

Highways Agency



State of the Network Report



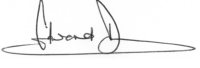
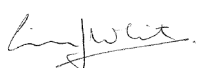
Construction Waste Data



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## Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
1.1	Background	2
<b>2</b>	<b>Methodology</b>	<b>3</b>
2.1	Construction Demolition & Excavation Waste Data Recording	3
2.2	Minimum Reporting Requirement for CD&E Waste	4
2.3	Data Receipt and Analysis	4
<b>3</b>	<b>Construction Demolition &amp; Excavation Waste Data 2010 - 2011</b>	<b>5</b>
3.1	Introduction	5
3.2	Total CD&E Waste Arisings 2010-11 for Reported Projects	5
3.3	Total CD&E Waste Sent to Landfill 2010-11 for Reported Projects	5
3.4	Total CD&E Waste Recycled / Reused 2010-11 for Reported Projects	5
3.5	Total Waste Sent to Incineration/Energy from Waste 2010-11 for Reported Projects	6
3.6	Total Expenditure on Waste Disposal 2010-11 for Reported Projects	6
3.7	Total Expenditure on Waste Sent to Landfill 2010-11 for Reported Projects	6
3.8	Total Expenditure on Waste Recycling/Reuse 2010-11 for Reported Projects	6
3.9	Total Expenditure on Waste Sent to Incineration/Energy from Waste 2010-11 for Reported Projects	6
<b>4</b>	<b>Conclusions and Recommendations</b>	<b>7</b>
<b>Appendix 1</b>	<b>Individual Project Data</b>	<b>8</b>

## 1.1 Background

The Highways Agency (the HA) generates construction, demolition and excavation (CD&E) waste through the activities of its supply chain.

In accordance with the HM Treasury Guidance "*Public Sector Annual Reports: Sustainability Reporting – Guidance for the 2010-11 Dry Run*", the HA is expected to report externally on the extent of its construction waste generation. This report provides details of the sample data that is currently available for 2010-11 and discusses how future reporting can be improved to provide a fuller picture in subsequent years.

## 2.1 CD&E Data Recording

A Site Waste Management Plan (SWMP) is a tool used in construction projects to identify, measure and record waste arisings, responsibilities and management options and assist in applying the principles of the waste hierarchy through every stage of construction. It is a legal requirement to write and implement a SWMP for construction schemes on one site with a cost of over £300,000 excluding VAT.

The HA has developed an Interim Advice Note<sup>1</sup> which covers the use of SWMPs on construction projects undertaken on its behalf, which includes standard templates for SWMPs on HA schemes (the HA currently uses the SWMP template version 1.3 (July 2010)).

In a previous report<sup>2</sup>, Jacobs assessed the data recording required by the SWMP template against the minimum reporting requirements of the HM Treasury. This report identified that for HA construction projects using the SWMP template, the minimum reporting requirements can be met, depending upon the cost of the project (projects with a cost below £500,000 excluding VAT have lesser SWMP data recording requirements, particularly in terms of waste management costs). Currently, there is no mechanism in place requiring the HA's contractors to record CD&E waste data for projects with a cost below £300,000 excluding VAT.

The HA's Environmental Information System (EnvIS) is a key tool which aims to provide the information through which the HA can demonstrate legal compliance regarding management of their soft estate and support decision making by providing consistent and accurate environmental information. The EnvIS Management Team (EMT) is responsible for the day to day management of EnvIS including the following key tasks:

- Receipt, logging and loading of data into the Upload and Validation Tool;
- Interpretation of error reports and provision of feedback / support to Service Providers in relation to the resolution of errors and resubmission of data as necessary;
- Maintenance of the query management programme and EnvIS Support email box and responding to queries;
- Co-ordination of data extractions for supply to Service Providers and third parties.

It is recognised that since 1<sup>st</sup> April 2011, there have been resourcing issues with the EMT which has resulted in the temporary suspension of EnvIS services. As such, the scope of the CD&E waste data analysed for this report has been revised to focus solely on collating waste data for major HA projects only (see s3.1 for list).

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<sup>1</sup> IAN XX/10: Site Waste Management Plans for Construction Projects Undertaken on behalf of the Highways Agency

<sup>2</sup> Highways Agency SWMP Data Reporting Analysis, Jacobs, April 2011

## **2.2 Minimum Reporting Requirement for CD&E Waste**

The minimum reporting requirements of the HM Treasury are:

- Total waste arising;
- Quantities sent to landfill;
- Quantities recycled / reused;
- Quantities sent for incineration / energy from waste;
- Total expenditure on waste disposal;
- Expenditure on waste sent to landfill;
- Expenditure on recycling / reuse;
- Expenditure on incineration/energy from waste.

## **2.3 Data Receipt and Analysis**

Currently, the HA do not contractually require their contractors to provide annual CD&E data, therefore all data used in this report has been provided to the HA by the named contractors on a voluntary basis. It must be noted, therefore, that the information presented within this report only provides a sample of readily available information from major HA projects: no data was available for many of the HA projects.

All CD&E data provided to the HA has been analysed by Jacobs. The information relevant to the minimum reporting requirements of the HM Treasury for the period 1<sup>st</sup> April 2010 to 31<sup>st</sup> March 2011 has been extracted and presented within this Report.

### 3.1 Introduction

From the data held by the HA, we have identified 235 projects that appear to have a cost greater than £300,000 (excluding VAT). However, it is not clear how many of these projects involve “construction work” as defined by the Site Waste Management Plans Regulations 2008.

Relevant CD&E data has been made available for just six HA projects. These projects are named in Table 1 below:

Table 1: Major HA Projects Providing CD&E Data

Project Name	Contractor
Catthorpe Viaduct M1 Jct 19	Skanska
A1 Dishforth to Barton	Carillion
M25 DBFO	Balfour Beatty
A46 Newark	Balfour Beatty
A3 Hindhead	Balfour Beatty
A46 Widmerpool to Farndon Improvement	Balfour Beatty

(Source: HA, 2011)

Details of the HM Treasury minimum reporting data for each individual project is provided in Appendix 1. The following sections provide the overall total data. **Due to the limited data available, the totals provided do not present a total figure for all construction waste generated on behalf of the HA but provide instead only a limited set of examples.**

### 3.2 Total CD&E Waste Arisings 2010-11 for Reported Projects

From the Table in Appendix 1, it can be seen that only three of the example projects provided a total waste arising figure, providing an overall total of **3,371.56 tonnes**.

Other projects provided figures for waste reuse / recycling. If it is assumed that **all** waste produced by these projects was recycled or reused, then the total waste arisings would increase to **3,620,871.5 tonnes**. However, it has not been possible to establish if this is an accurate assumption.

### 3.3 Total CD&E Waste Sent to Landfill 2010-11 for Reported Projects

From the Table in Appendix 1, it can be seen that only three of the example projects provided a total waste to landfill figure, providing an overall total of **231.62 tonnes**.

### 3.4 Total CD&E Waste Recycled / Reused 2010-11 for Reported Projects

From the Table in Appendix 1, it can be seen that all six example projects provided a figure for waste recycling / reuse: however, only four provided this as a total, and for three of the projects, the recycling / reuse figures did not specify a reporting period.



The overall total for the projects that provided a total figure is **3,602,942.9 tonnes**.

If it is assumed that the other recycling / reuse figures provided are the total recycling / reuse figures for the projects, then the total waste recycling / reuse increases to **3,620,442.9 tonnes**.

### **3.5 Total Waste Sent to Incineration / Energy from Waste 2010-11 for Reported Projects**

From the Table in Appendix 1, it can be seen that none of the example projects reported sending waste to incineration / energy from waste in 2010-11.

### **3.6 Total Expenditure on Waste Disposal 2010-11 for Reported Projects**

No suitable expenditure figures were provided for any of the example projects.

### **3.7 Total Expenditure on Waste Sent to Landfill 2010-11 for Reported Projects**

No suitable expenditure figures were provided for any of the example projects.

### **3.8 Total Expenditure on Waste Recycling / Reuse 2010-11 for Reported Projects**

No suitable expenditure figures were provided for any of the example projects.

### **3.9 Total Expenditure on Waste Sent to Incineration / Energy from Waste 2010-11 for Reported Projects**

No suitable expenditure figures were provided for any of the example projects.

As can be seen within the report, it has not been possible for the HA to provide a comprehensive report in accordance with the HM Treasury Guidance for 2010-11. The reason for this stems from the fact that data systems are not yet firmly in place to capture and record the required SWMP data. Furthermore, the HA contracts do not, as yet, require their contractors to provide annual CD&E data.

The HA has been working with the Waste and Resources Action Program's (WRAP) Halving Waste to Landfill commitment to support Government Sustainable Construction commitments to reduce CD&E waste arisings by 50% by 2012 (compared to 2008). Due to the lack of data for 2010-11, it is also not possible to establish a baseline for 2010-11 against which progress towards this commitment can be made.

In order to enable more comprehensive and accurate reporting of construction waste data for subsequent years, it is recommended that the HA take the following actions within 2011-12:

1. Consider adding a clause to all future contracts requiring the submission of construction, demolition and excavation waste data in accordance with the minimum requirements of the HM Treasury Guidance.
2. Where possible, undertake early negotiations within existing contractors to secure the submission of construction, demolition and excavation waste data in accordance with the minimum requirements of the HM Treasury Guidance for 2011-12 and beyond.
3. Consider the re-establishment and, where necessary, the enhancement of the EnvIS system as a mechanism for recording the minimum requirements of the HM Treasury Guidance for construction, demolition and excavation waste or, if this is not a viable option, establish another system by which such data may be recorded.

## Appendix 1 Individual Project Data

HMT Accounting for Sustainability	Minimum Requirement?	Catthorpe Viaduct M1 Jct 19	A1 Dishforth to Barton	M25 DBFO	A46 Newark	A3 Hindhead	A46 Widmerpool to Farndon Improvement	Comments
Total waste arising	✓	13.6	540.46				2,817.5	
Waste sent to landfill	✓	3.14	49.58				178.9	Waste to landfill for Catthorpe is for period 01/07/2010 to 03/05/2011 as reported on the original spreadsheet. No figures available to calculate for financial year 10/11 only.
<b>Total Waste recycled /reused</b>	✓	10.46	490.88	3,600,000*			2441.7	*No information available to determine the period for which the data relates to.
<i>Reused on-site</i>					15,000*		58	
<i>Recycled on-site</i>						2,500*	1,784.2	
<i>Recycled off-site</i>							599.5	
Waste incinerated / EfW	✓							Waste data not broken down into treatment method.
Total expenditure on waste disposal	✓							
Expenditure on waste sent to landfill (residual waste)	✓							
Expenditure recycling/reuse (recycled, composted, internal or external re-used)	✓							
Expenditure incineration / efw (food waste)	✓							
Breakdown into quantities of hazardous and non-hazardous waste	✗						118.41	Hazardous waste only.

**NB: All figures in tonnes unless otherwise specified.**