBs (mg/kg)**		<0.01			1	-	-	
Mineral Oil (mg/kg)**		5			500	-	-	
Total PAH (mg/kg)**		<0.5			100	-	-	
pH (Units)**		7.9			-	-	-	
Acid Neutralisation Capacity (mol/kg)		<0.1			-	To be evaluated	To be evaluated	
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l			using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
					mg/kg			
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		0.008	0.008		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		<0.005	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		<0.005	0.006		<0.1	4	50	200
Chloride*		2	4		24	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		15	3		36	1000	20000	50000
TDS		170	390		2298	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		10.1	10.7		70	500	800	1000
Leach Test Information								
pH *		8.0	7.6					
EC*		161	106					
Sample Mass (kg)		0.192						
Dry Matter (%)		91						
Moisture (%)		11						
Stage 1								
Volume Eluate L2 (litres)		0.331						
Filtered Eluate VE1 (litres)		0.236						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

*= UKAS accredited

** - MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
						CLIENT:	CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42076				Landfill Waste Acceptance Criterina		
						Limits		
Sampling Date		19/06/12				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM02						
Depth		4.20						
Solid Waste Analysis								
TOC (%)		1.3				3%	5%	6%
Loss on Ignition (%)**		3.1				-	-	10%
BTEX (mg/kg)**		<0.01				6	-	-
Sum of PCBs (mg/kg)**		<0.01				1	-	-
Mineral Oil (mg/kg)**		2				500	-	-
Total PAH (mg/kg)**		<0.5				100	-	-
pH (Units)**		7.9				-	-	-
Acid Neutralisation Capacity (mol/kg)		<0.1				-	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test			
	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)			
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25	
Barium*	0.040	0.017		<0.1	20	100	300	
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5	
Chromium*	<0.005	<0.005		<0.1	0.5	10	70	
Copper*	0.008	<0.005		<0.1	2	50	100	
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2	
Molybdenum*	0.006	<0.005		<0.1	0.5	10	30	
Nickel*	<0.005	<0.005		<0.1	0.4	10	40	
Lead*	<0.005	<0.005		<0.1	0.5	10	50	
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5	
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7	
Zinc*	0.020	0.005		<0.1	4	50	200	
Chloride*	12	3		9	800	15000	25000	
Fluoride*	<1	<1		<1	10	150	500	
Sulphate*	186	23		109	1000	20000	50000	
TDS	560	440		924	4000	60000	100000	
Phenol Index	<0.5	<0.5			1	-	-	
DOC	10.7	7.3		16	500	800	1000	
Leach Test Information								
pH *	8.1	7.7						
EC*	621	176						
Sample Mass (kg)	0.293							
Dry Matter (%)	60							
Moisture (%)	79							
Stage 1								
Volume Eluate L2 (litres)	0.212							
Filtered Eluate VE1 (litres)	0.068							
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

* = UKAS accredited

** - MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS							
Report No:		ANALYTICAL REPORT No. AR39548			CLIENT: CC Geotechnical Limited		
Project Name:		Location: Wast Arc Wrexham Soil Mounds					
Lab Reference		42077			Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date		19/06/12			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM03					
Depth		2.50					
Solid Waste Analysis							
TOC (%)		2.2			3%	5%	6%
Loss on Ignition (%)**		1.4			–	–	10%
BTEX (mg/kg)**		<0.01			6	–	–
Sum of PCBs (mg/kg)**		<0.01			1	–	–
Mineral Oil (mg/kg)**		2			500	–	–
Total PAH (mg/kg)**		<0.5			100	–	–
pH (Units)**		8.1			–	–	–
Acid Neutralisation Capacity (mol/kg)		<0.1			–	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25
Barium*	0.020	0.021		0.1	20	100	300
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5
Chromium*	<0.005	<0.005		<0.1	0.5	10	70
Copper*	0.005	<0.005		<0.1	2	50	100
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*	0.011	<0.005		<0.1	0.5	10	30
Nickel*	<0.005	<0.005		<0.1	0.4	10	40
Lead*	<0.005	<0.005		<0.1	0.5	10	50
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*	0.008	0.006		<0.1	4	50	200
Chloride*	5	4		21	800	15000	25000
Fluoride*	<1	<1		<1	10	150	500
Sulphate*	34	5		55	1000	20000	50000
TDS	270	360		1749	4000	60000	100000
Phenol Index	<0.5	<0.5			1	-	-
DOC	12.8	10.3		55	500	800	1000
Leach Test Information							
pH *	8.1	7.9					
EC*	227	110					
Sample Mass (kg)	0.206						
Dry Matter (%)	85						
Moisture (%)	20						
Stage 1							
Volume Eluate L2 (litres)	0.315						
Filtered Eluate VE1 (litres)	0.176						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation							

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
					CLIENT:		CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42078			Landfill Waste Acceptance Criterina			
					Limits			
Sampling Date		19/06/12			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID		TPM04						
Depth		1.00						
Solid Waste Analysis								
TOC (%)		0.2			3%	5%	6%	
Loss on Ignition (%)**		0.7			-	-	10%	
BTEX (mg/kg)**		<0.01			6	-	-	
Sum of PCBs (mg/kg)**		<0.01			1	-	-	
Mineral Oil (mg/kg)**		3			500	-	-	
Total PAH (mg/kg)**		<0.5			100	-	-	
pH (Units)**		8.2			-	-	-	
Acid Neutralisation Capacity (mol/kg)		<0.1			-	To be evaluated	To be evaluated	
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l			using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
					mg/kg			
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		<0.005	<0.005		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		<0.005	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		<0.005	<0.005		<0.1	4	50	200
Chloride*		3	3		21	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		2	<5		3	1000	20000	50000
TDS		200	190		1322	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		9.7	9.4		65	500	800	1000
Leach Test Information								
pH *		7.9	7.4					
EC*		81	39					
Sample Mass (kg)		0.191						
Dry Matter (%)		92						
Moisture (%)		9						
Stage 1								
Volume Eluate L2 (litres)		0.334						
Filtered Eluate VE1 (litres)		0.220						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

* = UKAS accredited

** - MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548			CLIENT: CC Geotechnical Limited			
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42079			Landfill Waste Acceptance Criteria			
					Limits			
Sampling Date		19/06/12			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID		TPM05						
Depth		3.00						
Solid Waste Analysis								
TOC (%)		0.4			3%	5%	6%	
Loss on Ignition (%)**		1.3			–	–	10%	
BTEX (mg/kg)**		<0.01			6	–	–	
Sum of PCBs (mg/kg)**		<0.01			1	–	–	
Mineral Oil (mg/kg)**		8			500	–	–	
Total PAH (mg/kg)**		<0.5			100	–	–	
pH (Units)**		8.0			–	–	–	
Acid Neutralisation Capacity (mol/kg)		<0.1			–	To be evaluated	To be evaluated	
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l			using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		0.007	0.007		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		<0.005	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		<0.005	<0.005		<0.1	4	50	200
Chloride*		5	2		17	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		16	1		26	1000	20000	50000
TDS		160	380		2248	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		9.8	11.1		72	500	800	1000
Leach Test Information								
pH *		8.0	7.6					
EC*		130	71					
Sample Mass (kg)		0.192						
Dry Matter (%)		91						
Moisture (%)		11						
Stage 1								
Volume Eluate L2 (litres)		0.332						
Filtered Eluate VE1 (litres)		0.230						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
						CLIENT:	CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42080				Landfill Waste Acceptance Criterina		
						Limits		
Sampling Date		19/06/12				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM06						
Depth		1.00						
Solid Waste Analysis								
TOC (%)		0.4				3%	5%	6%
Loss on Ignition (%)**		1.3				-	-	10%
BTEX (mg/kg)**		<0.01				6	-	-
Sum of PCBs (mg/kg)**		<0.01				1	-	-
Mineral Oil (mg/kg)**		4				500	-	-
Total PAH (mg/kg)**		<0.5				100	-	-
pH (Units)**		8.0				-	-	-
Acid Neutralisation Capacity (mol/kg)		<0.1				-	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test			
	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)			
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25	
Barium*	0.006	<0.005		<0.1	20	100	300	
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5	
Chromium*	<0.005	<0.005		<0.1	0.5	10	70	
Copper*	<0.005	<0.005		<0.1	2	50	100	
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2	
Molybdenum*	<0.005	<0.005		<0.1	0.5	10	30	
Nickel*	<0.005	<0.005		<0.1	0.4	10	40	
Lead*	<0.005	<0.005		<0.1	0.5	10	50	
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5	
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7	
Zinc*	<0.005	<0.005		<0.1	4	50	200	
Chloride*	2	3		18	800	15000	25000	
Fluoride*	<1	<1		<1	10	150	500	
Sulphate*	3	2		14	1000	20000	50000	
TDS	190	390		2273	4000	60000	100000	
Phenol Index	<0.5	<0.5			1	-	-	
DOC	10.3	9.3		61	500	800	1000	
Leach Test Information								
pH *	8.1	7.6						
EC*	126	58						
Sample Mass (kg)	0.194							
Dry Matter (%)	90							
Moisture (%)	12							
Stage 1								
Volume Eluate L2 (litres)	0.330							
Filtered Eluate VE1 (litres)	0.198							
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
					CLIENT:		CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42081			Landfill Waste Acceptance Criterina			
					Limits			
Sampling Date		19/06/12			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID		TPM07						
Depth		2.50						
Solid Waste Analysis								
TOC (%)		1.4			3%	5%	6%	
Loss on Ignition (%)**		1.4			-	-	10%	
BTEX (mg/kg)**		<0.01			6	-	-	
Sum of PCBs (mg/kg)**		<0.01			1	-	-	
Mineral Oil (mg/kg)**		3			500	-	-	
Total PAH (mg/kg)**		<0.5			100	-	-	
pH (Units)**		8.1			-	-	-	
Acid Neutralisation Capacity (mol/kg)		<0.1			-	To be evaluated	To be evaluated	
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l			using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
					mg/kg			
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		0.025	0.012		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		0.005	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		0.006	<0.005		<0.1	4	50	200
Chloride*		3	3		20	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		14	3		34	1000	20000	50000
TDS		180	320		1973	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		9.5	9.7		65	500	800	1000
Leach Test Information								
pH *		8.1	7.8					
EC*		164	96					
Sample Mass (kg)		0.192						
Dry Matter (%)		91						
Moisture (%)		10						
Stage 1								
Volume Eluate L2 (litres)		0.332						
Filtered Eluate VE1 (litres)		0.224						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
					CLIENT:		CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42082			Landfill Waste Acceptance Criterina			
					Limits			
Sampling Date		19/06/12			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID		TPM08						
Depth		1.00						
Solid Waste Analysis								
TOC (%)		1.0			3%	5%	6%	
Loss on Ignition (%)**		2.9			-	-	10%	
BTEX (mg/kg)**		<0.01			6	-	-	
Sum of PCBs (mg/kg)**		<0.01			1	-	-	
Mineral Oil (mg/kg)**		60			500	-	-	
Total PAH (mg/kg)**		18.5			100	-	-	
pH (Units)**		8.2			-	-	-	
Acid Neutralisation Capacity (mol/kg)		<0.1			-	To be evaluated	To be evaluated	
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l			using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
					mg/kg			
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		0.010	<0.005		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		<0.005	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		<0.005	<0.005		<0.1	4	50	200
Chloride*		3	4		24	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		15	3		35	1000	20000	50000
TDS		190	230		1420	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		9.7	10.2		65	500	800	1000
Leach Test Information								
pH *		8.1	7.8					
EC*		179	93					
Sample Mass (kg)		0.195						
Dry Matter (%)		90						
Moisture (%)		12						
Stage 1								
Volume Eluate L2 (litres)		0.329						
Filtered Eluate VE1 (litres)		0.228						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS							
Report No:		ANALYTICAL REPORT No. AR39548					
					CLIENT:		CC Geotechnical Limited
Project Name:		Location: Wast Arc Wrexham Soil Mounds					
					Landfill Waste Acceptance Criterina		
Lab Reference		42084			Limits		
Sampling Date		--			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM09					
Depth		2.00					
Solid Waste Analysis							
TOC (%)		0.3			3%	5%	6%
Loss on Ignition (%)**		1.9			--	--	10%
BTEX (mg/kg)**		<0.01			6	--	--
Sum of PCBs (mg/kg)**		<0.01			1	--	--
Mineral Oil (mg/kg)**		9			500	--	--
Total PAH (mg/kg)**		<0.5			100	--	--
pH (Units)**		8.0			--	--	--
Acid Neutralisation Capacity (mol/kg)		<0.1			--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25
Barium*	<0.005	<0.005		<0.1	20	100	300
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5
Chromium*	<0.005	<0.005		<0.1	0.5	10	70
Copper*	<0.005	<0.005		<0.1	2	50	100
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*	<0.005	<0.005		<0.1	0.5	10	30
Nickel*	<0.005	<0.005		<0.1	0.4	10	40
Lead*	<0.005	<0.005		<0.1	0.5	10	50
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*	<0.005	<0.005		<0.1	4	50	200
Chloride*	3	2		15	800	15000	25000
Fluoride*	<1	<1		<1	10	150	500
Sulphate*	5	1		12	1000	20000	50000
TDS	150	210		1306	4000	60000	100000
Phenol Index	<0.5	<0.5			1	-	-
DOC	8.1	7.0		48	500	800	1000
Leach Test Information							
pH *		8.0	7.9				
EC*		117	70				
Sample Mass (kg)		0.193					
Dry Matter (%)		91					
Moisture (%)		11					
Stage 1							
Volume Eluate L2 (litres)		0.331					
Filtered Eluate VE1 (litres)		0.240					
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation							

*= UKAS accredited

** - MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
						CLIENT:	CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42085				Landfill Waste Acceptance Criterina		
						Limits		
Sampling Date		---				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM10						
Depth		1.00						
Solid Waste Analysis								
TOC (%)		0.6				3%	5%	6%
Loss on Ignition (%)**		1.5				--	--	10%
BTEX (mg/kg)**		<0.01				6	--	--
Sum of PCBs (mg/kg)		<0.01				1	--	--
Mineral Oil (mg/kg)**		4				500	--	--
Total PAH (mg/kg)**		<0.5				100	--	--
pH (Units)**		8.2				--	--	--
Acid Neutralisation Capacity (mol/kg)		<0.1				--	To be evaluated	To be evaluated
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		<0.005	<0.005		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		<0.005	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		<0.005	<0.005		<0.1	4	50	200
Chloride*		3	3		21	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		69	1		94	1000	20000	50000
TDS		230	290		1909	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		9.3	10.2		69	500	800	1000
Leach Test Information								
pH *		8.1	7.8					
EC*		137	84					
Sample Mass (kg)		0.191						
Dry Matter (%)		92						
Moisture (%)		10						
Stage 1								
Volume Eluate L2 (litres)		0.333						
Filtered Eluate VE1 (litres)		0.224						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
						CLIENT:	CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42086				Landfill Waste Acceptance Criterina		
						Limits		
Sampling Date		--				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM10						
Depth		4.00						
Solid Waste Analysis								
TOC (%)		1.9				3%	5%	6%
Loss on Ignition (%)**		3.9				--	--	10%
BTEX (mg/kg)**		<0.01				6	--	--
Sum of PCBs (mg/kg)**		<0.01				1	--	--
Mineral Oil (mg/kg)**		198				500	--	--
Total PAH (mg/kg)**		22.1				100	--	--
pH (Units)**		8.0				--	--	--
Acid Neutralisation Capacity (mol/kg)		<0.1				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test			
	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)			
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25	
Barium*	0.026	0.010		<0.1	20	100	300	
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5	
Chromium*	<0.005	<0.005		<0.1	0.5	10	70	
Copper*	0.006	<0.005		<0.1	2	50	100	
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2	
Molybdenum*	0.007	<0.005		<0.1	0.5	10	30	
Nickel*	<0.005	<0.005		<0.1	0.4	10	40	
Lead*	<0.005	<0.005		<0.1	0.5	10	50	
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5	
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7	
Zinc*	0.008	0.006		<0.1	4	50	200	
Chloride*	6	5		30	800	15000	25000	
Fluoride*	<1	<1		<1	10	150	500	
Sulphate*	74	8		135	1000	20000	50000	
TDS	320	410		2255	4000	60000	100000	
Phenol Index	<0.5	<0.5			1	-	-	
DOC	12.2	7.5		50	500	800	1000	
Leach Test Information								
pH *	8.1	7.9						
EC*	320	110						
Sample Mass (kg)	0.201							
Dry Matter (%)	87							
Moisture (%)	16							
Stage 1								
Volume Eluate L2 (litres)	0.322							
Filtered Eluate VE1 (litres)	0.236							
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

*= UKAS accredited

** - MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
						CLIENT:	CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42087				Landfill Waste Acceptance Criterina		
						Limits		
Sampling Date		---				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM11						
Depth		1.10						
Solid Waste Analysis								
TOC (%)		0.5				3%	5%	6%
Loss on Ignition (%)**		1.7				--	--	10%
BTEX (mg/kg)**		<0.01				6	--	--
Sum of PCBs (mg/kg)**		<0.01				1	--	--
Mineral Oil (mg/kg)**		8				500	--	--
Total PAH (mg/kg)**		<0.5				100	--	--
pH (Units)**		8.2				--	--	--
Acid Neutralisation Capacity (mol/kg)		<0.1				--	To be evaluated	To be evaluated
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		0.012	0.010		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		<0.005	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		<0.005	0.005		<0.1	4	50	200
Chloride*		4	2		17	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		14	2		31	1000	20000	50000
TDS		140	160		1113	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		8.5	10.3		71	500	800	1000
Leach Test Information								
pH *		8.1	7.9					
EC*		146	82					
Sample Mass (kg)		0.189						
Dry Matter (%)		93						
Moisture (%)		8						
Stage 1								
Volume Eluate L2 (litres)		0.335						
Filtered Eluate VE1 (litres)		0.246						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

* = UKAS accredited

** - MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS							
Report No:		ANALYTICAL REPORT No. AR39548					
					CLIENT:		CC Geotechnical Limited
Project Name:		Location: Wast Arc Wrexham Soil Mounds					
					Landfill Waste Acceptance Criteria		
Lab Reference		42088			Limits		
Sampling Date		--			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM11					
Depth		2.00					
Solid Waste Analysis							
TOC (%)		0.4			3%	5%	6%
Loss on Ignition (%)**		2.2			–	–	10%
BTEX (mg/kg)**		<0.01			6	–	–
Sum of PCBs (mg/kg)**		<0.01			1	–	–
Mineral Oil (mg/kg)**		6			500	–	–
Total PAH (mg/kg)**		<0.5			100	–	–
pH (Units)**		8.2			–	–	–
Acid Neutralisation Capacity (mol/kg)		<0.1			–	To be evaluated	To be evaluated
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test	
		mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)	
Arsenic*		<0.005	<0.005		<0.1	0.5	2
Barium*		0.010	<0.005		<0.1	20	100
Cadmium*		<0.001	<0.001		<0.01	0.04	1
Chromium*		<0.005	<0.005		<0.1	0.5	10
Copper*		<0.005	<0.005		<0.1	2	50
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2
Molybdenum*		0.006	<0.005		<0.1	0.5	10
Nickel*		<0.005	<0.005		<0.1	0.4	10
Lead*		<0.005	<0.005		<0.1	0.5	10
Antimony		<0.005	<0.005		<0.01	0.06	0.7
Selenium*		<0.005	<0.005		<0.01	0.1	0.5
Zinc*		0.006	0.008		<0.1	4	50
Chloride*		4	3		23	800	15000
Fluoride*		<1	<1		<1	10	150
Sulphate*		15	3		38	1000	20000
TDS		190	250		1681	4000	60000
Phenol Index		<0.5	<0.5			1	-
DOC		8.7	9.8		68	500	800
Leach Test Information							
pH *		8.0	7.8				
EC*		172	86				
Sample Mass (kg)		0.189					
Dry Matter (%)		92					
Moisture (%)		9					
Stage 1							
Volume Eluate L2 (litres)		0.335					
Filtered Eluate VE1 (litres)		0.248					
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation							

*= UKAS accredited

** - MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS							
Report No:		ANALYTICAL REPORT No. AR39548			CLIENT: CC Geotechnical Limited		
Project Name:		Location: Wast Arc Wrexham Soil Mounds					
Lab Reference		42089			Landfill Waste Acceptance Criteria		
Sampling Date		--			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM12					
Depth		4.50					
Solid Waste Analysis							
TOC (%)		0.7			3%	5%	6%
Loss on Ignition (%)**		1.7			--	--	10%
BTEX (mg/kg)**		<0.01			6	--	--
Sum of PCBs (mg/kg)**		<0.01			1	--	--
Mineral Oil (mg/kg)**		6			500	--	--
Total PAH (mg/kg)**		<0.5			100	--	--
pH (Units)**		8.3			--	--	--
Acid Neutralisation Capacity (mol/kg)		<0.1			--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25
Barium*	0.020	0.010		<0.1	20	100	300
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5
Chromium*	<0.005	<0.005		<0.1	0.5	10	70
Copper*	<0.005	<0.005		<0.1	2	50	100
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*	<0.005	<0.005		<0.1	0.5	10	30
Nickel*	<0.005	<0.005		<0.1	0.4	10	40
Lead*	<0.005	<0.005		<0.1	0.5	10	50
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*	<0.005	<0.005		<0.1	4	50	200
Chloride*	3	4		28	800	15000	25000
Fluoride*	<1	<1		<1	10	150	500
Sulphate*	6	2		21	1000	20000	50000
TDS	150	160		1154	4000	60000	100000
Phenol Index	<0.5	<0.5			1	-	-
DOC	8.7	6.8		53	500	800	1000
Leach Test Information							
pH *	8.0	7.8					
EC*	122	68					
Sample Mass (kg)	0.188						
Dry Matter (%)	93						
Moisture (%)	8						
Stage 1							
Volume Eluate L2 (litres)	0.336						
Filtered Eluate VE1 (litres)	0.268						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation							

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS							
Report No:		ANALYTICAL REPORT No. AR39548					
					CLIENT:		CC Geotechnical Limited
Project Name:		Location: Wast Arc Wrexham Soil Mounds					
Lab Reference		42090			Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date		--			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM13					
Depth		1.00					
Solid Waste Analysis							
TOC (%)		1.9			3%	5%	6%
Loss on Ignition (%)**		4.2			--	--	10%
BTEX (mg/kg)**		<0.01			6	--	--
Sum of PCBs (mg/kg)**		<0.01			1	--	--
Mineral Oil (mg/kg)**		5			500	--	--
Total PAH (mg/kg)**		<0.5			100	--	--
pH (Units)**		8.1			--	--	--
Acid Neutralisation Capacity (mol/kg)		<0.1			--	To be evaluated	To be evaluated
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test	
		mg/l	mg/l			using BS EN 12457-3 at L/S 10 l/kg (mg/kg)	
		mg/l	mg/l	mg/kg			
Arsenic*		<0.005	<0.005	<0.1	0.5	2	25
Barium*		0.019	0.013	<0.1	20	100	300
Cadmium*		<0.001	<0.001	<0.01	0.04	1	5
Chromium*		<0.005	<0.005	<0.1	0.5	10	70
Copper*		0.006	<0.005	<0.1	2	50	100
Mercury*		<0.0001	<0.0001	<0.001	0.01	0.2	2
Molybdenum*		0.009	<0.005	<0.1	0.5	10	30
Nickel*		<0.005	<0.005	<0.1	0.4	10	40
Lead*		<0.005	<0.005	<0.1	0.5	10	50
Antimony		<0.005	<0.005	<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005	<0.01	0.1	0.5	7
Zinc*		0.005	0.008	<0.1	4	50	200
Chloride*		4	4	23	800	15000	25000
Fluoride*		<1	<1	<1	10	150	500
Sulphate*		17	4	39	1000	20000	50000
TDS		220	420	2162	4000	60000	100000
Phenol Index		<0.5	<0.5		1	-	-
DOC		10.9	7.6	48	500	800	1000
Leach Test Information							
pH *		8.1	7.9				
EC*		212	108				
Sample Mass (kg)		0.200					
Dry Matter (%)		87					
Moisture (%)		16					
Stage 1							
Volume Eluate L2 (litres)		0.322					
Filtered Eluate VE1 (litres)		0.218					
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation							

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
						CLIENT:	CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42091				Landfill Waste Acceptance Criteria		
						Limits		
Sampling Date		--				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM13						
Depth		4.00						
Solid Waste Analysis								
TOC (%)		0.3				3%	5%	6%
Loss on Ignition (%)**		1.2				--	--	10%
BTEX (mg/kg)**		<0.01				6	--	--
Sum of PCBs (mg/kg)**		<0.01				1	--	--
Mineral Oil (mg/kg)**		2				500	--	--
Total PAH (mg/kg)**		<0.5				100	--	--
pH (Units)**		8.3				--	--	--
Acid Neutralisation Capacity (mol/kg)		<0.1				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test			
	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)			
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25	
Barium*	0.031	0.009		0.1	20	100	300	
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5	
Chromium*	<0.005	<0.005		<0.1	0.5	10	70	
Copper*	<0.005	<0.005		<0.1	2	50	100	
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2	
Molybdenum*	<0.005	<0.005		<0.1	0.5	10	30	
Nickel*	<0.005	<0.005		<0.1	0.4	10	40	
Lead*	<0.005	<0.005		<0.1	0.5	10	50	
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5	
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7	
Zinc*	<0.005	<0.005		<0.1	4	50	200	
Chloride*	0	4			800	15000	25000	
Fluoride*	<1	<1		<1	10	150	500	
Sulphate*	0	7			1000	20000	50000	
TDS	270	370		2627	4000	60000	100000	
Phenol Index	<0.5	<0.5			1	-	-	
DOC	7.6	7.5		56	500	800	1000	
Leach Test Information								
pH *	7.9	7.8						
EC*	309	86						
Sample Mass (kg)	0.187							
Dry Matter (%)	94							
Moisture (%)	7							
Stage 1								
Volume Eluate L2 (litres)	0.338							
Filtered Eluate VE1 (litres)	0.264							
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
					CLIENT:		CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42092			Landfill Waste Acceptance Criteria			
					Limits			
Sampling Date		--			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID		TPM14						
Depth		1.40						
Solid Waste Analysis								
TOC (%)		0.2			3%	5%	6%	
Loss on Ignition (%)**		0.9			--	--	10%	
BTEX (mg/kg)**		<0.01			6	--	--	
Sum of PCBs (mg/kg)**		<0.01			1	--	--	
Mineral Oil (mg/kg)**		2			500	--	--	
Total PAH (mg/kg)**		<0.5			100	--	--	
pH (Units)**		8.2			--	--	--	
Acid Neutralisation Capacity (mol/kg)		<0.1			--	To be evaluated	To be evaluated	
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		<0.005	<0.005		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		<0.005	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		<0.005	<0.005		<0.1	4	50	200
Chloride*		3	3		23	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		2	<5		3	1000	20000	50000
TDS		70	50		405	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		9.9	10.3		77	500	800	1000
Leach Test Information								
pH *		8.0	7.6					
EC*		97	52					
Sample Mass (kg)		0.186						
Dry Matter (%)		94						
Moisture (%)		7						
Stage 1								
Volume Eluate L2 (litres)		0.338						
Filtered Eluate VE1 (litres)		0.248						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

*= UKAS accredited

** - MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
					CLIENT:		CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42093			Landfill Waste Acceptance Criteria			
					Limits			
Sampling Date		--			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID		TPM14						
Depth		3.00						
Solid Waste Analysis								
TOC (%)		0.2			3%	5%	6%	
Loss on Ignition (%)**		1.3			--	--	10%	
BTEX (mg/kg)**		<0.01			6	--	--	
Sum of PCBs (mg/kg)**		<0.01			1	--	--	
Mineral Oil (mg/kg)**		1			500	--	--	
Total PAH (mg/kg)**		<0.5			100	--	--	
pH (Units)**		8.1			--	--	--	
Acid Neutralisation Capacity (mol/kg)		<0.1			--	To be evaluated	To be evaluated	
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		<0.005	<0.005		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		<0.005	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		<0.005	0.007		<0.1	4	50	200
Chloride*		3	3		23	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		2	1		9	1000	20000	50000
TDS		160	110		903	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		9.3	10.3		77	500	800	1000
Leach Test Information								
pH *		7.7	7.3					
EC*		59	32					
Sample Mass (kg)		0.186						
Dry Matter (%)		94						
Moisture (%)		7						
Stage 1								
Volume Eluate L2 (litres)		0.339						
Filtered Eluate VE1 (litres)		0.234						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
					CLIENT:		CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42094			Landfill Waste Acceptance Criterina			
					Limits			
Sampling Date		---			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID		TPM15						
Depth		2.20						
Solid Waste Analysis								
TOC (%)		0.1			3%	5%	6%	
Loss on Ignition (%)**		0.9			--	--	10%	
BTEX (mg/kg)**		<0.01			6	--	--	
Sum of PCBs (mg/kg)**		<0.01			1	--	--	
Mineral Oil (mg/kg)**		7			500	--	--	
Total PAH (mg/kg)**		<0.5			100	--	--	
pH (Units)**		8.0			--	--	--	
Acid Neutralisation Capacity (mol/kg)		<0.1			--	To be evaluated	To be evaluated	
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		<0.005	<0.005		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		<0.005	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		<0.005	<0.005		<0.1	4	50	200
Chloride*		3	4		29	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		2	2		15	1000	20000	50000
TDS		120	50		474	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		7.8	6.7		52	500	800	1000
Leach Test Information								
pH *		7.8	7.3					
EC*		86	37					
Sample Mass (kg)		0.186						
Dry Matter (%)		94						
Moisture (%)		7						
Stage 1								
Volume Eluate L2 (litres)		0.338						
Filtered Eluate VE1 (litres)		0.242						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

*= UKAS accredited

** - MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
					CLIENT:		CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42095			Landfill Waste Acceptance Criterina			
					Limits			
Sampling Date		---			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID		TPM16						
Depth		0.20						
Solid Waste Analysis								
TOC (%)		0.3			3%	5%	6%	
Loss on Ignition (%)**		2.6			-	-	10%	
BTEX (mg/kg)**		<0.01			6	-	-	
Sum of PCBs (mg/kg)		<0.01			1	-	-	
Mineral Oil (mg/kg)**		2			500	-	-	
Total PAH (mg/kg)**		<0.5			100	-	-	
pH (Units)**		8.0			-	-	-	
Acid Neutralisation Capacity (mol/kg)		<0.1			-	To be evaluated	To be evaluated	
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l			using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
					mg/kg			
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		0.010	<0.005		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		<0.005	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		<0.005	0.009		<0.1	4	50	200
Chloride*		3	3		21	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		4	<5		5	1000	20000	50000
TDS		130	100		742	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		8.6	10.0		68	500	800	1000
Leach Test Information								
pH *		8.0	7.5					
EC*		127	58					
Sample Mass (kg)		0.190						
Dry Matter (%)		92						
Moisture (%)		9						
Stage 1								
Volume Eluate L2 (litres)		0.334						
Filtered Eluate VE1 (litres)		0.240						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

*= UKAS accredited

** - MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
						CLIENT:	CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42107				Landfill Waste Acceptance Criterina		
						Limits		
Sampling Date		---				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM16						
Depth		2.00						
Solid Waste Analysis								
TOC (%)		1.2				3%	5%	6%
Loss on Ignition (%)**		2.0				--	--	10%
BTEX (mg/kg)**		<0.01				6	--	--
Sum of PCBs (mg/kg)**		<0.01				1	--	--
Mineral Oil (mg/kg)**		<5				500	--	--
Total PAH (mg/kg)**		<0.5				100	--	--
pH (Units)**		8.1				--	--	--
Acid Neutralisation Capacity (mol/kg)		<0.1				--	To be evaluated	To be evaluated
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		0.011	<0.005		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		<0.005	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		0.010	<0.005		<0.1	4	50	200
Chloride*		0	0			800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		0	0			1000	20000	50000
TDS		200	190		1333	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		11.7	12.5		86	500	800	1000
Leach Test Information								
pH *		8.1	7.9					
EC*		162	81					
Sample Mass (kg)		0.190						
Dry Matter (%)		92						
Moisture (%)		9						
Stage 1								
Volume Eluate L2 (litres)		0.334						
Filtered Eluate VE1 (litres)		0.230						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

*= UKAS accredited

** - MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
					CLIENT:		CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42096			Landfill Waste Acceptance Criterina			
					Limits			
Sampling Date		---			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID		TPM17						
Depth		1.20						
Solid Waste Analysis								
TOC (%)		0.5			3%	5%	6%	
Loss on Ignition (%)**		1.1			--	--	10%	
BTEX (mg/kg)**		<0.01			6	--	--	
Sum of PCBs (mg/kg)**		<0.01			1	--	--	
Mineral Oil (mg/kg)**		1			500	--	--	
Total PAH (mg/kg)**		<0.5			100	--	--	
pH (Units)**		8.4			--	--	--	
Acid Neutralisation Capacity (mol/kg)		<0.1			--	To be evaluated	To be evaluated	
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l			using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
					mg/kg			
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		<0.005	<0.005		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		<0.005	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		<0.005	<0.005		<0.1	4	50	200
Chloride*		3	2		16	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		3	<5		4	1000	20000	50000
TDS		80	40		355	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		8.8	5.6		46	500	800	1000
Leach Test Information								
pH *		8.0	7.7					
EC*		114	65					
Sample Mass (kg)		0.187						
Dry Matter (%)		93						
Moisture (%)		7						
Stage 1								
Volume Eluate L2 (litres)		0.337						
Filtered Eluate VE1 (litres)		0.254						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

*= UKAS accredited

** - MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS							
Report No:		ANALYTICAL REPORT No. AR39548			CLIENT: CC Geotechnical Limited		
Project Name:		Location: Wast Arc Wrexham Soil Mounds					
Lab Reference		42097			Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date		21/06/12			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM18					
Depth		1.30					
Solid Waste Analysis							
TOC (%)		0.4			3%	5%	6%
Loss on Ignition (%)**		4.1			–	–	10%
BTEX (mg/kg)**		<0.01			6	–	–
Sum of PCBs (mg/kg)**		<0.01			1	–	–
Mineral Oil (mg/kg)**		7			500	–	–
Total PAH (mg/kg)**		3.6			100	–	–
pH (Units)**		8.1			–	–	–
Acid Neutralisation Capacity (mol/kg)		<0.1			–	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25
Barium*	0.031	0.019		0.1	20	100	300
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5
Chromium*	<0.005	<0.005		<0.1	0.5	10	70
Copper*	<0.005	<0.005		<0.1	2	50	100
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*	<0.005	<0.005		<0.1	0.5	10	30
Nickel*	<0.005	<0.005		<0.1	0.4	10	40
Lead*	0.009	0.009		<0.1	0.5	10	50
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*	0.008	0.006		<0.1	4	50	200
Chloride*	3	4		22	800	15000	25000
Fluoride*	<1	<1		<1	10	150	500
Sulphate*	16	3		34	1000	20000	50000
TDS	210	90		672	4000	60000	100000
Phenol Index	<0.5	<0.5			1	-	-
DOC	7.8	8.5		48	500	800	1000
Leach Test Information							
pH *	8.0	7.8					
EC*	179	71					
Sample Mass (kg)	0.202						
Dry Matter (%)	87						
Moisture (%)	16						
Stage 1							
Volume Eluate L2 (litres)	0.322						
Filtered Eluate VE1 (litres)	0.228						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation							

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS							
Report No:		ANALYTICAL REPORT No. AR39548			CLIENT: CC Geotechnical Limited		
Project Name:		Location: Wast Arc Wrexham Soil Mounds					
Lab Reference		42098			Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date		21/06/12			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM19					
Depth		1.15					
Solid Waste Analysis							
TOC (%)		3.8			3%	5%	6%
Loss on Ignition (%)**		6.6			–	–	10%
BTEX (mg/kg)**		<0.01			6	–	–
Sum of PCBs (mg/kg)**		<0.01			1	–	–
Mineral Oil (mg/kg)**		2			500	–	–
Total PAH (mg/kg)**		<0.5			100	–	–
pH (Units)**		7.8			–	–	–
Acid Neutralisation Capacity (mol/kg)		<0.1			–	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25
Barium*	0.035	0.018		0.1	20	100	300
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5
Chromium*	<0.005	<0.005		<0.1	0.5	10	70
Copper*	0.005	<0.005		<0.1	2	50	100
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*	0.009	<0.005		<0.1	0.5	10	30
Nickel*	<0.005	<0.005		<0.1	0.4	10	40
Lead*	<0.005	<0.005		<0.1	0.5	10	50
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*	0.007	0.008		<0.1	4	50	200
Chloride*	5	4		24	800	15000	25000
Fluoride*	<1	<1		<1	10	150	500
Sulphate*	20	4		36	1000	20000	50000
TDS	230	260		1470	4000	60000	100000
Phenol Index	<0.5	<0.5			1	-	-
DOC	10.3	6.4		40	500	800	1000
Leach Test Information							
pH *	8.1	7.9					
EC*	207	104					
Sample Mass (kg)	0.199						
Dry Matter (%)	88						
Moisture (%)	15						
Stage 1							
Volume Eluate L2 (litres)	0.324						
Filtered Eluate VE1 (litres)	0.144						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation							

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS							
Report No:		ANALYTICAL REPORT No. AR39548					
					CLIENT:		CC Geotechnical Limited
Project Name:		Location: Wast Arc Wrexham Soil Mounds					
Lab Reference		42099			Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date		21/06/12			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM19					
Depth		4.20					
Solid Waste Analysis							
TOC (%)		3.6			3%	5%	6%
Loss on Ignition (%)**		1.7			–	–	10%
BTEX (mg/kg)**		<0.01			6	–	–
Sum of PCBs (mg/kg)**		<0.01			1	–	–
Mineral Oil (mg/kg)**		5			500	–	–
Total PAH (mg/kg)**		<0.5			100	–	–
pH (Units)**		7.7			–	–	–
Acid Neutralisation Capacity (mol/kg)		<0.1			–	To be evaluated	To be evaluated
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test	
		mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)	
Arsenic*		<0.005	<0.005		<0.1	0.5	2
Barium*		0.028	0.007		<0.1	20	100
Cadmium*		<0.001	<0.001		<0.01	0.04	1
Chromium*		<0.005	<0.005		<0.1	0.5	10
Copper*		<0.005	<0.005		<0.1	2	50
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10
Nickel*		<0.005	<0.005		<0.1	0.4	10
Lead*		<0.005	<0.005		<0.1	0.5	10
Antimony		<0.005	<0.005		<0.01	0.06	0.7
Selenium*		<0.005	<0.005		<0.01	0.1	0.5
Zinc*		0.009	<0.005		<0.1	4	50
Chloride*		5	4		26	800	15000
Fluoride*		<1	<1		<1	10	150
Sulphate*		27	4		57	1000	20000
TDS		150	30		356	4000	60000
Phenol Index		<0.5	<0.5			1	-
DOC		7.3	3.8		29	500	800
Leach Test Information							
pH *		7.7	7.6				
EC*		157	43				
Sample Mass (kg)		0.196					
Dry Matter (%)		89					
Moisture (%)		13					
Stage 1							
Volume Eluate L2 (litres)		0.327					
Filtered Eluate VE1 (litres)		0.246					
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation							

* = UKAS accredited

** - MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
						CLIENT:	CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42100				Landfill Waste Acceptance Criteria		
						Limits		
Sampling Date		21/06/12				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM20						
Depth		0.80						
Solid Waste Analysis								
TOC (%)		0.6				3%	5%	6%
Loss on Ignition (%)**		10.2				–	–	10%
BTEX (mg/kg)**		<0.01				6	–	–
Sum of PCBs (mg/kg)**		<0.01				1	–	–
Mineral Oil (mg/kg)**		15				500	–	–
Total PAH (mg/kg)**		14.6				100	–	–
pH (Units)**		7.2				–	–	–
Acid Neutralisation Capacity (mol/kg)		<0.1				–	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test			
	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)			
Arsenic*	<0.005	<0.005		<0.1	0.5	2	25	
Barium*	0.047	0.010		<0.1	20	100	300	
Cadmium*	<0.001	<0.001		<0.01	0.04	1	5	
Chromium*	<0.005	<0.005		<0.1	0.5	10	70	
Copper*	0.012	<0.005		<0.1	2	50	100	
Mercury*	<0.0001	<0.0001		<0.001	0.01	0.2	2	
Molybdenum*	0.014	<0.005		<0.1	0.5	10	30	
Nickel*	<0.005	<0.005		<0.1	0.4	10	40	
Lead*	0.005	<0.005		<0.1	0.5	10	50	
Antimony	<0.005	<0.005		<0.01	0.06	0.7	5	
Selenium*	<0.005	<0.005		<0.01	0.1	0.5	7	
Zinc*	0.012	0.007		<0.1	4	50	200	
Chloride*	4	3		14	800	15000	25000	
Fluoride*	<1	<1		<1	10	150	500	
Sulphate*	61	7		95	1000	20000	50000	
TDS	260	120		698	4000	60000	100000	
Phenol Index	<0.5	<0.5			1	-	-	
DOC	15.6	8.5		46	500	800	1000	
Leach Test Information								
pH *	8.0	7.5						
EC*	346	81						
Sample Mass (kg)	0.220							
Dry Matter (%)	79							
Moisture (%)	28							
Stage 1								
Volume Eluate L2 (litres)	0.300							
Filtered Eluate VE1 (litres)	0.208							
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS							
Report No:		ANALYTICAL REPORT No. AR39548					
					CLIENT:		CC Geotechnical Limited
Project Name:		Location: Wast Arc Wrexham Soil Mounds					
Lab Reference		42101			Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date		21/06/12			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM22					
Depth		1.10					
Solid Waste Analysis							
TOC (%)		1.8			3%	5%	6%
Loss on Ignition (%)**		3.5			–	–	10%
BTEX (mg/kg)**		<0.01			6	–	–
Sum of PCBs (mg/kg)**		<0.01			1	–	–
Mineral Oil (mg/kg)**		6			500	–	–
Total PAH (mg/kg)**		<0.5			100	–	–
pH (Units)**		7.2			–	–	–
Acid Neutralisation Capacity (mol/kg)		<0.1			–	To be evaluated	To be evaluated
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test	
		mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)	
Arsenic*		<0.005	<0.005		<0.1	0.5	2
Barium*		0.013	<0.005		<0.1	20	100
Cadmium*		<0.001	<0.001		<0.01	0.04	1
Chromium*		<0.005	<0.005		<0.1	0.5	10
Copper*		0.007	<0.005		<0.1	2	50
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10
Nickel*		<0.005	<0.005		<0.1	0.4	10
Lead*		<0.005	<0.005		<0.1	0.5	10
Antimony		<0.005	<0.005		<0.01	0.06	0.7
Selenium*		<0.005	<0.005		<0.01	0.1	0.5
Zinc*		<0.005	<0.005		<0.1	4	50
Chloride*		3	4		21	800	15000
Fluoride*		<1	<1		<1	10	150
Sulphate*		9	2		19	1000	20000
TDS		240	140		899	4000	60000
Phenol Index		<0.5	<0.5			1	-
DOC		18.9	7.1		53	500	800
Leach Test Information							
pH *		8.2	7.7				
EC*		247	76				
Sample Mass (kg)		0.201					
Dry Matter (%)		87					
Moisture (%)		16					
Stage 1							
Volume Eluate L2 (litres)		0.321					
Filtered Eluate VE1 (litres)		0.196					
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation							

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
						CLIENT:	CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42102				Landfill Waste Acceptance Criteria		
						Limits		
Sampling Date		21/06/12				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM22						
Depth		3.10						
Solid Waste Analysis								
TOC (%)		1.7				3%	5%	6%
Loss on Ignition (%)**		0.8				–	–	10%
BTEX (mg/kg)**		<0.01				6	–	–
Sum of PCBs (mg/kg)**		<0.01				1	–	–
Mineral Oil (mg/kg)**		2				500	–	–
Total PAH (mg/kg)**		<0.5				100	–	–
pH (Units)**		8.3				–	–	–
Acid Neutralisation Capacity (mol/kg)		<0.1				–	To be evaluated	To be evaluated
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		0.017	<0.005		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		<0.005	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		0.013	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		0.006	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		0.009	<0.005		<0.1	4	50	200
Chloride*		3	3		26	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		64	4		135	1000	20000	50000
TDS		230	160		1516	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		7.3	5.2		49	500	800	1000
Leach Test Information								
pH *		7.9	8.0					
EC*		234	78					
Sample Mass (kg)		0.180						
Dry Matter (%)		97						
Moisture (%)		3						
Stage 1								
Volume Eluate L2 (litres)		0.345						
Filtered Eluate VE1 (litres)		0.292						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548						
					CLIENT:		CC Geotechnical Limited	
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42103			Landfill Waste Acceptance Criterina			
					Limits			
Sampling Date		21/06/12			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID		TPM23						
Depth		1.10						
Solid Waste Analysis								
TOC (%)		1.6			3%	5%	6%	
Loss on Ignition (%)**		3.6			-	-	10%	
BTEX (mg/kg)**		<0.01			6	-	-	
Sum of PCBs (mg/kg)**		<0.01			1	-	-	
Mineral Oil (mg/kg)**		2			500	-	-	
Total PAH (mg/kg)**		<0.5			100	-	-	
pH (Units)**		7.3			-	-	-	
Acid Neutralisation Capacity (mol/kg)		<0.1			-	To be evaluated	To be evaluated	
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l			using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
					mg/kg			
Arsenic*		<0.005	<0.005		<0.1	0.5	2	25
Barium*		0.014	<0.005		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		0.008	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		0.005	<0.005		<0.1	4	50	200
Chloride*		4	4		22	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		15	3		28	1000	20000	50000
TDS		300	110		772	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		18.7	8.6		56	500	800	1000
Leach Test Information								
pH *		7.7	7.4					
EC*		197	56					
Sample Mass (kg)		0.203						
Dry Matter (%)		86						
Moisture (%)		18						
Stage 1								
Volume Eluate L2 (litres)		0.319						
Filtered Eluate VE1 (litres)		0.166						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

* = UKAS accredited

** = MCERTS accredited test



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

Waste Acceptance Criteria ANALYTICAL RESULTS								
Report No:		ANALYTICAL REPORT No. AR39548				CLIENT: CC Geotechnical Limited		
Project Name:		Location: Wast Arc Wrexham Soil Mounds						
Lab Reference		42104				Landfill Waste Acceptance Criteria		
						Limits		
Sampling Date		21/06/12				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID		TPM23						
Depth		2.45						
Solid Waste Analysis								
TOC (%)		0.8				3%	5%	6%
Loss on Ignition (%)**		3.4				–	–	10%
BTEX (mg/kg)**		<0.01				6	–	–
Sum of PCBs (mg/kg)		<0.01				1	–	–
Mineral Oil (mg/kg)**		2				500	–	–
Total PAH (mg/kg)**		<0.5				100	–	–
pH (Units)**		7.5				–	–	–
Acid Neutralisation Capacity (mol/kg)		<0.1				–	To be evaluated	To be evaluated
Eluate Analysis		2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
		mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic*		0.006	<0.005		<0.1	0.5	2	25
Barium*		0.039	0.008		<0.1	20	100	300
Cadmium*		<0.001	<0.001		<0.01	0.04	1	5
Chromium*		<0.005	<0.005		<0.1	0.5	10	70
Copper*		0.014	<0.005		<0.1	2	50	100
Mercury*		<0.0001	<0.0001		<0.001	0.01	0.2	2
Molybdenum*		<0.005	<0.005		<0.1	0.5	10	30
Nickel*		<0.005	<0.005		<0.1	0.4	10	40
Lead*		<0.005	<0.005		<0.1	0.5	10	50
Antimony		<0.005	<0.005		<0.01	0.06	0.7	5
Selenium*		<0.005	<0.005		<0.01	0.1	0.5	7
Zinc*		<0.005	<0.005		<0.1	4	50	200
Chloride*		6	5		27	800	15000	25000
Fluoride*		<1	<1		<1	10	150	500
Sulphate*		47	6		80	1000	20000	50000
TDS		590	430		2425	4000	60000	100000
Phenol Index		<0.5	<0.5			1	-	-
DOC		37.0	8.2		77	500	800	1000
Leach Test Information								
pH *		7.9	7.9					
EC*		572	158					
Sample Mass (kg)		0.207						
Dry Matter (%)		84						
Moisture (%)		20						
Stage 1								
Volume Eluate L2 (litres)		0.315						
Filtered Eluate VE1 (litres)		0.208						
Results are expressed on a dry weight basis, after correction for moisture content where applicable Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation								

* = UKAS accredited

** = MCERTS accredited test

WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Job Title: WAST - Western Gateway Site
Client Reference: 40822
Sample ID: TP14 / 1.60

Job Number: 11-48141
Sample Number: 321837
Date Analysed: 12/04/2011

Test Results On Waste		
Determinand and Method Reference	Units	Result
002 Total Organic Carbon	%	
003 Loss On Ignition	%	
062 BTEX	mg/kg	
052 PCB's (7 congeners)	mg/kg	
051 TPH (C10 - C40)	mg/kg	
050 PAH's	mg/kg	
008 pH	pH Units	
073 Acid Neutralisation Capacity (pH4)*	mol/kg	
073 Acid Neutralisation Capacity (pH7)*	mol/kg	

WAC Limit Values		
Inert Waste	SNRHW	Hazardous Waste
3	5	6
n/a	n/a	10
6	n/a	n/a
1	n/a	n/a
500	n/a	n/a
100	n/a	n/a
n/a	>6	n/a
n/a	TBE	TBE
n/a	TBE	TBE

Test Results On Leachate				
Determinand and Method Reference	Conc in Eluate ug/l		Amount Leached mg/kg	
	2:1	8:1	LS2	LS10
2326 Arsenic as As	1	1	0.002	0.010
042 Barium as Ba*	21	9	0.042	0.11
042 Cadmium as Cd	<2	<2	<0.004	<0.02
042 Chromium as Cr	<5	<5	<0.02	<0.1
042 Copper as Cu	3	<2	0.006	<0.02
081 Mercury as Hg	<0.05	<0.05	<0.0004	<0.002
042 Molybdenum as Mo*	<10	<10	<0.02	<0.1
042 Nickel as Ni	<10	<10	<0.02	<0.1
042 Lead as Pb	<4	<4	<0.01	<0.05
2328 Antimony as Sb	<1	<1	<0.01	<0.05
017 Selenium as Se	<3	<3	<0.006	<0.03
042 Zinc as Zn	<1	<1	<0.002	<0.01
055 Chloride as Cl	1700	410	<20	<100
055 Fluoride as F	310	<100	0.62	0.40
055 Sulphate as SO4	10000	1600	20	<100
035 Total Dissolved Solids *	100000	37000	200	451
067 Phenol Index	<100	<100	<0.2	<1.0
033 Dissolved Organic Carbon*	7200	3600	14	<50
Additional Information				
008 pH				
009 Conductivity uS/cm				
Temperature*				
Mass of Sample Kg	0.140			
Mass of dry Sample Kg	0.114			
Stage 1				
Volume of Leachant L2	0.203			
Volume of Eluate VE1	0.147			
Stage 2				
Volume of Leachant L8	0.916			
Volume of Eluate VE2	0.845			

WAC Limit Values		
limit values for LS10 Leachate		
Inert Waste	SNRHW	Hazardous Waste
0.5	2	25
20	100	300
0.04	1	5
0.5	10	70
2	50	100
0.01	0.2	2
0.5	10	30
0.4	10	40
0.5	10	50
0.06	0.7	5
0.1	0.5	7
4	50	200
800	15,000	25,000
10	150	500
1000	20,000	50,000
4000	60,000	100,000
1	n/a	n/a
500	800	1000

TBE = To Be Evaluated

SNRHW = Stable Non-Reactive Hazardous Waste

Disclaimer: The WAC limit values are provided for guidance only. DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.

DERWENTSIDE ENVIRONMENTAL TESTING SERVICES LIMITED

WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Job Title: WAST - Western Gateway Site
Client Reference: 40822
Sample ID: TP15 / 1.00

Job Number: 11-48141
Sample Number: 321839
Date Analysed: 12/04/2011

Test Results On Waste		
Determinand and Method Reference	Units	Result
002 Total Organic Carbon	%	
003 Loss On Ignition	%	
062 BTEX	mg/kg	
052 PCB's (7 congeners)	mg/kg	
051 TPH (C10 - C40)	mg/kg	
050 PAH's	mg/kg	
008 pH	pH Units	
073 Acid Neutralisation Capacity (pH4)*	mol/kg	
073 Acid Neutralisation Capacity (pH7)*	mol/kg	

WAC Limit Values		
Inert Waste	SNRHW	Hazardous Waste
3	5	6
n/a	n/a	10
6	n/a	n/a
1	n/a	n/a
500	n/a	n/a
100	n/a	n/a
n/a	>6	n/a
n/a	TBE	TBE
n/a	TBE	TBE

Test Results On Leachate				
Determinand and Method Reference	Conc in Eluate ug/l		Amount Leached mg/kg	
	2:1	8:1	LS2	LS10
2326 Arsenic as As	<1	<1	<0.002	<0.01
042 Barium as Ba*	2	10	<0.02	<0.1
042 Cadmium as Cd	<2	<2	<0.004	<0.02
042 Chromium as Cr	<5	<5	<0.02	<0.1
042 Copper as Cu	<2	<2	<0.004	<0.02
081 Mercury as Hg	<0.05	<0.05	<0.0004	<0.002
042 Molybdenum as Mo*	<10	<10	<0.02	<0.1
042 Nickel as Ni	<10	<10	<0.02	<0.1
042 Lead as Pb	<4	<4	<0.01	<0.05
2328 Antimony as Sb	<1	<1	<0.01	<0.05
017 Selenium as Se	<3	<3	<0.006	<0.03
042 Zinc as Zn	<1	4	<0.002	0.035
055 Chloride as Cl	1500	480	<20	<100
055 Fluoride as F	10	<100	0.020	<0.1
055 Sulphate as SO4	1400	990	<20	<100
035 Total Dissolved Solids *	19000	<5	38	<50
067 Phenol Index	<100	<100	<0.2	<1.0
033 Dissolved Organic Carbon*	8500	3900	17	<50
Additional Information				
008 pH				
009 Conductivity uS/cm				
Temperature*				
Mass of Sample Kg	0.140			
Mass of dry Sample Kg	0.112			
Stage 1				
Volume of Leachant L2	0.195			
Volume of Eluate VE1	0.153			
Stage 2				
Volume of Leachant L8	0.892			
Volume of Eluate VE2	0.810			

WAC Limit Values		
limit values for LS10 Leachate		
Inert Waste	SNRHW	Hazardous Waste
0.5	2	25
20	100	300
0.04	1	5
0.5	10	70
2	50	100
0.01	0.2	2
0.5	10	30
0.4	10	40
0.5	10	50
0.06	0.7	5
0.1	0.5	7
4	50	200
800	15,000	25,000
10	150	500
1000	20,000	50,000
4000	60,000	100,000
1	n/a	n/a
500	800	1000

TBE = To Be Evaluated

SNRHW = Stable Non-Reactive Hazardous Waste

Disclaimer: The WAC limit values are provided for guidance only. DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.

DERWENTSIDE ENVIRONMENTAL TESTING SERVICES LIMITED

WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Job Title: WAST - Western Gateway Site
Client Reference: 40822
Sample ID: TP17 / 2.00

Job Number: 11-48141
Sample Number: 321841
Date Analysed: 12/04/2011

Test Results On Waste		
Determinand and Method Reference	Units	Result
002 Total Organic Carbon	%	
003 Loss On Ignition	%	
062 BTEX	mg/kg	
052 PCB's (7 congeners)	mg/kg	
051 TPH (C10 - C40)	mg/kg	
050 PAH's	mg/kg	
008 pH	pH Units	
073 Acid Neutralisation Capacity (pH4)*	mol/kg	
073 Acid Neutralisation Capacity (pH7)*	mol/kg	

WAC Limit Values		
Inert Waste	SNRHW	Hazardous Waste
3	5	6
n/a	n/a	10
6	n/a	n/a
1	n/a	n/a
500	n/a	n/a
100	n/a	n/a
n/a	>6	n/a
n/a	TBE	TBE
n/a	TBE	TBE

Test Results On Leachate				
Determinand and Method Reference	Conc in Eluate ug/l		Amount Leached mg/kg	
	2:1	8:1	LS2	LS10
2326 Arsenic as As	<1	<1	<0.002	<0.01
042 Barium as Ba*	120	10	0.24	0.23
042 Cadmium as Cd	<2	<2	<0.004	<0.02
042 Chromium as Cr	<5	<5	<0.02	<0.1
042 Copper as Cu	5	<2	0.010	<0.02
081 Mercury as Hg	<0.05	<0.05	<0.0004	<0.002
042 Molybdenum as Mo*	<10	<10	<0.02	<0.1
042 Nickel as Ni	<10	<10	<0.02	<0.1
042 Lead as Pb	<4	<4	<0.01	<0.05
2328 Antimony as Sb	<1	<1	<0.01	<0.05
017 Selenium as Se	<3	<3	<0.006	<0.03
042 Zinc as Zn	4	<1	0.008	<0.01
055 Chloride as Cl	3600	730	<20	<100
055 Fluoride as F	390	290	0.78	3.0
055 Sulphate as SO4	72000	8200	144	158
035 Total Dissolved Solids *	230000	37000	460	601
067 Phenol Index	<100	<100	<0.2	<1.0
033 Dissolved Organic Carbon*	7500	3600	15	<50
Additional Information				
008 pH				
009 Conductivity uS/cm				
Temperature*				
Mass of Sample Kg	0.140			
Mass of dry Sample Kg	0.113			
Stage 1				
Volume of Leachant L2	0.200			
Volume of Eluate VE1	00136			
Stage 2				
Volume of Leachant L8	0.908			
Volume of Eluate VE2	0.850			

WAC Limit Values		
limit values for LS10 Leachate		
Inert Waste	SNRHW	Hazardous Waste
0.5	2	25
20	100	300
0.04	1	5
0.5	10	70
2	50	100
0.01	0.2	2
0.5	10	30
0.4	10	40
0.5	10	50
0.06	0.7	5
0.1	0.5	7
4	50	200
800	15,000	25,000
10	150	500
1000	20,000	50,000
4000	60,000	100,000
1	n/a	n/a
500	800	1000

TBE = To Be Evaluated

SNRHW = Stable Non-Reactive Hazardous Waste

Disclaimer: The WAC limit values are provided for guidance only. DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.

DERWENTSIDE ENVIRONMENTAL TESTING SERVICES LIMITED

WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Job Title: WAST - Western Gateway Site
Client Reference: 40822
Sample ID: TP29 / 0.50

Job Number: 11-48141
Sample Number: 321847
Date Analysed: 12/04/2011

Test Results On Waste		
Determinand and Method Reference	Units	Result
002 Total Organic Carbon	%	
003 Loss On Ignition	%	
062 BTEX	mg/kg	
052 PCB's (7 congeners)	mg/kg	
051 TPH (C10 - C40)	mg/kg	
050 PAH's	mg/kg	
008 pH	pH Units	
073 Acid Neutralisation Capacity (pH4)*	mol/kg	
073 Acid Neutralisation Capacity (pH7)*	mol/kg	

WAC Limit Values		
Inert Waste	SNRHW	Hazardous Waste
3	5	6
n/a	n/a	10
6	n/a	n/a
1	n/a	n/a
500	n/a	n/a
100	n/a	n/a
n/a	>6	n/a
n/a	TBE	TBE
n/a	TBE	TBE

Test Results On Leachate				
Determinand and Method Reference	Conc in Eluate ug/l		Amount Leached mg/kg	
	2:1	8:1	LS2	LS10
2326 Arsenic as As	<1	<1	<0.002	<0.01
042 Barium as Ba*	26	9	0.052	0.11
042 Cadmium as Cd	<2	<2	<0.004	<0.02
042 Chromium as Cr	<5	<5	<0.02	<0.1
042 Copper as Cu	<2	<2	<0.004	<0.02
081 Mercury as Hg	<0.05	<0.05	<0.0004	<0.002
042 Molybdenum as Mo*	<10	<10	<0.02	<0.1
042 Nickel as Ni	<10	<10	<0.02	<0.1
042 Lead as Pb	<4	<4	<0.01	<0.05
2328 Antimony as Sb	<1	<1	<0.01	<0.05
017 Selenium as Se	<3	<3	<0.006	<0.03
042 Zinc as Zn	<1	1	<0.002	<0.01
055 Chloride as Cl	2100	60	<20	<100
055 Fluoride as F	230	230	0.46	2.3
055 Sulphate as SO4	5800	4300	<20	<100
035 Total Dissolved Solids *	80000	21000	160	294
067 Phenol Index	<100	<100	<0.2	<1.0
033 Dissolved Organic Carbon*	4800	<2000	<10	<50
Additional Information				
008 pH				
009 Conductivity uS/cm				
Temperature*				
Mass of Sample Kg	0.140			
Mass of dry Sample Kg	0.116			
Stage 1				
Volume of Leachant L2	0.208			
Volume of Eluate VE1	0.165			
Stage 2				
Volume of Leachant L8	0.929			
Volume of Eluate VE2	0.870			

WAC Limit Values		
limit values for LS10 Leachate		
Inert Waste	SNRHW	Hazardous Waste
0.5	2	25
20	100	300
0.04	1	5
0.5	10	70
2	50	100
0.01	0.2	2
0.5	10	30
0.4	10	40
0.5	10	50
0.06	0.7	5
0.1	0.5	7
4	50	200
800	15,000	25,000
10	150	500
1000	20,000	50,000
4000	60,000	100,000
1	n/a	n/a
500	800	1000

TBE = To Be Evaluated

SNRHW = Stable Non-Reactive Hazardous Waste

Disclaimer: The WAC limit values are provided for guidance only. DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.

DERWENTSIDE ENVIRONMENTAL TESTING SERVICES LIMITED

Job name

Wrexham - mounds

Waste stream

WAST Wrexham

Comments

Report

Created by: Dymock, Lisa

Created date: 06/09/2012 13:11

Job summary

#	Sample name	Depth	Classification result	Hazardous properties
1	TPM01 1.9		Non Hazardous	
2	TPM02 4.2		Non Hazardous	
3	TPM03 2.5		Non Hazardous	
4	TPM04 1		Non Hazardous	
5	TPM05 3		Non Hazardous	
6	BH01 0.5		Potentially Hazardous	H12
7	TP14 1		Non Hazardous	
8	TP15 0.5		Non Hazardous	
9	TP28 0.5		Non Hazardous	
10	TP28 1		Non Hazardous	
11	TP28 3		Non Hazardous	
12	TPM06 1		Non Hazardous	
13	TPM07 2.5		Non Hazardous	
14	TPM08 1		Non Hazardous	
15	TPM08 4.4		Non Hazardous	
16	TPM09 2		Non Hazardous	
17	TPM10 1		Non Hazardous	
18	TPM10 4		Non Hazardous	
19	TPM11 1.1		Non Hazardous	
20	TPM11 2		Non Hazardous	
21	TPM12 4.5		Non Hazardous	
22	TPM13 1		Non Hazardous	
23	TPM13 4		Non Hazardous	
24	TPM14 1.4		Non Hazardous	
25	TPM14 3		Non Hazardous	
26	TPM15 2.2		Non Hazardous	
27	TPM16 0.2		Non Hazardous	
28	TPM16 2		Non Hazardous	
29	TPM17 1.2		Non Hazardous	
30	TP16 0.5		Non Hazardous	
31	TP17 1		Potentially Hazardous	H12
32	TP27 0.5		Non Hazardous	
33	TP27 1		Non Hazardous	
34	TP27 3		Non Hazardous	
35	TPM18 1.3		Non Hazardous	
36	TPM19 1.15		Non Hazardous	
37	TPM19 4.2		Non Hazardous	
38	TPM20 0.8		Non Hazardous	
39	TP29 0.5		Non Hazardous	
40	TPM22 1.1		Non Hazardous	

#	Sample name	Depth	Classification result	Hazardous properties
41	TPM22 3.1		Non Hazardous	
42	TPM23 1.1		Non Hazardous	
43	TPM23 2.45		Non Hazardous	
44	TPM24 0.6		Non Hazardous	
45	TPM24 1.4		Non Hazardous	

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM01 1.9

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0081%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00030%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 7.8 mg/kg, converted to compound conc.:10.30 mg/kg or 0.0010%)

Cadmium sulphide: (Cation conc. entered: 1 mg/kg, converted to compound conc.:1.29 mg/kg or 0.00013%)

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 52.1 mg/kg, converted to compound conc.:81.27 mg/kg or 0.0081%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 12 mg/kg, converted to compound conc.:18.95 mg/kg or 0.0019%)

Copper (I) oxide: (Cation conc. entered: 13.9 mg/kg, converted to compound conc.:15.65 mg/kg or 0.0016%)

Zinc chromate: (Cation conc. entered: 47.3 mg/kg, converted to compound conc.:131.22 mg/kg or 0.013%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 2 mg/kg, converted to compound conc.:3.00 mg/kg or 0.00030%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 7.9 pH or 7.90 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 5.3 mg/kg or 0.00053%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"

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: "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: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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: "H14 on R50/53" for determinand: "Lead chromate"

Test: "H14 on R50, R52, R53, R52/53" for determinand: "Cadmium sulphide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"

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

Substance notes

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: "Cadmium sulphide"
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: "Zinc chromate"
determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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: "Cadmium sulphide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM02 4.2

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0089%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00018%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 9.1 mg/kg, converted to compound conc.:12.01 mg/kg or 0.0012%)

Cadmium sulphide: (Cation conc. entered: 0.8 mg/kg, converted to compound conc.:1.03 mg/kg or 0.00010%)

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 57.3 mg/kg, converted to compound conc.:89.38 mg/kg or 0.0089%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 18.9 mg/kg, converted to compound conc.:29.85 mg/kg or 0.0030%)

Copper (I) oxide: (Cation conc. entered: 19.2 mg/kg, converted to compound conc.:21.62 mg/kg or 0.0022%)

Zinc chromate: (Cation conc. entered: 69.3 mg/kg, converted to compound conc.:192.25 mg/kg or 0.019%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 1.2 mg/kg, converted to compound conc.:1.80 mg/kg or 0.00018%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 7.9 pH or 7.90 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.7 mg/kg or 0.000070%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 1.5 mg/kg or 0.00015%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"

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: "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: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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: "H14 on R50/53" for determinand: "Lead chromate"

Test: "H14 on R50, R52, R53, R52/53" for determinand: "Cadmium sulphide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"

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

Substance notes**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: "Cadmium sulphide"

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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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: "Cadmium sulphide"

determinand: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08
HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)
HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM03 2.5

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0075%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00010%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 8.6 mg/kg, converted to compound conc.:11.35 mg/kg or 0.0011%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 48.3 mg/kg, converted to compound conc.:75.34 mg/kg or 0.0075%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 14.7 mg/kg, converted to compound conc.:23.22 mg/kg or 0.0023%)

Copper (I) oxide: (Cation conc. entered: 16.3 mg/kg, converted to compound conc.:18.35 mg/kg or 0.0018%)

Zinc chromate: (Cation conc. entered: 59.3 mg/kg, converted to compound conc.:164.51 mg/kg or 0.016%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 0.7 mg/kg, converted to compound conc.: 1.05 mg/kg or 0.00010%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.1 pH or 8.10 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 2.1 mg/kg or 0.00021%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "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: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes**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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08
HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)
HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM04 1

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0038%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: <5 mg/kg, converted to compound conc.:<6.60 mg/kg or <0.00066%)

IGNORED Because: "<LOD"

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 24.1 mg/kg, converted to compound conc.:37.59 mg/kg or 0.0038%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 8.2 mg/kg, converted to compound conc.:12.95 mg/kg or 0.0013%)

Copper (I) oxide: (Cation conc. entered: 9.5 mg/kg, converted to compound conc.:10.70 mg/kg or 0.0011%)

Zinc chromate: (Cation conc. entered: 26.1 mg/kg, converted to compound conc.:72.41 mg/kg or 0.0072%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.2 pH or 8.20 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "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: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM05 3

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0042%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 5.2 mg/kg, converted to compound conc.:6.87 mg/kg or 0.00069%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 27 mg/kg, converted to compound conc.:42.12 mg/kg or 0.0042%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 13 mg/kg, converted to compound conc.:20.53 mg/kg or 0.0021%)

Copper (I) oxide: (Cation conc. entered: 11.2 mg/kg, converted to compound conc.:12.61 mg/kg or 0.0013%)

Zinc chromate: (Cation conc. entered: 37.9 mg/kg, converted to compound conc.:105.14 mg/kg or 0.011%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8 pH or 8.00 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

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: "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"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

*** Potentially Hazardous Waste**

Classified as **17 05 04** or **17 05 03 ***
in the European Waste Catalogue 2002

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245

Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:
BH01 0.5
Site:

Project:

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

EWC 2002 code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 or 17 05 03 * (Soil and stones other than those mentioned in 17 05 03 or Soil and stones containing dangerous substances)

Hazard properties (substances considered hazardous until shown otherwise)

H12: "Waste which releases toxic or very toxic gases in contact with water, air or an acid."

Risk phrases hit:

R32 "Contact with acids liberates very toxic gas"

Because of determinand:

Cyanides (with the exception of complex cyanides): (0.000020%)

Additional: Additional Risk Phrases "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0059%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 6 mg/kg, converted to compound conc.:7.92 mg/kg or 0.00079%)
Cadmium sulphide: (Cation conc. entered: 0.5 mg/kg, converted to compound conc.:0.64 mg/kg or 0.000064%)
Lead chromate: (Cation conc. entered: 38 mg/kg, converted to compound conc.:59.27 mg/kg or 0.0059%)
Mercury dichloride: (Cation conc. entered: <0.05 mg/kg, converted to compound conc.:<0.068 mg/kg or <0.000068%) **IGNORED Because: "<LOD"**

Nickel dihydroxide: (Cation conc. entered: 12 mg/kg, converted to compound conc.: 18.95 mg/kg or 0.0019%)
 Copper (I) oxide: (Cation conc. entered: 11 mg/kg, converted to compound conc.: 12.38 mg/kg or 0.0012%)
 Zinc chromate: (Cation conc. entered: 43 mg/kg, converted to compound conc.: 119.29 mg/kg or 0.012%)
 Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**
 pH: (Whole concentration entered as: 8.7 pH or 8.70 pH)
 Cyanides (with the exception of complex cyanides): (Cation conc. entered: 0.2 mg/kg, converted to compound conc.: 0.20 mg/kg or 0.000020%)
 Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 6.2 mg/kg or 0.00062%)
 Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.1 mg/kg or 0.000010%)
 Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 4.8 mg/kg or 0.00048%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cyanides (with the exception of complex cyanides)"

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: "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: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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: "H14 on R50/R53" for determinand: "Lead chromate"

Test: "H14 on R50, R52, R53, R52/53" for determinand: "Cadmium sulphide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"

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

Substance notes

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: "Cadmium sulphide"

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: "Cyanides (with the exception of complex cyanides)"

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: "Cadmium sulphide"

determinand: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TP14 1

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0042%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 5.5 mg/kg, converted to compound conc.:7.26 mg/kg or 0.00073%)

Cadmium sulphide: (Cation conc. entered: 0.2 mg/kg, converted to compound conc.:0.26 mg/kg or 0.000026%)

Lead chromate: (Cation conc. entered: 27 mg/kg, converted to compound conc.:42.12 mg/kg or 0.0042%)

Mercury dichloride: (Cation conc. entered: <0.05 mg/kg, converted to compound conc.:<0.068 mg/kg or <0.0000068%) **IGNORED Because: "<LOD"**

Nickel dihydroxide: (Cation conc. entered: 8 mg/kg, converted to compound conc.:12.64 mg/kg or 0.0013%)

Copper (I) oxide: (Cation conc. entered: 8 mg/kg, converted to compound conc.:9.01 mg/kg or 0.00090%)

Zinc chromate: (Cation conc. entered: 27 mg/kg, converted to compound conc.:74.90 mg/kg or 0.0075%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.3 pH or 8.30 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <0.1 mg/kg, converted to compound conc.:<0.10 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 6.2 mg/kg or 0.00062%)
Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.1 mg/kg or 0.000010%)
Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 4.5 mg/kg or 0.00045%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"
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: "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: "Oils: fuel oils (including DRO, C10-C25)"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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

Substance notes

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: "Cadmium sulphide"

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: "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: "Cadmium sulphide"

determinand: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TP15 0.5

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0036%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 4.1 mg/kg, converted to compound conc.:5.41 mg/kg or 0.00054%)

Cadmium sulphide: (Cation conc. entered: 0.2 mg/kg, converted to compound conc.:0.26 mg/kg or 0.000026%)

Lead chromate: (Cation conc. entered: 23 mg/kg, converted to compound conc.:35.88 mg/kg or 0.0036%)

Mercury dichloride: (Cation conc. entered: <0.05 mg/kg, converted to compound conc.:<0.068 mg/kg or <0.0000068%) **IGNORED Because: "<LOD"**

Nickel dihydroxide: (Cation conc. entered: 8 mg/kg, converted to compound conc.:12.64 mg/kg or 0.0013%)

Copper (I) oxide: (Cation conc. entered: 8 mg/kg, converted to compound conc.:9.01 mg/kg or 0.00090%)

Zinc chromate: (Cation conc. entered: 23 mg/kg, converted to compound conc.:63.81 mg/kg or 0.0064%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.4 pH or 8.40 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <0.1 mg/kg, converted to compound conc.:<0.10 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 6.2 mg/kg or 0.00062%)
Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.1 mg/kg or 0.000010%)
Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 4.8 mg/kg or 0.00048%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"
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: "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: "Oils: fuel oils (including DRO, C10-C25)"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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

Substance notes

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: "Cadmium sulphide"

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: "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: "Cadmium sulphide"

determinand: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TP28 0.5

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0039%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 4.8 mg/kg, converted to compound conc.:6.34 mg/kg or 0.00063%)

Cadmium sulphide: (Cation conc. entered: 0.2 mg/kg, converted to compound conc.:0.26 mg/kg or 0.000026%)

Lead chromate: (Cation conc. entered: 25 mg/kg, converted to compound conc.:39.00 mg/kg or 0.0039%)

Mercury dichloride: (Cation conc. entered: <0.05 mg/kg, converted to compound conc.:<0.068 mg/kg or <0.0000068%) **IGNORED Because: "<LOD"**

Nickel dihydroxide: (Cation conc. entered: 9 mg/kg, converted to compound conc.:14.22 mg/kg or 0.0014%)

Copper (I) oxide: (Cation conc. entered: 7 mg/kg, converted to compound conc.:7.88 mg/kg or 0.00079%)

Zinc chromate: (Cation conc. entered: 27 mg/kg, converted to compound conc.:74.90 mg/kg or 0.0075%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.4 pH or 8.40 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <0.1 mg/kg, converted to compound conc.:<0.10 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 6.2 mg/kg or 0.00062%)
Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.1 mg/kg or 0.000010%)
Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 4.8 mg/kg or 0.00048%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"
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: "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: "Oils: fuel oils (including DRO, C10-C25)"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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

Substance notes

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: "Cadmium sulphide"

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: "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: "Cadmium sulphide"

determinand: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TP28 1

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0037%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.000075%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 4.6 mg/kg, converted to compound conc.:6.07 mg/kg or 0.00061%)

Cadmium sulphide: (Cation conc. entered: 0.2 mg/kg, converted to compound conc.:0.26 mg/kg or 0.000026%)

Lead chromate: (Cation conc. entered: 24 mg/kg, converted to compound conc.:37.44 mg/kg or 0.0037%)

Mercury dichloride: (Cation conc. entered: <0.05 mg/kg, converted to compound conc.:<0.068 mg/kg or <0.000068%) **IGNORED Because: "<LOD"**

Nickel dihydroxide: (Cation conc. entered: 10 mg/kg, converted to compound conc.:15.79 mg/kg or 0.0016%)

Copper (I) oxide: (Cation conc. entered: 8 mg/kg, converted to compound conc.:9.01 mg/kg or 0.00090%)

Zinc chromate: (Cation conc. entered: 28 mg/kg, converted to compound conc.:77.68 mg/kg or 0.0078%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 0.5 mg/kg, converted to compound conc.:0.75 mg/kg or 0.000075%)

pH: (Whole concentration entered as: 8.4 pH or 8.40 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <0.1 mg/kg, converted to compound conc.: <0.10 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 6.2 mg/kg or 0.00062%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.1 mg/kg or 0.000010%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 4.8 mg/kg or 0.00048%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Cadmium sulphide"

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: "H14 on R50/53" for determinand: "Lead chromate"

Test: "H14 on R50, R52, R53, R52/53" for determinand: "Cadmium sulphide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Cadmium sulphide"

Substance notes**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: "Cadmium sulphide"

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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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: "Cadmium sulphide"

determinand: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TP28 3

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0050%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 4.9 mg/kg, converted to compound conc.:6.47 mg/kg or 0.00065%)

Cadmium sulphide: (Cation conc. entered: 0.3 mg/kg, converted to compound conc.:0.39 mg/kg or 0.000039%)

Lead chromate: (Cation conc. entered: 32 mg/kg, converted to compound conc.:49.91 mg/kg or 0.0050%)

Mercury dichloride: (Cation conc. entered: <0.05 mg/kg, converted to compound conc.:<0.068 mg/kg or <0.0000068%) **IGNORED Because: "<LOD"**

Nickel dihydroxide: (Cation conc. entered: 9 mg/kg, converted to compound conc.:14.22 mg/kg or 0.0014%)

Copper (I) oxide: (Cation conc. entered: 8 mg/kg, converted to compound conc.:9.01 mg/kg or 0.00090%)

Zinc chromate: (Cation conc. entered: 33 mg/kg, converted to compound conc.:91.55 mg/kg or 0.0092%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.4 pH or 8.40 pH)

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Cadmium sulphide"

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: "H14 on R50/53" for determinand: "Lead chromate"

Test: "H14 on R50, R52, R53, R52/53" for determinand: "Cadmium sulphide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Cadmium sulphide"

Substance notes

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: "Cadmium sulphide"
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: "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: "Cadmium sulphide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version**Classification utilises the following:**

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM06 1

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.015%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00017%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 15.7 mg/kg, converted to compound conc.:20.73 mg/kg or 0.0021%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 99.2 mg/kg, converted to compound conc.:154.73 mg/kg or 0.015%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 39.1 mg/kg, converted to compound conc.:61.76 mg/kg or 0.0062%)

Copper (I) oxide: (Cation conc. entered: 31.5 mg/kg, converted to compound conc.:35.47 mg/kg or 0.0035%)

Zinc chromate: (Cation conc. entered: 83.5 mg/kg, converted to compound conc.:231.64 mg/kg or 0.023%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 1.1 mg/kg, converted to compound conc.: 1.65 mg/kg or 0.00017%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8 pH or 8.00 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 4.4 mg/kg or 0.00044%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM07 2.5

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0045%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.000075%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 6.6 mg/kg, converted to compound conc.:8.71 mg/kg or 0.00087%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 28.8 mg/kg, converted to compound conc.:44.92 mg/kg or 0.0045%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 14.1 mg/kg, converted to compound conc.:22.27 mg/kg or 0.0022%)

Copper (I) oxide: (Cation conc. entered: 18.3 mg/kg, converted to compound conc.:20.60 mg/kg or 0.0021%)

Zinc chromate: (Cation conc. entered: 45.6 mg/kg, converted to compound conc.:126.50 mg/kg or 0.013%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 0.5 mg/kg, converted to compound conc.: 0.75 mg/kg or 0.000075%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.1 pH or 8.10 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 3 mg/kg or 0.00030%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes**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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08
HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)
HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM08 1

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0086%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.000090%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 10.1 mg/kg, converted to compound conc.:13.34 mg/kg or 0.0013%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 55 mg/kg, converted to compound conc.:85.79 mg/kg or 0.0086%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 20.1 mg/kg, converted to compound conc.:31.75 mg/kg or 0.0032%)

Copper (I) oxide: (Cation conc. entered: 20.3 mg/kg, converted to compound conc.:22.86 mg/kg or 0.0023%)

Zinc chromate: (Cation conc. entered: 60.6 mg/kg, converted to compound conc.:168.11 mg/kg or 0.017%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 0.6 mg/kg, converted to compound conc.: 0.90 mg/kg or 0.000090%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.2 pH or 8.20 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 1.8 mg/kg or 0.00018%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 58.2 mg/kg or 0.0058%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes**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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08
HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)
HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM08 4.4

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0038%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 6.2 mg/kg, converted to compound conc.:8.19 mg/kg or 0.00082%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 24.6 mg/kg, converted to compound conc.:38.37 mg/kg or 0.0038%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 13.7 mg/kg, converted to compound conc.:21.64 mg/kg or 0.0022%)

Copper (I) oxide: (Cation conc. entered: 13.8 mg/kg, converted to compound conc.:15.54 mg/kg or 0.0016%)

Zinc chromate: (Cation conc. entered: 39.8 mg/kg, converted to compound conc.:110.41 mg/kg or 0.011%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8 pH or 8.00 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

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

Substance notes

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: "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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM09 2

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0048%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 5.6 mg/kg, converted to compound conc.:7.39 mg/kg or 0.00074%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 30.7 mg/kg, converted to compound conc.:47.89 mg/kg or 0.0048%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 11.9 mg/kg, converted to compound conc.:18.80 mg/kg or 0.0019%)

Copper (I) oxide: (Cation conc. entered: 12.4 mg/kg, converted to compound conc.:13.96 mg/kg or 0.0014%)

Zinc chromate: (Cation conc. entered: 37.6 mg/kg, converted to compound conc.:104.31 mg/kg or 0.010%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.2 pH or 8.20 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 9.1 mg/kg or 0.00091%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM10 1

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0046%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 6.8 mg/kg, converted to compound conc.:8.98 mg/kg or 0.00090%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 29.2 mg/kg, converted to compound conc.:45.55 mg/kg or 0.0046%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 16.9 mg/kg, converted to compound conc.:26.69 mg/kg or 0.0027%)

Copper (I) oxide: (Cation conc. entered: 16 mg/kg, converted to compound conc.:18.01 mg/kg or 0.0018%)

Zinc chromate: (Cation conc. entered: 50.9 mg/kg, converted to compound conc.:141.20 mg/kg or 0.014%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8 pH or 8.00 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 4.2 mg/kg or 0.00042%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM10 4

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.014%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00020%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 10.3 mg/kg, converted to compound conc.:13.60 mg/kg or 0.0014%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 90.9 mg/kg, converted to compound conc.:141.79 mg/kg or 0.014%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 20.1 mg/kg, converted to compound conc.:31.75 mg/kg or 0.0032%)

Copper (I) oxide: (Cation conc. entered: 25.9 mg/kg, converted to compound conc.:29.16 mg/kg or 0.0029%)

Zinc chromate: (Cation conc. entered: 96.5 mg/kg, converted to compound conc.:267.71 mg/kg or 0.027%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 1.3 mg/kg, converted to compound conc.: 1.95 mg/kg or 0.00020%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.2 pH or 8.20 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: 1.6 mg/kg or 0.00016%)

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: 1.9 mg/kg or 0.00019%)

Benzo[b]fluoranthene: (Whole concentration entered as: 1.9 mg/kg or 0.00019%)

Benzo[ghi]perylene: (Whole concentration entered as: 1.6 mg/kg or 0.00016%)

Benzo[k]fluoranthene: (Whole concentration entered as: 1.9 mg/kg or 0.00019%)

Chrysene: (Whole concentration entered as: 2 mg/kg or 0.00020%)

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: 2.7 mg/kg or 0.00027%)

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: 1.7 mg/kg or 0.00017%)

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: 1.3 mg/kg or 0.00013%)

Pyrene: (Whole concentration entered as: 2.4 mg/kg or 0.00024%)

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 9.9 mg/kg or 0.00099%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 188.4 mg/kg or 0.019%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Benzo[a]anthracene"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Benzo[a]pyrene; benzo[def]chrysene"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Benzo[k]fluoranthene"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Benzo[b]fluoranthene"

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

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

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Benzo[ghi]perylene"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Arsenic trioxide"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Lead chromate"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Zinc chromate"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes**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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM11 1.1

Site:

Project:

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)

Sample Depth:

0 m

Wet Weight Moisture Content:

0%

Comments:

Hazard properties

None identified

Additional: Additional Risk Phrases "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0037%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 7.3 mg/kg, converted to compound conc.:9.64 mg/kg or 0.00096%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 24 mg/kg, converted to compound conc.:37.44 mg/kg or 0.0037%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 29.5 mg/kg, converted to compound conc.:46.60 mg/kg or 0.0047%)

Copper (I) oxide: (Cation conc. entered: 17.9 mg/kg, converted to compound conc.:20.15 mg/kg or 0.0020%)

Zinc chromate: (Cation conc. entered: 51.2 mg/kg, converted to compound conc.:142.04 mg/kg or 0.014%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.2 pH or 8.20 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 7.9 mg/kg or 0.00079%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "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: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM11 2

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0041%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 12.1 mg/kg, converted to compound conc.:15.98 mg/kg or 0.0016%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 26 mg/kg, converted to compound conc.:40.56 mg/kg or 0.0041%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 13.3 mg/kg, converted to compound conc.:21.01 mg/kg or 0.0021%)

Copper (I) oxide: (Cation conc. entered: 16.1 mg/kg, converted to compound conc.:18.13 mg/kg or 0.0018%)

Zinc chromate: (Cation conc. entered: 38.8 mg/kg, converted to compound conc.:107.64 mg/kg or 0.011%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.2 pH or 8.20 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

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: "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"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM12 4.5

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.011%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00017%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 15.5 mg/kg, converted to compound conc.:20.47 mg/kg or 0.0020%)

Cadmium sulphide: (Cation conc. entered: 0.8 mg/kg, converted to compound conc.:1.03 mg/kg or 0.00010%)

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 68.6 mg/kg, converted to compound conc.:107.00 mg/kg or 0.011%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 48.6 mg/kg, converted to compound conc.:76.76 mg/kg or 0.0077%)

Copper (I) oxide: (Cation conc. entered: 21.6 mg/kg, converted to compound conc.:24.32 mg/kg or 0.0024%)

Zinc chromate: (Cation conc. entered: 91.4 mg/kg, converted to compound conc.:253.56 mg/kg or 0.025%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 1.1 mg/kg, converted to compound conc.:1.65 mg/kg or 0.00017%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.3 pH or 8.30 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"

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: "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: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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: "H14 on R50/53" for determinand: "Lead chromate"

Test: "H14 on R50, R52, R53, R52/53" for determinand: "Cadmium sulphide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"

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

Substance notes

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: "Cadmium sulphide"

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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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: "Cadmium sulphide"

determinand: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM13 1

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.021%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00027%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 15.5 mg/kg, converted to compound conc.:20.47 mg/kg or 0.0020%)

Cadmium sulphide: (Cation conc. entered: 0.7 mg/kg, converted to compound conc.:0.90 mg/kg or 0.000090%)

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 134.2 mg/kg, converted to compound conc.:209.33 mg/kg or 0.021%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 123.3 mg/kg, converted to compound conc.:194.75 mg/kg or 0.019%)

Copper (I) oxide: (Cation conc. entered: 31.8 mg/kg, converted to compound conc.:35.80 mg/kg or 0.0036%)

Zinc chromate: (Cation conc. entered: 116.3 mg/kg, converted to compound conc.:322.63 mg/kg or 0.032%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 1.8 mg/kg, converted to compound conc.:2.70 mg/kg or 0.00027%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.1 pH or 8.10 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 4.4 mg/kg or 0.00044%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"

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: "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: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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: "H14 on R50/53" for determinand: "Lead chromate"

Test: "H14 on R50, R52, R53, R52/53" for determinand: "Cadmium sulphide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"

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

Substance notes

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: "Cadmium sulphide"
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: "Zinc chromate"
determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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: "Cadmium sulphide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM13 4

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0040%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: <5 mg/kg, converted to compound conc.:<6.60 mg/kg or <0.00066%)

IGNORED Because: "<LOD"

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 25.9 mg/kg, converted to compound conc.:40.40 mg/kg or 0.0040%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 10.7 mg/kg, converted to compound conc.:16.90 mg/kg or 0.0017%)

Copper (I) oxide: (Cation conc. entered: 12 mg/kg, converted to compound conc.:13.51 mg/kg or 0.0014%)

Zinc chromate: (Cation conc. entered: 31.6 mg/kg, converted to compound conc.:87.66 mg/kg or 0.0088%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.3 pH or 8.30 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 2.1 mg/kg or 0.00021%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "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: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:
TPM14 1.4
Site:

Project:

Sample Depth:
0 m
Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0033%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: <5 mg/kg, converted to compound conc.:<6.60 mg/kg or <0.00066%)

IGNORED Because: "<LOD"

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 20.9 mg/kg, converted to compound conc.:32.60 mg/kg or 0.0033%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 9.7 mg/kg, converted to compound conc.:15.32 mg/kg or 0.0015%)

Copper (I) oxide: (Cation conc. entered: 10 mg/kg, converted to compound conc.:11.26 mg/kg or 0.0011%)

Zinc chromate: (Cation conc. entered: 36.1 mg/kg, converted to compound conc.:100.15 mg/kg or 0.010%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.2 pH or 8.20 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 1.7 mg/kg or 0.00017%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "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: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM14 3

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0044%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 8.1 mg/kg, converted to compound conc.:10.69 mg/kg or 0.0011%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 28.1 mg/kg, converted to compound conc.:43.83 mg/kg or 0.0044%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 31.9 mg/kg, converted to compound conc.:50.39 mg/kg or 0.0050%)

Copper (I) oxide: (Cation conc. entered: 22 mg/kg, converted to compound conc.:24.77 mg/kg or 0.0025%)

Zinc chromate: (Cation conc. entered: 59.5 mg/kg, converted to compound conc.:165.06 mg/kg or 0.017%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.1 pH or 8.10 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 1.4 mg/kg or 0.00014%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "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: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:
TPM15 2.2
Site: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)

Project:

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

Hazard properties

None identified

Additional: Additional Risk Phrases "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0048%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: <5 mg/kg, converted to compound conc.:<6.60 mg/kg or <0.00066%)

IGNORED Because: "<LOD"

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 30.9 mg/kg, converted to compound conc.:48.20 mg/kg or 0.0048%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 11.1 mg/kg, converted to compound conc.:17.53 mg/kg or 0.0018%)

Copper (I) oxide: (Cation conc. entered: 13 mg/kg, converted to compound conc.:14.64 mg/kg or 0.0015%)

Zinc chromate: (Cation conc. entered: 35.1 mg/kg, converted to compound conc.:97.37 mg/kg or 0.0097%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8 pH or 8.00 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "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: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM16 0.2

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0078%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00021%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 7.4 mg/kg, converted to compound conc.:9.77 mg/kg or 0.00098%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 49.8 mg/kg, converted to compound conc.:77.68 mg/kg or 0.0078%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 14.6 mg/kg, converted to compound conc.:23.06 mg/kg or 0.0023%)

Copper (I) oxide: (Cation conc. entered: 14.9 mg/kg, converted to compound conc.:16.78 mg/kg or 0.0017%)

Zinc chromate: (Cation conc. entered: 46.6 mg/kg, converted to compound conc.:129.28 mg/kg or 0.013%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 1.4 mg/kg, converted to compound conc.: 2.10 mg/kg or 0.00021%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8 pH or 8.00 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 1.5 mg/kg or 0.00015%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "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: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes**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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08
HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)
HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM16 2

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0079%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00022%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 7.1 mg/kg, converted to compound conc.:9.37 mg/kg or 0.00094%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 50.9 mg/kg, converted to compound conc.:79.39 mg/kg or 0.0079%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 12 mg/kg, converted to compound conc.:18.95 mg/kg or 0.0019%)

Copper (I) oxide: (Cation conc. entered: 14.5 mg/kg, converted to compound conc.:16.33 mg/kg or 0.0016%)

Zinc chromate: (Cation conc. entered: 42.9 mg/kg, converted to compound conc.:119.01 mg/kg or 0.012%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 1.5 mg/kg, converted to compound conc.: 2.25 mg/kg or 0.00022%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8 pH or 8.00 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM17 1.2

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0045%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.000075%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: <5 mg/kg, converted to compound conc.:<6.60 mg/kg or <0.00066%)

IGNORED Because: "<LOD"

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 29.1 mg/kg, converted to compound conc.:45.39 mg/kg or 0.0045%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 9.7 mg/kg, converted to compound conc.:15.32 mg/kg or 0.0015%)

Copper (I) oxide: (Cation conc. entered: 11.9 mg/kg, converted to compound conc.:13.40 mg/kg or 0.0013%)

Zinc chromate: (Cation conc. entered: 39 mg/kg, converted to compound conc.:108.19 mg/kg or 0.011%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 0.5 mg/kg, converted to compound conc.: 0.75 mg/kg or 0.000075%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8 pH or 8.00 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 1.3 mg/kg or 0.00013%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes**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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TP16 0.5

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0041%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 6.8 mg/kg, converted to compound conc.:8.98 mg/kg or 0.00090%)

Cadmium sulphide: (Cation conc. entered: 0.4 mg/kg, converted to compound conc.:0.51 mg/kg or 0.000051%)

Lead chromate: (Cation conc. entered: 26 mg/kg, converted to compound conc.:40.56 mg/kg or 0.0041%)

Mercury dichloride: (Cation conc. entered: <0.05 mg/kg, converted to compound conc.:<0.068 mg/kg or <0.0000068%) **IGNORED Because: "<LOD"**

Nickel dihydroxide: (Cation conc. entered: 23 mg/kg, converted to compound conc.:36.33 mg/kg or 0.0036%)

Copper (I) oxide: (Cation conc. entered: 17 mg/kg, converted to compound conc.:19.14 mg/kg or 0.0019%)

Zinc chromate: (Cation conc. entered: 51 mg/kg, converted to compound conc.:141.48 mg/kg or 0.014%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.4 pH or 8.40 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <0.1 mg/kg, converted to compound conc.:<0.10 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 6.2 mg/kg or 0.00062%)
Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.1 mg/kg or 0.000010%)
Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 4.8 mg/kg or 0.00048%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Cadmium sulphide"

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: "H14 on R50/53" for determinand: "Lead chromate"

Test: "H14 on R50, R52, R53, R52/53" for determinand: "Cadmium sulphide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Cadmium sulphide"

Substance notes

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: "Cadmium sulphide"

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: "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: "Cadmium sulphide"

determinand: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

*** Potentially Hazardous Waste**

Classified as **17 05 04** or **17 05 03 ***
in the European Waste Catalogue 2002

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245

Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:
TP17 1
Site:

Project:

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

EWC 2002 code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 or 17 05 03 * (Soil and stones other than those mentioned in 17 05 03 or Soil and stones containing dangerous substances)

Hazard properties (substances considered hazardous until shown otherwise)

H12: "Waste which releases toxic or very toxic gases in contact with water, air or an acid."

Risk phrases hit:

R32 "Contact with acids liberates very toxic gas"

Because of determinand:

Cyanides (with the exception of complex cyanides): (0.000010%)

Additional: Additional Risk Phrases "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0092%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.000015%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 7.3 mg/kg, converted to compound conc.:9.64 mg/kg or 0.00096%)
Cadmium sulphide: (Cation conc. entered: 0.6 mg/kg, converted to compound conc.:0.77 mg/kg or 0.000077%)
Lead chromate: (Cation conc. entered: 59 mg/kg, converted to compound conc.:92.03 mg/kg or 0.0092%)
Mercury dichloride: (Cation conc. entered: 0.1 mg/kg, converted to compound conc.:0.14 mg/kg or 0.000014%)

Nickel dihydroxide: (Cation conc. entered: 14 mg/kg, converted to compound conc.:22.11 mg/kg or 0.0022%)
Copper (I) oxide: (Cation conc. entered: 15 mg/kg, converted to compound conc.:16.89 mg/kg or 0.0017%)
Zinc chromate: (Cation conc. entered: 83 mg/kg, converted to compound conc.:230.25 mg/kg or 0.023%)
Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 0.1 mg/kg, converted to compound conc.:0.15 mg/kg or 0.000015%)
pH: (Whole concentration entered as: 8.3 pH or 8.30 pH)
Cyanides (with the exception of complex cyanides): (Cation conc. entered: 0.1 mg/kg, converted to compound conc.:0.10 mg/kg or 0.000010%)
Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Benzo[a]anthracene: (Whole concentration entered as: 1.2 mg/kg or 0.00012%)
Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: 3.1 mg/kg or 0.00031%)
Benzo[b]fluoranthene: (Whole concentration entered as: 2.5 mg/kg or 0.00025%)
Benzo[ghi]perylene: (Whole concentration entered as: 1.9 mg/kg or 0.00019%)
Benzo[k]fluoranthene: (Whole concentration entered as: 1.1 mg/kg or 0.00011%)
Chrysene: (Whole concentration entered as: 1.3 mg/kg or 0.00013%)
Dibenz[a,h]anthracene: (Whole concentration entered as: 0.7 mg/kg or 0.000070%)
Fluoranthene: (Whole concentration entered as: 3.6 mg/kg or 0.00036%)
Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Indeno[123-cd]pyrene: (Whole concentration entered as: 2 mg/kg or 0.00020%)
Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
Pyrene: (Whole concentration entered as: 3.4 mg/kg or 0.00034%)
Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 15.4 mg/kg or 0.0015%)
Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.1 mg/kg or 0.000010%)
Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 280 mg/kg or 0.028%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Benzo[a]anthracene"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Benzo[a]pyrene; benzo[def]chrysene"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Benzo[k]fluoranthene"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Dibenz[a,h]anthracene"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Cyanides (with the exception of complex cyanides)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Benzo[b]fluoranthene"

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

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Benzo[ghi]perylene"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Lead chromate"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Mercury dichloride"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Zinc chromate"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"
Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Cadmium sulphide"

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

Substance notes**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: "Cadmium sulphide"
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: "Cyanides (with the exception of complex cyanides)"
determinand: "Zinc chromate"
determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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: "Cadmium sulphide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TP27 0.5

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0059%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 5.5 mg/kg, converted to compound conc.:7.26 mg/kg or 0.00073%)

Cadmium sulphide: (Cation conc. entered: 0.3 mg/kg, converted to compound conc.:0.39 mg/kg or 0.000039%)

Lead chromate: (Cation conc. entered: 38 mg/kg, converted to compound conc.:59.27 mg/kg or 0.0059%)

Mercury dichloride: (Cation conc. entered: <0.05 mg/kg, converted to compound conc.:<0.068 mg/kg or <0.0000068%) **IGNORED Because: "<LOD"**

Nickel dihydroxide: (Cation conc. entered: 10 mg/kg, converted to compound conc.:15.79 mg/kg or 0.0016%)

Copper (I) oxide: (Cation conc. entered: 11 mg/kg, converted to compound conc.:12.38 mg/kg or 0.0012%)

Zinc chromate: (Cation conc. entered: 37 mg/kg, converted to compound conc.:102.64 mg/kg or 0.010%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.4 pH or 8.40 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <0.1 mg/kg, converted to compound conc.:<0.10 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 6.2 mg/kg or 0.00062%)
 Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.1 mg/kg or 0.000010%)
 Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 4.8 mg/kg or 0.00048%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Arsenic trioxide"
 Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"
 Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Lead chromate"
 Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"
 Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Zinc chromate"
 Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"
 Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"
 Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"
 Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Cadmium sulphide"

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

Substance notes

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: "Cadmium sulphide"

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: "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: "Cadmium sulphide"

determinand: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TP27 1

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0053%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 5.1 mg/kg, converted to compound conc.:6.73 mg/kg or 0.00067%)

Cadmium sulphide: (Cation conc. entered: 0.3 mg/kg, converted to compound conc.:0.39 mg/kg or 0.000039%)

Lead chromate: (Cation conc. entered: 34 mg/kg, converted to compound conc.:53.03 mg/kg or 0.0053%)

Mercury dichloride: (Cation conc. entered: <0.05 mg/kg, converted to compound conc.:<0.068 mg/kg or <0.000068%) **IGNORED Because: "<LOD"**

Nickel dihydroxide: (Cation conc. entered: 10 mg/kg, converted to compound conc.:15.79 mg/kg or 0.0016%)

Copper (I) oxide: (Cation conc. entered: 9 mg/kg, converted to compound conc.:10.13 mg/kg or 0.0010%)

Zinc chromate: (Cation conc. entered: 37 mg/kg, converted to compound conc.:102.64 mg/kg or 0.010%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.6 pH or 8.60 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <0.1 mg/kg, converted to compound conc.:<0.10 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 6.2 mg/kg or 0.00062%)
 Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.1 mg/kg or 0.000010%)
 Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 4.8 mg/kg or 0.00048%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Cadmium sulphide"

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: "H14 on R50/53" for determinand: "Lead chromate"

Test: "H14 on R50, R52, R53, R52/53" for determinand: "Cadmium sulphide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Cadmium sulphide"

Substance notes

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: "Cadmium sulphide"

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: "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: "Cadmium sulphide"

determinand: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TP27 3

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0059%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 5.9 mg/kg, converted to compound conc.:7.79 mg/kg or 0.00078%)

Cadmium sulphide: (Cation conc. entered: 0.3 mg/kg, converted to compound conc.:0.39 mg/kg or 0.000039%)

Lead chromate: (Cation conc. entered: 38 mg/kg, converted to compound conc.:59.27 mg/kg or 0.0059%)

Mercury dichloride: (Cation conc. entered: <0.05 mg/kg, converted to compound conc.:<0.068 mg/kg or <0.0000068%) **IGNORED Because: "<LOD"**

Nickel dihydroxide: (Cation conc. entered: 10 mg/kg, converted to compound conc.:15.79 mg/kg or 0.0016%)

Copper (I) oxide: (Cation conc. entered: 11 mg/kg, converted to compound conc.:12.38 mg/kg or 0.0012%)

Zinc chromate: (Cation conc. entered: 45 mg/kg, converted to compound conc.:124.84 mg/kg or 0.012%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.6 pH or 8.60 pH)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Cadmium sulphide"

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: "H14 on R50/53" for determinand: "Lead chromate"

Test: "H14 on R50, R52, R53, R52/53" for determinand: "Cadmium sulphide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Cadmium sulphide"

Substance notes

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: "Cadmium sulphide"

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: "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: "Cadmium sulphide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08
HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)
HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM18 1.3

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.031%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00022%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 6.5 mg/kg, converted to compound conc.:8.58 mg/kg or 0.00086%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 200.5 mg/kg, converted to compound conc.:312.74 mg/kg or 0.031%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 15.5 mg/kg, converted to compound conc.:24.48 mg/kg or 0.0024%)

Copper (I) oxide: (Cation conc. entered: 17.3 mg/kg, converted to compound conc.:19.48 mg/kg or 0.0019%)

Zinc chromate: (Cation conc. entered: 91.9 mg/kg, converted to compound conc.:254.94 mg/kg or 0.025%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 1.5 mg/kg, converted to compound conc.: 2.25 mg/kg or 0.00022%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.1 pH or 8.10 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: 0.5 mg/kg or 0.000050%)

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Chrysene: (Whole concentration entered as: 0.8 mg/kg or 0.000080%)

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: 0.7 mg/kg or 0.000070%)

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Benzo[k]fluoranthene"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Benzo[b]fluoranthene"

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

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

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:10
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:
TPM19 1.15
Site:

Project:

Sample Depth:
0 m
Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.020%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00025%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 5.1 mg/kg, converted to compound conc.:6.73 mg/kg or 0.00067%)
Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)
IGNORED Because: "<LOD"
Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)
IGNORED Because: "<LOD"
Lead chromate: (Cation conc. entered: 128.5 mg/kg, converted to compound conc.:200.44 mg/kg or 0.020%)
Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)
IGNORED Because: "<LOD"
Nickel dihydroxide: (Cation conc. entered: 26.9 mg/kg, converted to compound conc.:42.49 mg/kg or 0.0042%)
Copper (I) oxide: (Cation conc. entered: 25.6 mg/kg, converted to compound conc.:28.82 mg/kg or 0.0029%)
Zinc chromate: (Cation conc. entered: 94.6 mg/kg, converted to compound conc.:262.43 mg/kg or 0.026%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 1.7 mg/kg, converted to compound conc.: 2.55 mg/kg or 0.00025%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 7.8 pH or 7.80 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.7 mg/kg or 0.000070%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 1.8 mg/kg or 0.00018%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Copper (I) oxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Nickel dihydroxide"

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

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

Test: "H14 on R50, R50/53, R51/53, R52, R53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:11
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM19 4.2

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0085%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.000090%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 7.9 mg/kg, converted to compound conc.:10.43 mg/kg or 0.0010%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 54.4 mg/kg, converted to compound conc.:84.85 mg/kg or 0.0085%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 17.6 mg/kg, converted to compound conc.:27.80 mg/kg or 0.0028%)

Copper (I) oxide: (Cation conc. entered: 11.1 mg/kg, converted to compound conc.:12.50 mg/kg or 0.0012%)

Zinc chromate: (Cation conc. entered: 38.6 mg/kg, converted to compound conc.:107.08 mg/kg or 0.011%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 0.6 mg/kg, converted to compound conc.: 0.90 mg/kg or 0.000090%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 7.7 pH or 7.70 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

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: "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: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:11
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM20 0.8

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.053%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00032%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 10.6 mg/kg, converted to compound conc.:14.00 mg/kg or 0.0014%)

Cadmium sulphide: (Cation conc. entered: 1.1 mg/kg, converted to compound conc.:1.41 mg/kg or 0.00014%)

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 341.3 mg/kg, converted to compound conc.:532.36 mg/kg or 0.053%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 32.6 mg/kg, converted to compound conc.:51.49 mg/kg or 0.0051%)

Copper (I) oxide: (Cation conc. entered: 40.1 mg/kg, converted to compound conc.:45.15 mg/kg or 0.0045%)

Zinc chromate: (Cation conc. entered: 313.8 mg/kg, converted to compound conc.:870.53 mg/kg or 0.087%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 2.1 mg/kg, converted to compound conc.:3.15 mg/kg or 0.00032%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 7.2 pH or 7.20 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: 1 mg/kg or 0.00010%)

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: 1.2 mg/kg or 0.00012%)

Benzo[b]fluoranthene: (Whole concentration entered as: 1.2 mg/kg or 0.00012%)

Benzo[ghi]perylene: (Whole concentration entered as: 1 mg/kg or 0.00010%)

Benzo[k]fluoranthene: (Whole concentration entered as: 1.4 mg/kg or 0.00014%)

Chrysene: (Whole concentration entered as: 1.6 mg/kg or 0.00016%)

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: 1.6 mg/kg or 0.00016%)

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: 1.1 mg/kg or 0.00011%)

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: 1.4 mg/kg or 0.00014%)

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 1.8 mg/kg or 0.00018%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 13.7 mg/kg or 0.0014%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Benzo[a]anthracene"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Benzo[a]pyrene; benzo[def]chrysene"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Benzo[k]fluoranthene"

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

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Benzo[b]fluoranthene"

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

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

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Benzo[ghi]perylene"

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: "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: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"
Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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

Substance notes**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: "Cadmium sulphide"
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: "Zinc chromate"
determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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: "Cadmium sulphide"
determinand: "Nickel dihydroxide"
determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:11
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TP29 0.5

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases 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: (0.0055%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 6.4 mg/kg, converted to compound conc.:8.45 mg/kg or 0.00085%)

Cadmium sulphide: (Cation conc. entered: 0.5 mg/kg, converted to compound conc.:0.64 mg/kg or 0.00064%)

Lead chromate: (Cation conc. entered: 35 mg/kg, converted to compound conc.:54.59 mg/kg or 0.0055%)

Mercury dichloride: (Cation conc. entered: <0.05 mg/kg, converted to compound conc.:<0.068 mg/kg or <0.000068%) **IGNORED Because: "<LOD"**

Nickel dihydroxide: (Cation conc. entered: 19 mg/kg, converted to compound conc.:30.01 mg/kg or 0.0030%)

Copper (I) oxide: (Cation conc. entered: 13 mg/kg, converted to compound conc.:14.64 mg/kg or 0.0015%)

Zinc chromate: (Cation conc. entered: 45 mg/kg, converted to compound conc.:124.84 mg/kg or 0.012%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.75 mg/kg or <0.000075%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.5 pH or 8.50 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <0.1 mg/kg, converted to compound conc.:<0.10 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**
 Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 6.2 mg/kg or 0.00062%)
 Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.1 mg/kg or 0.000010%)
 Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 4.8 mg/kg or 0.00048%)
 Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**
 Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**
 Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**
 Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"

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: "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: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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: "H14 on R50/53" for determinand: "Lead chromate"

Test: "H14 on R50, R52, R53, R52/53" for determinand: "Cadmium sulphide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Cadmium sulphide"

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

Substance notes

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: "Cadmium sulphide"

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: "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: "Cadmium sulphide"

determinand: "Nickel dihydroxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:11
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM22 1.1

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0088%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00012%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 6.5 mg/kg, converted to compound conc.:8.58 mg/kg or 0.00086%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 56.4 mg/kg, converted to compound conc.:87.97 mg/kg or 0.0088%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 14.3 mg/kg, converted to compound conc.:22.59 mg/kg or 0.0023%)

Copper (I) oxide: (Cation conc. entered: 16 mg/kg, converted to compound conc.:18.01 mg/kg or 0.0018%)

Zinc chromate: (Cation conc. entered: 68.5 mg/kg, converted to compound conc.:190.03 mg/kg or 0.019%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 0.8 mg/kg, converted to compound conc.: 1.20 mg/kg or 0.00012%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 7.2 pH or 7.20 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: "[WM2 - Hazardous Waste Technical Guidance](#)"

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration. Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

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: "Lead chromate"

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: "Nickel dihydroxide"

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: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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: "Zinc chromate"

determinand: "Nickel dihydroxide"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification



Non Hazardous Waste

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:11
Telephone:
0207 755 3245

Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM22 3.1

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0017%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00014%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: <5 mg/kg, converted to compound conc.:<6.60 mg/kg or <0.00066%)

IGNORED Because: "<LOD"

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 11.2 mg/kg, converted to compound conc.:17.47 mg/kg or 0.0017%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 8 mg/kg, converted to compound conc.:12.64 mg/kg or 0.0013%)

Copper (I) oxide: (Cation conc. entered: 33.2 mg/kg, converted to compound conc.:37.38 mg/kg or 0.0037%)

Zinc chromate: (Cation conc. entered: 9.9 mg/kg, converted to compound conc.:27.46 mg/kg or 0.0027%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 0.9 mg/kg, converted to compound conc.: 1.35 mg/kg or 0.00014%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.3 pH or 8.30 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.6 mg/kg or 0.000060%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 2.2 mg/kg or 0.00022%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "Lead chromate"

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: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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: "Zinc chromate"

determinand: "Nickel dihydroxide"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:11
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM23 1.1

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0073%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00012%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 6.4 mg/kg, converted to compound conc.:8.45 mg/kg or 0.00085%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 47.1 mg/kg, converted to compound conc.:73.47 mg/kg or 0.0073%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 13 mg/kg, converted to compound conc.:20.53 mg/kg or 0.0021%)

Copper (I) oxide: (Cation conc. entered: 15 mg/kg, converted to compound conc.:16.89 mg/kg or 0.0017%)

Zinc chromate: (Cation conc. entered: 13.3 mg/kg, converted to compound conc.:36.90 mg/kg or 0.0037%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 0.8 mg/kg, converted to compound conc.: 1.20 mg/kg or 0.00012%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 7.3 pH or 7.30 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.7 mg/kg or 0.000070%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 1.7 mg/kg or 0.00017%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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: "Arsenic trioxide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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: "Nickel dihydroxide"

determinand: "Zinc chromate"

determinand: "Arsenic trioxide"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:11
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:
TPM23 2.45
Site:

Project:

Sample Depth:
0 m
Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0071%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.000090%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 6.2 mg/kg, converted to compound conc.:8.19 mg/kg or 0.00082%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 45.3 mg/kg, converted to compound conc.:70.66 mg/kg or 0.0071%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 14 mg/kg, converted to compound conc.:22.11 mg/kg or 0.0022%)

Copper (I) oxide: (Cation conc. entered: 14.8 mg/kg, converted to compound conc.:16.66 mg/kg or 0.0017%)

Zinc chromate: (Cation conc. entered: 59.8 mg/kg, converted to compound conc.:165.89 mg/kg or 0.017%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 0.6 mg/kg, converted to compound conc.: 0.90 mg/kg or 0.00090%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 7.5 pH or 7.50 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 0.7 mg/kg or 0.000070%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 1.7 mg/kg or 0.00017%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "Arsenic trioxide"

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"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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: "Nickel dihydroxide"

determinand: "Arsenic trioxide"

determinand: "Zinc chromate"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:11
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:

TPM24 0.6

Site:

Project:

Sample Depth:

0 m

Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Lead chromate: (0.0057%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00022%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 10.7 mg/kg, converted to compound conc.:14.13 mg/kg or 0.0014%)

Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)

IGNORED Because: "<LOD"

Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)

IGNORED Because: "<LOD"

Lead chromate: (Cation conc. entered: 36.4 mg/kg, converted to compound conc.:56.78 mg/kg or 0.0057%)

Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)

IGNORED Because: "<LOD"

Nickel dihydroxide: (Cation conc. entered: 21.7 mg/kg, converted to compound conc.:34.28 mg/kg or 0.0034%)

Copper (I) oxide: (Cation conc. entered: 19.9 mg/kg, converted to compound conc.:22.41 mg/kg or 0.0022%)

Zinc chromate: (Cation conc. entered: 67.6 mg/kg, converted to compound conc.:187.53 mg/kg or 0.019%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 1.5 mg/kg, converted to compound conc.: 2.25 mg/kg or 0.00022%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.3 pH or 8.30 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Oils: non-fuel oils/lubricating oils (>C25): (Whole concentration entered as: 1 mg/kg or 0.00010%)

Oils: GRO/PRO (C6-C10): (Whole concentration entered as: 0.2 mg/kg or 0.000020%)

Oils: fuel oils (including DRO, C10-C25): (Whole concentration entered as: 4.9 mg/kg or 0.00049%)

Benzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Toluene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Ethylbenzene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Xylene: (Whole concentration entered as: <10 mg/kg or <0.0010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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"

Test: "Additional on R33" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: non-fuel oils/lubricating oils (>C25)"

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: "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: "Copper (I) oxide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: GRO/PRO (C6-C10)"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Oils: fuel oils (including DRO, C10-C25)"

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "Zinc chromate"

determinand: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)

Classification

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

Classified by

Name:
Dymock, Lisa
Date:
06/09/2012 13:11
Telephone:
0207 755 3245Company:
Ove Arup & Partners International
4 Pierhead Street
Capital Waterside
Cardiff
CF10 4QP

Sample details

Sample Name:
TPM24 1.4
Site:

Project:

Sample Depth:
0 m
Wet 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 "Additional risk phrases apply, please check potential effects. NOTE: These are additional risk phrases and such a risk phrases alone will not cause a waste to be hazardous."

Risk phrases hit:

R33 "Danger of cumulative effects"

Because of determinands:

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (0.00014%)

Lead chromate: (0.061%)

Determinands (Wet Weight Moisture Content:0%)

Arsenic trioxide: (Cation conc. entered: 6.4 mg/kg, converted to compound conc.:8.45 mg/kg or 0.00085%)
Cadmium sulphide: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.64 mg/kg or <0.000064%)
IGNORED Because: "<LOD"
Chromium(VI) oxide: (Cation conc. entered: <2 mg/kg, converted to compound conc.:<3.85 mg/kg or <0.00038%)
IGNORED Because: "<LOD"
Lead chromate: (Cation conc. entered: 391.4 mg/kg, converted to compound conc.:610.51 mg/kg or 0.061%)
Mercury dichloride: (Cation conc. entered: <0.5 mg/kg, converted to compound conc.:<0.68 mg/kg or <0.000068%)
IGNORED Because: "<LOD"
Nickel dihydroxide: (Cation conc. entered: 15.5 mg/kg, converted to compound conc.:24.48 mg/kg or 0.0024%)
Copper (I) oxide: (Cation conc. entered: 11.5 mg/kg, converted to compound conc.:12.95 mg/kg or 0.0013%)
Zinc chromate: (Cation conc. entered: 42.8 mg/kg, converted to compound conc.:118.73 mg/kg or 0.012%)

Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite): (Cation conc. entered: 0.9 mg/kg, converted to compound conc.: 1.35 mg/kg or 0.00014%)

Boron tribromide/trichloride/trifluoride (combined risk phrases): (Cation conc. entered: <0.5 mg/kg, converted to compound conc.: <6.72 mg/kg or <0.00067%) **IGNORED Because: "<LOD"**

pH: (Whole concentration entered as: 8.2 pH or 8.20 pH)

Cyanides (with the exception of complex cyanides): (Cation conc. entered: <1 mg/kg, converted to compound conc.: <1.00 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Phenol: (Whole concentration entered as: <1 mg/kg or <0.00010%) **IGNORED Because: "<LOD"**

Acenaphthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Acenaphthylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[a]pyrene; benzo[def]chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[b]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[ghi]perylene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Benzo[k]fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Chrysene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Dibenz[a,h]anthracene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluoranthene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Fluorene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Indeno[123-cd]pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Naphthalene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Phenanthrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Pyrene: (Whole concentration entered as: <0.1 mg/kg or <0.000010%) **IGNORED Because: "<LOD"**

Notes utilised in assessment

Additional Risk Phrase Comments

from section: Table 3.1 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: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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

C14.5.5: Step 5

from section: C14.5 in the document: ["WM2 - Hazardous Waste Technical Guidance"](#)

"Remove dangerous substances below the trace impurity thresholds concentrations from further consideration.

Where an individual dangerous substance is present at a very low concentration it can be excluded from further consideration."

Note used on:

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: "Copper (I) oxide"

Test: "H14 on R50, R52, R53, R50/53, R51/53, R52/53" for determinand: "Selenium compounds (with the exception of cadmium sulphoselenide and sodium selenite)"

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: "Lead chromate"

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

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: "H14 on R50/53" for determinand: "Lead chromate"

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

Substance notes

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: "Selenium compounds (with the exception of cadmium sulposelenide and sodium selenite)"

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: "Nickel dihydroxide"

determinand: "Zinc chromate"

determinand: "Arsenic trioxide"

Version

Classification utilises the following:

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

HazWasteOnline Engine: WM2 version 2.3 (April 2011) using HWR08

HazWasteOnline Engine Version: 1.0.2067.4797 (05 Sep 2012)

HazWasteOnline Database: 1.0.2067.4797 (05 Sep 2012)