



**scisys**

# **DEFRA GAP ANALYSIS FOR WASTE DATA STRATEGY REQUIREMENTS**

Issue number 1.2

Author : Brian Hooker

Checked : John Marrinan, Chris Timson

Approved :

Authorised :

### **DOCUMENT CONTROL**

This document has no controlled or maintained paper copies. The master document is held in the Microsoft Word file K:\Ssu\EA\U7987 Operator Returns\DOC - Documents\DOC009 DEFRA GAP Analysis for Waste Data Strategy Requirements\DOC009 DEFRA GAP Analysis for Waste Data Strategy Requirements 1.2.doc on the in-house PC network. All files have widespread access for reading only.

Changes to the document will be notified to its audience.

### **ISSUE RECORD**

<b>Issue</b>	<b>Date</b>	<b>Author</b>	<b>Reason</b>
0.1	13 <sup>th</sup> May 2005	BH	Draft Version
0.2	16 <sup>th</sup> May 2005	BH	Internal Review Comments
0.3	17 <sup>th</sup> May 2005	BH	DEFRA comments
0.4	20 <sup>th</sup> May 2005	BH	Changes following DEFRA and EA meeting
0.5	3 <sup>rd</sup> June 2005	BH	Changes following review comments and DEFRA and EA meeting
1.0	13 <sup>th</sup> June 2005	BH	Initial Issue
1.1	20 <sup>th</sup> June 2005	BH	Minor Changes required from EA and DEFRA
1.2	24 <sup>th</sup> June 2005	BH	Minor Change required from EA

### **NOTICE**

The contents of this document are the copyright of the Environment Agency and shall not be copied in whole, in part or otherwise reproduced (whether by photographic, reprographic or any other method) and the contents thereof shall not be divulged to any other person or organisation without the prior written consent of the Environment Agency.

© 2005

## **CONTENTS**

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	References .....	1
<b>2</b>	<b>DATA GAPS AND CHANGES REQUIREMENTS .....</b>	<b>2</b>
2.1	Changes Requirements .....	2
2.2	Database.....	2
2.2.1	WML Activity Description.....	2
2.2.2	Residual Waste.....	2
2.2.3	Collection Type.....	3
2.3	Data Gaps .....	3
2.3.1	Stored Waste .....	3
2.3.2	Site Status .....	3
2.3.3	Exemptions .....	3
<b>3</b>	<b>DATA REQUIRED BY DEFRA.....</b>	<b>4</b>
<b>4</b>	<b>DATA DESCRIPTION .....</b>	<b>9</b>

## 1 INTRODUCTION

This high level document details the data items required from the Environment Agency Operator returns system by DEFRA for their Waste Data Strategy requirements. The data items are presented in a matrix format.

The document matrix details:

- DEFRA data items required
- DEFRA data item descriptions
- Potential Gap's between DEFRA requirements and the Environment Agency data items that will be held within Operator returns
- Description of known information within the Operator returns system
- Additional information that may be required by DEFRA.

### 1.1 References

Document	Reference	Version
Data requirements for Defra waste data strategy – Source (E-Mail, Keith Rogers DEFRA 9 <sup>th</sup> May 2005)	[1]	N/A
DES0006 Operator Returns - Logical Data Model.doc – Source (SciSys - Chris Timson)	[2]	0.1
EWC Codes Document – 2000D0532-EN-01.01.2002-001.001-1	[3]	N/A

## 2 DATA GAPS AND CHANGES REQUIREMENTS

### 2.1 Changes Requirements

#### **WML WMS1 Return Form**

The Waste Return form at present allows for the Consignee's to have a choice on whether the 'Origin' and 'Destination' fields are completed as they are optional fields.

DEFRA require this information for the 'Waste Arising', destination is not required to obtain the waste arising figure; therefore a form change from optional to mandatory would be required to ensure the data is available for DEFRA though the fields are not specifically labelled 'optional/mandatory'.

This form change would require the Environment Agency to remodel the Waste Return form though the forms can vary slightly between Regions.

Note: This may have other implications within the Agency and also require legislative change.

### 2.2 Database

#### 2.2.1 WML Activity Description

The WML Activity Description has been designed to hold a description of the activity as provided by the Agency. The Environment Agency will be required to provide the WML activity description in (R&D) Codes to level 3 as stated in the Defra document "A consultation on the development and implementation of a three-year strategy to improve data across all waste streams in the UK Appendix 3:2: classification of Recovery and Disposal Operations for reporting and primary data aggregation purposes.'

For further information on R&D codes view <http://www.defra.gov.uk/corporate/consult/wip-data/index.htm>

**Note:** The Environment Agency's responsibility is to provide the information WML activity description in R&D code format to level 3 (R1.1, D1.1 etc.).

#### 2.2.2 Residual Waste

A 'Residual Waste' flag identifier will be added to the Returns Database against the specified EWC codes that relate to 'Residual Waste'.

**Note:** A full list of EWC codes that relate to 'Residual waste' is defined by code 19 from the EWC code list "*Wastes from Waste management facilities, off-site waste water treatment plants and preparation of water for human consumption/industrial use*"

---

See document EWC Codes Document – 2000D0532-EN-01.01.2002-001.001-1 Ref [3] for EWC codes.

### 2.2.3 Collection Type

A collection type of 'Rejected' will be added to the operator returns database in order to categorise 'Rejected Waste'.

**Note:** Consignment types of 'Rejected' are available for Hazardous Waste returns.

## 2.3 Data Gaps

### 2.3.1 Stored Waste

There is no mechanism within the Agency to hold stored waste information. This creates a data gap for the 'Quantity stored (By waste type)' required by DEFRA.

**Note:** The Environment Agency could carry out a "one-off" survey, updated every 5 years as of 31/12 to establish stock and then use inputs and outputs to adjust stock levels.

There would be a requirement for the Environment Agency to inform DEFRA of the outcome of the survey to meet the requirements of the Waste Data Strategy.

### 2.3.2 Site Status

There is no current method to capture the site status (i.e. Pre Operational, Operational, and Post Operational). A method would have to be established on how the information would be captured and a field would require adding to the database in order to produce the site status information required by DEFRA.

### 2.3.3 Exemptions

Some sites are exempt from making a waste return; this leaves a data gap for these sites as no return information is received for these sites.

**Note:** Regulations would require changing in order to ensure the exempt sites make waste returns.

### 3 DATA REQUIRED BY DEFRA

DEFRA Data Items required [1]	Data Description	Data Location (Operator Returns)	Potential GAPS
1. Quarterly			Returns are not always quarterly, but they are rarely more than quarterly.
2. Facility type (as per infrastructure)	<ul style="list-style-type: none"> <li>Infrastructure – Site Name.</li> <li>Facility Type – Facility Code from the Waste Management Facility (Where waste is processed)</li> </ul>	Data items from tables (Site and WML Activity) <ul style="list-style-type: none"> <li>Site Name</li> <li>Description (Activity)</li> </ul>	<u>Facility Type:</u> (Description (Activity))  The Environment Agency will provide facility type in R & D code format to level 3 (R1.1, D1.1 etc.).
3. Source facility type (as per infrastructure)	<ul style="list-style-type: none"> <li>Infrastructure – [Source of Waste Processing] Site Name</li> <li>Facility Type – Facility Code from the Waste Management Facility (Where waste is processed)</li> </ul>	Data items from tables (Site, WML Tonnage Return Line and WML Activity) <ul style="list-style-type: none"> <li>Site Name</li> <li>Site Address</li> <li>Site Post Code</li> <li>EWC</li> <li>Tonnage per EWC code</li> <li>Date (Return period)</li> <li>Description (Activity)</li> <li>Site Status Licence status?</li> </ul>	<u>Facility Type:</u> (Description (Activity)) Same as item 2.  Site Status is not currently held within the Operator returns database.  <b>Note:</b> See Section 2.3 Data Gaps
4. Type of waste (as per infrastructure)	<ul style="list-style-type: none"> <li>Infrastructure – Site Name.</li> </ul>	Data items from tables (Site and WML European	<u>Waste types</u> – currently waste types accepted are not always given by individual 6-figure

	<ul style="list-style-type: none"> <li>Type of Waste - European Waste Catalogue (EWC) for SIC Code of site</li> </ul>	Waste Catalogue Table) <ul style="list-style-type: none"> <li>Site Name</li> <li>EWC</li> <li>Tonnage per EWC code</li> </ul>	EWC codes: some are given in other coding systems; even where they are in EWC format they may be given as a chapter or other high level code and only those 6-figure waste codes listed. This is a gap.
5. Original source sector (as per arisings)	<ul style="list-style-type: none"> <li>The waste "arising" is any waste produced. (I.e. Origin of the Waste, 'Origin' on returns forms.)</li> <li>Sector – Is a group of SIC's</li> <li>EWC</li> <li>Post Code</li> <li>Local Authority</li> <li>Tonnage</li> <li>Date (Returns period)</li> </ul>	Data items from tables (Party and WML Tonnage Return Line) <ul style="list-style-type: none"> <li>Local Authority</li> <li>Tonnage</li> <li>EWC</li> <li>SIC</li> <li>Date (Returns Period)</li> </ul>	<b>Note:</b> See Section 2.1 Change Requirements  Industry source does not exist.
6. Original source locations (as per arisings)	<ul style="list-style-type: none"> <li>The waste "arising" is any waste produced. (I.e. Origin of the Waste, 'Origin' on returns forms.)</li> </ul>	Data items from tables (Party and WML Tonnage Return Line) <ul style="list-style-type: none"> <li>Local Authority</li> <li>Tonnage</li> <li>EWC</li> <li>SIC</li> </ul>	(Local Authority) –This would be the Waste Received 'Origin' from the Waste form.  <b>Note:</b> See Section 2.1 Change Requirements

7. Quantity received (as per arisings)	<ul style="list-style-type: none"> <li>The waste “arising” is any waste produced. (I.e. Origin of the Waste, ‘Origin’ on returns forms.)</li> <li>Quantity Received – Sum (Tonnage) (received from site producing waste.)</li> <li>EWC Code</li> <li>SIC Code</li> </ul>	<p>Data items from tables (Party and WML Tonnage Return Line)</p> <ul style="list-style-type: none"> <li>Local Authority - ‘Origin’</li> <li>Tonnage</li> <li>EWC</li> <li>SIC Code</li> </ul>	<p>(Local Authority) –This would be the Waste Received ‘Origin’ from the Waste form.</p> <p><b>Note:</b> See Section 2.1 Change Requirements</p>
8. Quantity rejected (by waste type)	<ul style="list-style-type: none"> <li>Waste Type - European Waste Catalogue (EWC)</li> <li>Quantity - Sum (Tonnage) (stored from site producing waste.)</li> </ul>	<p>Data items from table (WML Tonnage Return Line)</p> <ul style="list-style-type: none"> <li>EWC</li> <li>Tonnage</li> </ul> <p><b>Filter:</b> Mode of Disposal = ‘REJ’</p>	<p><b>Note:</b> Rejected is available for (Hazardous Waste) returns against a consignment type of ‘Rejected’ on the return from the Consignee.</p> <p>Each rejected row of a return is highlighted by the mode of disposal = ‘REJ’.</p>
9. Quantity stored (by waste type)	<ul style="list-style-type: none"> <li>Waste Type - European Waste Catalogue (EWC)</li> </ul>	<p>Data items from table (WML Tonnage Return Line)</p> <ul style="list-style-type: none"> <li>Tonnage</li> <li>EWC</li> </ul> <p><b>Filter:</b> Stored?</p>	<p>The returns form does not have a consignment type of ‘Stored’. This will be a data gap for information required by DEFRA.</p> <p><b>Note:</b> See Section 2.3 Data Gaps</p>

10.Quantity of residual waste produced (by waste type)	<ul style="list-style-type: none"> <li>Quantity Received Sum (Tonnage) (received from site producing waste.)</li> <li>Tonnage of Residual Waste produced by European Waste Catalogue (EWC)</li> </ul>	<p>Data items from tables (Site, WML Activity and WML Tonnage Return Line)</p> <ul style="list-style-type: none"> <li>Site Name</li> <li>Site Type</li> <li>Description (Activity)</li> <li>Tonnage</li> <li>EWC Codes</li> </ul> <p><b>Filter:</b> EWC codes for 'Residual Waste' only. (code 19 from the EWC code list)</p>	<p>Residual Waste is Waste detailed in the [Waste Removed from Site Section] that has a EWC residual waste code.</p> <p><b>Note:</b> Only Residual Waste under EWC code 19 is required.</p> <p><u>Facility Type:</u> (Description (Activity)) Same as item 2.</p>
11.Receiving facility type (R&D Code)	<ul style="list-style-type: none"> <li>Facility Type – Facility Code from the Waste Management Facility (Where waste is processed)</li> </ul>	<p>Data items from table (WML Activity)</p> <ul style="list-style-type: none"> <li>Description (Activity)</li> </ul>	<p><u>Facility Type:</u> (Description (Activity)) Same as item 2.</p>
12.Receiving facility location (postcode)	<ul style="list-style-type: none"> <li>Facility Type – Facility Code from the Waste Management Facility (Where waste is processed)</li> </ul>	<p>Data items from table (Site)</p> <ul style="list-style-type: none"> <li>Site Name</li> <li>Site Address</li> <li>Site Post Code</li> </ul>	<p>OK</p> <p>The post code could be converted to NGR by DEFRA within their proposed data warehouse.</p>
13. Capacity	<ul style="list-style-type: none"> <li>Capacity of the Site</li> </ul>	<ul style="list-style-type: none"> <li>Site Name</li> <li>Site Post Code</li> <li>Remaining Void Space</li> </ul>	<p>Ok</p>

		Meter (cubed)	
--	--	---------------	--

## 4 DATA DESCRIPTION

DEFRA Data Item	Description
R & D Code	Recovery and Disposal (R&D) Code
Sector	SIC code for Site
Location	Local Authority
Quantity	Tonnage
Waste Type	EWC Codes Only.
Hazardous Waste	EWC Codes of (7 Digits ending in *)
Non Hazardous Waste	EWC Codes of (6 digits)
Facility Type	Facility code from the Waste Management Facility (Where waste is processed)
Infrastructure	Site Name
Stored	"Stored" is waste that is received on site but not processed within the reporting period. e.g. where the facility may hold on to waste till they have sufficient to fill a lorry.
Rejected	Quantity rejected will be used by some facilities to highlight that certain wastes (e.g. soiled paper) may not be suitable for the process carried out on that site. This waste would then be transferred to another facility. This would allow sites to complete a "mass balance" of all waste that they receive/dispatch.
Residual Waste	Residual waste is other wastes produced from facilities during the treatment/sorting of materials. e.g. if a glass re-processor washes the labels from bottles a residual waste paper is produced.
Source Facility	This where the waste is produced. This will be available for certain wastes where the producers are clearly identifiable (e.g. hazardous waste producers, households, discrete businesses, other waste facilities). We acknowledge that this may not be accurately obtainable from multiple collection rounds but would like the flexibility to include it for individual collections and possible future developments in on-board weighing.
Arising	The waste "arising" is any waste produced.