

## APPENDIX D: PRELIMINARY SITE WASTE MANAGEMENT PLAN

## D1 INTRODUCTION

### D1.1 Background

*The Site Waste Management Plans Regulations 2008* came into force in April 2008. The regulations require that a Site Waste Management Plan (SWMP) must be prepared for construction projects costing more than £300,000 (excl. VAT).

SWMPs are also now included in the supplementary list of information that may be required by the local planning authority before they validate a planning application.

The development plan for the proposed Energy from Waste Facility (EFW) development at Vanguard Way, Battlefield Enterprise Park, Shropshire (the site) has been reviewed in line with current legislative requirements, waste management operational guidance and proposed construction activities in order to prepare a Preliminary Site Waste Management Plan (SWMP).

### D1.2 Plan Objectives

The objectives of the preliminary SWMP are to:

- review outline design information with respect to expected construction and identify the main waste materials expected to be generated;
- review available site investigation information; and
- to prepare the preliminary SWMP to support the planning application.

### D1.3 Limitations of the Preliminary Plan

This preliminary plan has been based on the initial design information prepared to support the planning application and as such as targets and waste volumes detailed are estimated.

The construction phase SWMP document will be developed prior to any construction work commencing and will include any additional information generated following completion of the:

- contract documentation;
- detailed design work; and
- detailed site investigation activities.

No independent verification of information provided by third parties (for inclusion in the plan) has so far been undertaken and as such Scott Wilson accept no responsibility for any errors arising in relation to that information.

#### **D1.4 Layout of the SWMP**

This preliminary SWMP comprises:

- Section 2: description of the development site;
- Section 3: outline of the intended management arrangements; and
- Section 4: outline of proposed waste management arrangement.

## D2 PROJECT DESCRIPTION

### D2.1 Project Details

**Project Title** Energy from Waste Facility and Associated Development

**Estimated Cost** > £500,000

**Location** Vanguard Way, Battlefield Enterprise Park, Shrewsbury

**Client** Veolia ES Shropshire Ltd

**Principal Contractor**

**Construction Dates**

EWf Facility	Early 2010 - Early 2013
HRC Extension	Early 2013

**Person Responsible for drafting SWMP**

<b>Name:</b>	Angela Graham (Scott Wilson)
<b>Date:</b>	22 September 2008

### D2.2 Nature of Project

Individual elements of the development are outlined below with specific site design details provided in the Design and Access Statement. Site location and proposed layout are shown on drawings ES 3.1 and ES 4.1 in the Environmental Statement respectively.

#### *Energy from Waste Facility*

The construction of the EWF and associated buildings will be let to a design and build contractor who will take on the role of Principal Contractor. As such specific

construction methodology will not be finalised until such times as the Principal Contractor is appointed although at this stage, the construction sequence of the principal elements is anticipated to be:

- site preparation;
- access road construction;
- excavation for waste bunker;
- construction of foundations;
- bunker construction;
- form concrete slabs;
- erect steelwork;
- install major plant items;
- clad new buildings;
- internal equipment fit out;
- commission and start up.

#### *Household Recycling Centre*

The extension to the HRC is required to facilitate an improvement of turnaround time, improve waste segregation and improve public-commercial vehicle segregation. Changes to be introduced include:

- additional vehicle queuing space for public vehicles;
- additional container bays;
- extension of elevated public parking/unloading area with canopy to provide shelter; and
- extension of the down ramp for public egress from the HRC.

Construction work is anticipated to comprise:

- any setting out/site clearance required;

- any ground works (foundations) required;
- modification of hardstanding and drainage;
- extension to tipping bays;
- construction of canopy;
- extension of down ramp; and
- extension of services.

#### *Construction Materials*

In reviewing the design and access statement, the following have been identified as the main construction materials:

- concrete;
- steel framework and support columns;
- Corus Kalzip roofing;
- vertical trapezoidal steel cladding;
- metal doors (roller and fast acting type);
- Danpalon Crystal Softlite; and
- mesh screen wall.

## **D2.3 Location Assessment**

### *Site Location*

The development site is located on vacant land adjacent to the existing Integrated Waste Management Facility (IWMP) and within Battlefield Industrial Estate (National Grid Reference SJ 510 163) (Figure ES 3.1) on the northern edge of Shrewsbury, approximately 4 km north of Shrewsbury town centre.

The development site is shown in the context of the surrounding area on Figure ES 3.2 together with the proposed means of access and the proposed planning application boundary. An aerial photograph showing the proposed application site is shown on Figure ES 3.3. In total, the area of land covered by the planning application which this Environmental Statement accompanies is approximately 4.7 ha.

### *Site Description*

The Site occupies an area of 4.7 hectares and comprises a vacant plot together with the existing IWMF, comprising a Household Recycling Centre (HRC) and Waste Transfer Station (WTS), within Battlefield Enterprise Park, approximately 4 kilometres north of the centre of Shrewsbury.

Access to the Site will be from the existing roundabout on Vanguard Way. This in turn links to the local highway network comprising the A5124 Battlefield Link Road to the north, Battlefield Way to the west and Harlescott Lane/Brixton Way (via the Brixton Way Link) to the south.

The Site slopes gently to north (from around 71-72 m AOD in the south to around 67-68 m AOD in the north) toward the Battlefield Brook, which defines the northern site boundary. The Shrewsbury – Crewe railway passes approximately 25 metres to the east of the Site. Battlefield Brook flows to the east, via a culvert, under the railway. The Site is devoid of mature trees and hedges, with the exception of those alongside Battlefield Brook.

The western part of the Site is defined by the existing IWMF developed in 2004 by Shropshire County Council as Phase 1 of the Battlefield waste development site.

Within the IWMF, the HRC provides a facility for the public to deposit household waste and incorporates areas for the segregation of various recyclable materials. The IWMF also includes a WTS which provides a facility for the bulking and onward transportation of recyclables collected by (or on behalf of) the Waste Collection Authorities (WCAs) through the kerbside collection schemes in Shrewsbury & Atcham Borough and parts of North Shropshire District as well as for the onward transfer of residual wastes arising from the HRC and the WCAs. Currently this waste is bulked-up for onward transportation to landfill disposal.

### *Surroundings and Neighbouring Uses*

Land between the Site and Battlefield Link Road and between the Site and Battlefield Way has the benefit of planning permission for the development of a Food Enterprise Centre and is currently undergoing site preparation works ahead of development. A number of other industrial units in the vicinity of the site and south of Vanguard Way

are under construction as part of the expanding Battlefield Enterprise Park development.

The nearest residential properties to the Site are in Battlefield, approximately 300 metres to the north east. These properties are screened from the Site by the railway embankment and associated trees. Residential properties at Harlescott Grange are located approximately 460 metres to the south west. Nearby industrial units to the east of the railway include ABP located 120 metres to the east. Battlefield Church and the Field House, a residential property, are located approximately 800 m to the north of the Site.

Several public footpaths and bridleways cross the open countryside to the north of the Site. The nearest public right of way is located approximately 370m to the north-west of the Site.

The site is located within a 700 metre buffer zone imposed by the Health and Safety Executive around the site operated by Firmin Coates Ltd for the warehousing and distribution of packaged chemicals. However, the HSE (Factories Inspectorate) was consulted on the allocation of the site within the Shropshire Waste Local Plan and on the Phase 1 planning application. In both cases the location of the Phase 1 site within the buffer zone was not judged to be a factor which warranted refusal of planning permission for the development.

### *Site History*

Available historical mapping indicates that the area occupied by the proposed development was in continuous agricultural use until the development of the IWMF in 2004.

## D3 OUTLINE MANAGEMENT ARRANGEMENTS

### D3.1 Roles and Responsibilities

Position	Name	Contact Details	SWMP Responsibility
<b>Main Contract Personnel</b>			
Client	Veolia ES Shropshire Ltd		
Design Team Manager	Miles Nichol	TBC	Consider SWMP requirements in finalisation of design
Client's Project Manager	Stephen Brown	TBC	Incorporation of SWMP requirements into construction phase management plans.
Principal Contractor -Site Manager	TBC	TBC	<ul style="list-style-type: none"> <li>Implementation of SWMP requirements during construction and maintenance of appropriate records.</li> <li>Brief of site personnel including sub-contractors regarding SWMP requirements at induction.</li> <li>Complete regular waste TBT with site personnel throughout the construction phase.</li> </ul>
Document Controller	TBC	TBC	Maintain up-to-date SWMP throughout the project and maintain SWMP records.
<b>Sub-Contractor Details</b>			
TBC			Implement SWMP requirements in relation to the contracted activities.

### **D3.2 Distribution**

Copies of this plan will be provided to:

- Client representative
- Project Manager
- CDM Co-ordinator
- Principal Contractor - Site Manager

Relevant details of the plan will be stipulated to sub-contractors via tender documentation and in their contract requirements.

A copy of the plan will be available at site at all times.

### **D3.3 Instruction and Training**

The Project Manager and Site Manager will be briefed prior to work commencing on site.

SWMP requirements will be incorporated into the site induction including use of segregation, minimisation and recycling/reuse techniques. All personnel working on the site including sub-contractors will be inducted.

Tool-box talks on waste management will be completed monthly for all site personnel including sub-contractors.

### **D3.4 Project Performance Indicators**

Project performance targets will be set following finalisation of the detailed design and preparation of the construction phase SWMP. Typical indicators are identified in the table below.

KPI	Measure	Target
Waste volume Vs Project Value	m3/ £100,000	TBC
No of skips used (Mixed)	No of skips removed	TBC
No of skips used (Segregated)	No of skips removed	TBC
Cost of Waste Disposal For Project	£net	TBC

## D4 OUTLINE WASTE MANAGEMENT ON SITE

### D4.1 Forecast Waste Arisings

Waste arisings for the project have been estimated on the basis of:

- detailed site investigation activity to determine areas of contamination that need to be addressed; and
- earthworks information indicating the cut/fill requirements;
- demolition information derived from information regarding existing structures; and
- initial site waste audit and associated document review.

Calculations to determine the level of arisings are generally based on:

- the methodology detailed in the study completed by Jacobs "*Waste Management in the Thames Gateway*" which establishes waste data for each type of building to be demolished/constructed based on the construction method used (i.e. traditional build or pre-fabricated build); and
- industry practice and knowledge from prior construction projects.

Current forecast waste arisings are detailed in Annex D1 and this forecast will need to be reviewed and updated when the following is completed:

- detailed design finalised including demolition/construction methodology and materials to be used for construction;
- anticipated supplier arrangements - volumes, timing and expected level of packaging have been finalised.

### D4.2 Record of Previous Decisions Taken Regarding Waste Management

The activities that would result in the recycling of waste on site during the construction period are the bulk earthworks operation and the recycling of general site waste.

All materials resulting from the main excavation exercise are planned to be used to landscape the finished site layout, in accordance with the permitted scheme to

minimise the export of waste from site and to reduce the import of fill material. It is not anticipated that an exemption will be required for re-use of excavated material on-site provided excavation follows *The Definition of Waste: Development Industry Code of Practice* (CLAiRE, September 2008).

Any unforeseen surplus fill materials on site will be sold on for reuse or removed to a permitted landfill site.

A Construction Site Waste Management Plan will be developed by the contractor to address the segregation of site waste generated throughout construction. This will include waste generated within the site compound and office set up which will be separated between general household type waste generated from the messing facilities and paper waste which will be deposited in designated paper recycling bins.

The waste generated from construction activities will be separated on site in general waste, timber waste and steel waste skips; this will be managed by the contractor and will be removed from site to an appropriate facility for processing.

A detailed Construction Site Waste Management Plan will be submitted to the WPA for approval prior to the commencement of construction works.

### D4.3 Potential Opportunities for Waste Minimisation

Proposed Actions For Consideration:

#### Design Stage

- Identify options for off-site prefabrication
- Standardise fixtures/fittings
- Review waste materials expected to be generated by site preparation and evaluate for re-use during construction
- Standardise roof/wall panel sizes to minimise off-cuts

#### Construction Stage

- Delivery scheduling - arrangements for JIT deliveries
- Material Storage - designated areas with minimisation of double handling
- Prevent import of wastes from external sources (e.g. personnel using skips for waste from home/other jobs)
- Security - prevent unauthorised access especially during non-operational hours to minimise risk of fly-tipping

#### D4.4 Potential Waste Storage and Segregation Options

A designated area for waste storage will be defined on a construction phase site layout plan which will be maintained by the Site Manager. Consideration for the provision of the following will be made:

- mixed waste skip (e.g. non-hazardous material incapable of being segregated);
- separate skips for the segregation of wood, metal and glass - this will be generally sent for off-site recycling;
- Soil and other excavated materials will be stockpiled on site for re-use during the cut and fill activities. Potentially contaminated materials will be stockpiled pending classification and, if necessary, off-site treatment or disposal;
- brick, rubble and uncontaminated concrete materials - stockpile storage prior to crushing and reuse;
- separate skips for the segregation of hazardous wastes - these will be sent for off-site treatment and disposal; and
- green waste (e.g. vegetation) - provision of a skip to enable off-site recycling or alternatively it may be possible to process (e.g. shred/chip) on-site to facilitate reuse of material as mulch in landscaped areas.

#### D4.5 Potential Waste Management Options

Potential management routes for materials generated at the site will include:

- On-site re-use of materials;
- off-site re-use of materials;
- recycling;
- treatment;
- landfill;

Proposed intended waste management routes are identified in Annex D2 - waste management arrangements will be supported by a declaration as set out in the requirements of the Site Waste Management Plan Regulations, 2008.

## D4.6 Proposed Monitoring Arrangements

The Site Manager will be responsible for maintaining a record of all waste materials removed from site and the waste management route chosen. Records will include details of waste transfer/disposal licences, consignment notes and other relevant communications. Examples of the type of records that will be maintained are shown on the blank SWMP template in Annex D3.

The Project Manager will review the SWMP records at the end of project close against the original plan. The SWMP and associated records will be retained for at least 2 years following project completion for audit purposes.

## ANNEX D1: ESTIMATED WASTE ARISING

<b>PROJECT</b>	Energy from Waste Facility and Associated Development
<b>SITE LOCATION</b>	Vanguard Way, Battlefield Enterprise Park, Shrewsbury
<b>PERSON COMPLETING FORECAST</b>	Angela Graham (Scott Wilson)

WASTE Category and Type	ENABLING WORKS INCLUDING DEMOLITION			CONSTRUCTION WORKS		
	Tick	Estimated Quantity (m3)	Comment	Tick	Estimated Quantity (m3)	Comment
<i>Inert Waste</i>						
Rock						
Gravel						
Sand						
Aggregates				✓		potential for recycling/reuse
Concrete	✓		potential for recycling/reuse	✓		potential for recycling/reuse
Tarmac						
Top soil (uncontaminated)	✓		potential for recycling/reuse	✓		potential for recycling/reuse
Sub soil (uncontaminated)						
Bulk excavated (uncontaminated)	✓		potential for recycling/reuse			
Glass				✓		potential for recycling/reuse
Polystyrene				✓		potential for recycling/reuse
Other: Brick						
<b>Sub-total</b>						

Supporting Statement: Appendix D Preliminary Site Waste Management Plan

WASTE Category and Type	ENABLING WORKS INCLUDING DEMOLITION			CONSTRUCTION WORKS		
	Tick	Estimated Quantity (m3)	Comment	Tick	Estimated Quantity (m3)	Comment
<i>Non-hazardous Waste</i>						
Plasterboard				✓		
Gypsum products						
Metals - reinforcement	✓		potential for recycling/reuse			
Metals - steel	✓		recycling/reuse	✓		recycling/reuse
Metals - copper				✓		recycling/reuse
Metals - iron						
Metals - lead						
Metals - offcuts				✓		recycling/reuse
Timber				✓		potential for recycling/reuse
Cardboard				✓		potential for recycling/reuse
Paper				✓		potential for recycling/reuse
Plastic (non-biodegradable)				✓		potential for recycling/reuse
Plastic (biodegradable)				✓		potential for recycling/reuse
Food waste				✓		look for composting option
Trees	✓		shredding/composting			
Other vegetation	✓		shredding/composting	✓		shredding/composting
Other:						
<b>Sub-total</b>						

Supporting Statement: Appendix D Preliminary Site Waste Management Plan

WASTE Category and Type	ENABLING WORKS INCLUDING DEMOLITION			CONSTRUCTION WORKS		
	Tick	Estimated Quantity (m3)	Comment	Tick	Estimated Quantity (m3)	Comment
<b>Hazardous Waste</b>						
Top soil (contaminated)	✓		potential treatment for reuse			
Sub soil (contaminated)						
Bulk excavated (contaminated)	✓		potential treatment for reuse			
Asbestos						
Explosive - associated with mining						
Flammable						
Oils/Greases				✓		potential for recycling/reuse
Fuels						
Toxic				✓		treatment
Other:						
<b>Sub-total</b>						
<b>TOTAL VOLUMES</b>						

## ANNEX D2: WASTE MANAGEMENT ROUTES

Site Waste Management Plan for Scheme - Name

Energy from Waste Facility and Associated  
Development

Client Name:	Veolia ES Shropshire Ltd
Principal Contractor:	TBC
Main Sub-contractor:	TBC
Creator of SWMP*:	Scott Wilson Ltd

Declaration: That all reasonable steps will be taken to ensure that: § all waste from site is dealt with in accordance to EPA 1990 and Duty of Care 1991 § materials will be handled efficiently and waste managed appropriately § everyone involved are aware of their requirements for completing the SWMP.	signed by site representative:
	signed by client representative:

To be completed prior to scheme mobilisation - & included within the Scheme Supplementary information

Wastes Expected & Quantities			Disposal/Treatment Routes - % & / or Quantity					Intended Waste Carrier & treatment / disposal site?
WASTE	EWG (European Waste Catalogue) Code	QUANTITY (incl. units)	Re-used on site	Reused off site	Recycled for use on site	Disposal to recycling facility	Disposal to landfill	
Aggregates	17 09 04							TBC
Concrete	17 01 01							TBC
Tarmac	17 03 02							TBC
Soil & Stones	17 05 03							TBC
Soil & Stones (Contam)	17 05 03							TBC
Glass	17 02 02							TBC

Supporting Statement: Appendix D Preliminary Site Waste Management Plan

Wastes Expected & Quantities			Disposal/Treatment Routes - % & / or Quantity					Intended Waste Carrier & treatment / disposal site?
WASTE	EWC (European Waste Catalogue) Code	QUANTITY (incl. units)	Re-used on site	Reused off site	Recycled for use on site	Disposal to recycling facility	Disposal to landfill	
Brick	17 01 02							TBC
Plasterboard	17 08 02							TBC
Steel	17 04 05							TBC
Metal off-cuts	17 04 07							TBC
Timber	17 02 01							TBC
Cardboard	20 01 01							TBC
Paper	20 01 01							TBC
Plastic - construction	17 02 03							TBC
Plastic - Other	20 01 39							TBC
Food Waste	20 01 08							TBC
Vegetation	20 02 01							TBC
Oil Cont Materials	17 09 03							TBC
Cont. mixed construction	17 01 06							TBC
Mixed construction	17 01 07							TBC

## **ANNEX D3: EXAMPLE SITE WASTE MANAGEMENT PRO- FORMA**

# **Site Waste Management Plan**

**For project :**

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# Site Waste Management Plan

*This document template & guidance is in accordance with The Site Waste Management Plans Regulations 2008, which came into force on 6<sup>th</sup> April 2008. The Regulations state that the Client must produce the Site Waste Management Plan (SWMP), but that both the Client & the Principal Contractor are committing an offence if the project starts without one. If a SWMP is received from the Client then this file should still be used, with the Client's documents inserted into the relevant sections so that:*

- a) the completeness of the Plan can be checked against the sections required;*
- b) the Plan can be readily made available as required by the Regulations*
- c) the Principal Contractor elements can be easily added as the work progresses.*

**The Project Manager must ensure that the Plan is:**

- in place prior to the start of works on site, and that it is**
- regularly reviewed and kept up-to-date.**

*A copy of the waste datasheet (Section 8) should be sent in monthly with the HS&E Report.*

## **Contents:**

1. Introduction & General Requirements
2. Project Details & Declarations
3. Record of Previous Decisions Taken
4. Expected Wastes & Proposed Waste Management Actions
5. Waste Management & Waste Reduction Checklist
6. Record of wastes removed from site / waste transfer notes
7. Reviews of the Plan
8. Waste quantities – summary data sheet
9. Log of items for post-completion debrief
10. Post-completion review & 'close-out'

# 1. Introduction & General Requirements

## The Site Waste Management Plans Regulations 2008

The Site Waste Management Plan must be prepared before construction work begins. The Principal Contractor must ensure that:

- the SWMP is kept at the site
- every contractor on the project knows where it is kept
- the SWMP is available to any contractor carrying out work described in the plan
- the Plan is kept for a minimum of 2 years after project completion.

The Principal Contractor must also ensure as far as is reasonably practical:

- co-ordination of the work and co-operation among sub-contractors
- that every construction worker is provided with a suitable site induction and any further information and training needed for the particular work being carried out
- that waste produced during construction is re-used, recycled or recovered.

The standard Subcontract Checklist Meeting Minutes deal with the above requirements relating to subcontractors, and the sections of this document reflect the specific requirements of the Regulations.

## Security

Both the Client and the Principal Contractor must take reasonable steps to ensure that sufficient site security measures are in place to prevent the illegal disposal of waste from the site.

## Enforcement

These Regulations may be enforced by the Environment Agency, the Local Authority, or the District or County Council. Any person acting in the execution of the regulations must be provided with any assistance and information that they may reasonably require. Anybody guilty of an offence, including obstruction, under these Regulations is liable on conviction to a fine of up to £50,000.

## 2. Project Details & Declarations

<b>Project name</b>	
<b>Estimated cost to Client</b>	
<b>Project address / location / description</b>  <b>Client</b>  <b>Principal Contractor</b>	- see copy of the F10 enclosed -
<b>Person responsible for drafting the SWMP</b>	Name   Signature <span style="float: right;">Date</span>

<p><b>Declaration:</b></p> <p>We confirm that we will take all reasonable steps to ensure that:</p> <p>(a) all waste from the site is dealt with in accordance with the waste duty of care in Section 34 of the Environmental Protection Act 1990 and the Environmental Protection (Duty of Care) Regulations 1991; and</p> <p>(b) materials will be handled efficiently and waste managed appropriately.</p>
Name .....  for Organisation ('client') .....  Signature .....Date .....
Name .....  for Principal Contractor:  Signature .....Date .....

## Commitments from Sub-Contractors

The Regulations require us to:

- make subcontractors aware of the Plan
- promote coordination of the work and cooperation amongst subcontractors
- ensure that, as far as reasonably practicable, waste produced during construction is re-used, recycled or recovered.

These issues are covered under General Obligations' of the Subcontract Checklist Meeting, at which the subcontractors agree to:

*“co-operate, and provide information to enable the Principal Contractor to comply with its duties under the Site Waste Management Plan (SWMP) Regulations. This includes providing full details of ALL waste the subcontractor removes from site, including waste carrier and destination permits, and co-operating with other contractors regarding waste management.”*

At the meeting the subcontractors also confirm they:

- are aware of the SWMP
- know where it is kept (normally available to view at the site office)
- will ensure that, as far as reasonably practicable, waste produced during construction is re-used, recycled or recovered.





## Typical 'Construction' Waste Codes

Generally the '15' codes are for waste packaging, and the '17' codes are for construction and demolition wastes.

Codes with an asterisk ( \* ) indicate hazardous waste. See at the end of the list for the definition of 'dangerous substances'.

The codes we would use most frequently are:

Inert	17 01 07	Mixtures of concrete, bricks, tiles and ceramics (non-hazardous)
Timber	17 02 01	Wood (not containing dangerous substances)
Blacktop	17 03 02	Bituminous mixtures (not containing dangerous substances)
Metal	17 04 07	Mixed metals (not containing dangerous substances)
Soil / Stone	17 05 04	Soils & Stones (not containing dangerous substances)
Insulation	17 06 04	Insulation materials (not containing dangerous substances)
Plasterboard	17 08 02	Gypsum-based construction materials (not containing dangerous substances)

## WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED

### Packaging (including separately collected municipal packaging waste)

15 01 01 paper and cardboard packaging

15 01 02 plastic packaging

15 01 03 wooden packaging

15 01 04 metallic packaging

15 01 05 composite packaging

15 01 06 mixed packaging

15 01 07 glass packaging

15 01 09 textile packaging

15 01 10\* packaging containing residues of or contaminated by dangerous substances

15 01 11\* metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

### Absorbents, filter materials, wiping cloths and protective clothing

15 02 02\* absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances

15 02 03 absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02

## **CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**

### **Concrete, bricks, tiles and ceramics**

17 01 01 concrete

17 01 02 bricks

17 01 03 tiles and ceramics

17 01 06\* mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances

17 01 07 mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06

### **Wood, glass and plastic**

17 02 01 wood

17 02 02 glass

17 02 03 plastic

17 02 04\* glass, plastic and wood containing or contaminated with dangerous substances

### **Bituminous mixtures, coal tar and tarred products**

17 03 01\* bituminous mixtures containing coal tar

17 03 02 bituminous mixtures other than those mentioned in 17 03 01

17 03 03\* coal tar and tarred products

### **Metals (including their alloys)**

17 04 01 copper, bronze, brass

17 04 02 aluminium

17 04 03 lead

17 04 04 zinc

17 04 05 iron and steel

17 04 06 tin

17 04 07 mixed metals

17 04 09\* metal waste contaminated with dangerous substances

17 04 10\* cables containing oil, coal tar and other dangerous substances

17 04 11 cables other than those mentioned in 17 04 10

### **Soil (including excavated soil from contaminated sites), stones and dredging spoil**

17 05 03\* soil and stones containing dangerous substances

17 05 04 soil and stones other than those mentioned in 17 05 03

17 05 05\* dredging spoil containing dangerous substances

17 05 06 dredging spoil other than those mentioned in 17 05 05

17 05 07\* track ballast containing dangerous substances

17 05 08 track ballast other than those mentioned in 17 05 07

### **Insulation materials and asbestos-containing construction materials**

17 06 01\* insulation materials containing asbestos

17 06 03\* other insulation materials consisting of or containing dangerous substances

17 06 04 insulation materials other than those mentioned in 17 06 01 and 17 06 03

17 06 05\* construction materials containing asbestos (7)

### **Gypsum-based construction material**

17 08 01\* gypsum-based construction materials contaminated with dangerous substances

17 08 02 gypsum-based construction materials other than those mentioned in 17 08 01

### **Other construction and demolition wastes**

17 09 01\* construction and demolition wastes containing mercury

17 09 02\* construction and demolition wastes containing PCB (for example PCB-containing sealants, PCB-containing resin-based floorings, PCB-containing sealed glazing units, PCB-containing capacitors)

17 09 03\* other construction and demolition wastes (including mixed wastes) containing dangerous substances

17 09 04 mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

### **Properties and characteristics of dangerous substances classified as hazardous waste**

Wastes satisfies the requirements of this regulation in respect of any of the properties H3 to H8, H10[21] and H11 of Annex III, where it displays one or more of the following characteristics -

(a) flash point  $\leq 55$  °C;

(b) one or more substances classified[22] as very toxic at a total concentration  $\geq 0,1$  %;

(c) one or more substances classified as toxic at a total concentration  $\geq 3$  %;

(d) one or more substances classified as harmful at a total concentration  $\geq 25$  %;

(e) one or more corrosive substances classified as R35 at a total concentration  $\geq 1$  %;

(f) one or more corrosive substances classified as R34 at a total concentration  $\geq 5$  %;

(g) one or more irritant substances classified as R41 at a total concentration  $\geq 10$  %;

(h) one or more irritant substances classified as R36, R37, R38 at a total concentration  $\geq 20$  %;

(i) one substance known to be carcinogenic of category 1 or 2 at a concentration  $\geq 0,1$  %;

(j) one substance known to be carcinogenic of category 3 at a concentration  $\geq 1$  %;

(k) one substance toxic for reproduction of category 1 or 2 classified as R60, R61 at a concentration  $\geq 0,5$  %;

(l) one substance toxic for reproduction of category 3 classified as R62, R63 at a concentration  $\geq 5$  %;

(m) one mutagenic substance of category 1 or 2 classified as R46 at a concentration  $\geq 0,1$  %,

(n) one mutagenic substance of category 3 classified as R40 at a concentration  $\geq 1$  %.

## 5. Waste Management & Waste Reduction Checklist

Use this checklist to identify any action-plans required with regard to waste management and waste reduction issues. File any action-plans in this section, review progress in the Contract Management Meetings, and update this file as appropriate.

Project Stages	Actions / Questions to consider	Applicable? Y / N	Action Plan required? Y / N	Responsibility	Deadline	Completed?
<b>Procurement</b>						
1	Actions to be taken so that over-ordering and site wastage is reduced?					
2	What opportunities exist for use of secondary & recycled materials? Consult WRAP website.					
3	Identify significant packaging waste. Arrange with suppliers to minimise packaging and return packaging that cannot be avoided. Actions needed?					
4	Incentives to reduce waste: Actions needed?					
<b>Project Planning</b>						
5	Establish designated areas for waste management					
6	Plan for dealing with waste from offices, canteens, etc.					
7	Set project waste targets					
8	Opportunities for re-use of materials on & off site? Actions needed?					
9	Opportunities for on-site / off-site processing and re-use of materials? Actions needed?					
<b>Site operations – see also main Duties Matrix</b>						
10	Audit waste transfer, to check that waste is actually going to the intended premises; frequency?					
11	Audit the implementation of the agreed waste management procedures; frequency?					
<b>Post completion</b>						
12	Undertake post-completion debrief on the site waste management, and produce report with recommendations for future projects					



## 6. Waste Records

When any waste is removed from site the Principal Contractor must record on the SWMP:

- The identity of the person removing the waste, including waste carrier registration number
- A written description of the waste including the appropriate waste code
- The destination of the waste including details of the waste management license or registered exemption

**File in this section:**

- **List of persons who may be removing waste from the site and where they will be taking it**
- **Copies of their Waste Carriers permit**
- **Copies of the permits for the destinations of the waste**
- **Copies of the Waste Transfer Notes for all waste leaving the site** - checking that all WTNs are for the permitted carriers to the permitted sites.
- **Notes of auditing waste transfers**

## 7. Reviews of the Plan

The Regulations state that the Principal Contractor must keep the Plan up to date to accurately reflect the progress of the works and must regularly:

- Review the Plan
- Record the types and quantities of waste produced, and the types and quantities of waste that have been:
  - re-used (and whether this was on-site or off-site)
  - recycled (and whether this was on-site or off-site)
  - sent for another form of recovery (and whether this was on-site or offsite)
  - sent to landfill
  - otherwise disposed of.

Use **Section 6** of this Plan to keep the records of the waste produced, and use the Datasheet in **Section 8** to summarise the figures for monthly review.

Keep a record of the reviews of this Plan in the minutes of the monthly **Contract Management meeting**.

Data Sheet for Project: .....  
 For period from: Project Start Date ..... / ..... / ..... to: .....

Contract No. ....  
 Sheet No. ....

Types of waste arising	Cumulative Quantities										Performance						
	Total Actual Delivered (A)	Units	Total Theoretical Planned Quantity to date (B)	Stored for use (C)	Total Waste (D) (D=A-B-C)	Used / Lost on Site (overdig, etc)	Processed / Recycled for use on site	Sent for use off-site	Processed / Recycled for use off site	Disposal to recycling facility	Disposal to WML exempt site	Total Recycled (E)	Total Disposal to landfill (F)	Estimated Waste (Target) (Max. % D/B)	Actual Waste (D/B as %)	% Diverted from Landfill (E/D as %)	
<b>Material Wastage</b>																	
Concrete																	
Aggregates																	
Bricks																	
Blocks																	
Timber: Permanent (Joinery etc.)																	
Timber: Temporary (Shuttering, etc)																	
Reinforcement																	
<b>Waste Disposal</b>																	
Segregated Skips																	
General Waste Skips	Inert																
	Active																
Excavated Material (Muck away)	Inert																
	Active																
Demolition Waste	Inert																
	Active																
<b>Hazardous Waste</b>																	
Hazardous Waste Skips																	



## 10. Post-Completion Review

Within 3 months of the work being completed the Principal Contractor must add to the plan:

- confirmation that the Plan has been monitored and updated on a regular basis to reflect the progress of the works
- a comparison of the actual quantities with the original estimated quantities of each waste type
- an explanation of any deviation from the Plan
- an estimate of the cost savings that have been achieved by implementing the Plan.

### **Actions for the Project Manager:**

- **Undertake a post-completion review, considering the items listed above along with any items noted on the log in Section 9**
- **File the notes of the review in this section of the SWMP**
- **Send a copy of the review and the final waste figures to the Environmental Team at the Scunthorpe Office**
- **Archive this file with the project records.**