
Waste Management Plan

FOR

LanzaTech

PROJECT	6716
REPORT REFERENCE	R6716-IE-0006
ISSUE	A8
ISSUE DATE	09/11/2023
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ISO 9001 & ISO 14001
Certificate Number: 5021

REVISION HISTORY

ISSUE			DATE	COMMENTS
P1	AUTHOR	Peter Shanahan	25/5/2023	Draft for discussion
	CHECKED			
	APPROVED			
P2	AUTHOR	Peter Shanahan	14/06/2023	Document guidelines for discussion
	CHECKED			
	APPROVED			
P3	AUTHOR	Peter Shanahan	13/07/2023	Full content for client review.
	CHECKED	Simon Boniface	14/07/2023	
	APPROVED			
A1	AUTHOR	Peter Shanahan	13/07/2023	Waste types medical/sanitary and WEEE added. Approved for issue.
	CHECKED	Simon Boniface	14/07/2023	
	APPROVED	Deb Pal	24/07/2023	
A2	AUTHOR	Peter Shanahan	02/08/2023	Construction waste section added. Update to expected operational waste types and quantities. Updated with comments from ERM on version A1.
	CHECKED	Simon Boniface	03/08/2023	
	APPROVED	Deb Pal	04/08/2023	
A3	AUTHOR	Peter Shanahan	31/08/2023	Updated operational waste quantities.
	CHECKED	Reza Khaleghi	06/09/2023	
	APPROVED	Deb Pal	15/09/2023	
A4	AUTHOR	Peter Shanahan	22/09/2023	Waste streams quantities update from client.
	CHECKED	Reza Khaleghi	24/09/2023	
	APPROVED	Deb Pal	28/09/2023	
A5	AUTHOR	Peter Shanahan	27/10/2023	Updates to Table 2 waste types and quantities.
	CHECKED	Deb Pal	27/10/2023	
	APPROVED	Deb Pal	27/10/2023	
A6	AUTHOR	Peter Shanahan	03/11/2023	Updates from LanzaTech 03/11/2023
	CHECKED	Deb Pal	06/11/2023	
	APPROVED	Deb Pal	06/11/2023	
A7	AUTHOR	Peter Shanahan	07/11/2023	Amended Table 1 and reference list.
	CHECKED	Deb Pal	07/11/2023	
	APPROVED	Deb Pal	07/11/2023	
A8	AUTHOR	Peter Shanahan	09/11/2023	Amended Table 1 with soil volumes.
	CHECKED	Simon Couling	09/11/2023	
	APPROVED	Shem Harper	09/11/2023	

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1 INTRODUCTION

Stopford Limited has been commissioned by LanzaTech (LT) to produce a Waste Management Plan (WMP) for their Alcohol to Jet (ATJ) DRAGON sustainable aviation fuel installation (the Installation) at Crown Wharf, Harbour Way, Port Talbot Dock, Port Talbot, SA13 1RA.

This WMP forms part of LanzaTech's Environmental Management System (EMS) and Framework Construction Environmental Management Plan (CEMP). As a new installation, the WMP will be reviewed annually for first two years, then at least every five years or after a significant change at the Installation.

This WMP meets guidance for permitted installations (ref. 1) and any sector guidance.

The aim of this WMP is to highlight the main waste types produced during construction, by the Installation when operational and how they will be managed to prevent environmental harm.

2 LEGISLATION

The following are relevant legislation for LanzaTech as the installation operator:

- The Environmental Permitting (England and Wales) Regulations 2016
- The Waste (England and Wales) Regulations 2011
- The Hazardous Waste (England and Wales) Regulations 2005

3 SITE PROCESS

Project DRAGON aims to convert ethanol to Synthetic Paraffinic Kerosene (SPK) and Synthetic Paraffinic Diesel (SPD). The ethanol will be provided from multiple feedstock options, with ethanol storage onsite. The production involves a feed pre-treatment followed by dehydration and separation to produce ethylene. The resulting ethylene is further processed via oligomerisation followed by hydrogenation and fractionation to produce the final sustainable aviation fuel and diesel. These final products and intermediate products will be stored onsite. Initial calculations suggest the facility will be an upper tier COMAH site.

Waste will be produced from operations and maintenance activities at the DRAGON ATJ facility (ref. 8).

4 WASTE TYPES

4.1 Construction Waste

This section forms part of the Installation's Framework Construction Environmental Management Plan (CEMP) (ref. 12).

Table 1 below provides estimates of volumes of main waste types generated during construction of the Dragon Installation based on data provided by Technip Energies (ref. 11).

The following sections provide further detail on the management of expected construction waste.

Table 1 Construction waste types and estimated volumes (ref. 11).

Construction Waste Type	Estimated volume (m ³)	EWG code
Soil material	1,406	17 05 03 17 05 04
Concrete material	868	17 01 01
Steel	43	17 04 05
Cables	1	17 04 11
Mixed wastes	36	17 09 04
Packing wastes	344	17 09 04
Domestic (mixed) wastes	191	17 09 04
Contaminated water (hazardous)	11,304	17 09 03
Chemicals (hazardous)	385	17 09 03

4.1.1 Construction Waste Recycling and Disposal

As under the Framework CEMP (ref. 12), the appointed contractor will segregate waste streams on-site, prior to them being taken to a licensed waste facility for recycling or disposal. All waste to be removed from the site will be undertaken by fully licensed waste carriers and taken to licensed waste facilities.

An audit of licensed waste carriers and licensed waste facilities will be conducted by LanzaTech.

4.1.2 Construction Spoil Management

As under the Framework CEMP (ref. 12), spoil will arise from the construction activities of the project. The appointed contractor will take all reasonable measures to apply the waste hierarchy (Figure 1) and managed in accordance with The Waste (England and Wales) Regulations 2011.

During enabling works and construction, spoil arisings will be temporarily stockpiled within the site boundary before either beneficial re-use on site for use in development platform construction or being taken off-site by HGV for treatment and/or disposal at a local permitted facility (in the local area) or for reuse in other development sites in the area.

Spoil will be stockpiled in areas at low risk of flooding within the site boundary on the site. The size of the stockpiles will be minimised where possible by excavation works being constructed in parallel with construction activities which will utilise spoil arisings where these are geotechnically or chemically suitable (ref. 15).

For contaminated materials, there will be progressive off-site removal of geotechnically unsuitable or contaminated materials for re-use, treatment and/or disposal. Any suspected contaminated spoil will be placed on an impermeable membrane to prevent the leaching of any contaminants into the subsurface or watercourses. A site specific Screening Verification Criteria for the classification of soils for re-use or disposal will be derived by LanzaTech following guidance such as Definition of Waste: Code of Practice by CL:AIRE (ref. 15). Suitable measures will be put in place to prevent sediment being washed into watercourses, and the stockpiles will be kept low and visually monitored for wash away during/ after periods of prolonged rainfall.

Spoil will be sampled as per guidance (ref. 3) and any contaminated spoil identified will be managed in accordance with the following:

- Defra 2009 Construction Code of Practice for the Sustainable Use of Soil on Development Sites; and
- Definition of Waste: Development Industry Code of Practice (ref. 15).

4.2 Operational Waste

The following LanzaTech documents have informed the waste types for the operation of the Installation:

- Block Flow Diagram - Process And Utility Area 202947C-000-PFD-0010-00005.
- Process Design Basis - Effluent Waste Water Treatment System 202947C-650-CN-0007-00695.
- Process Basis Of Design - Drain And Effluent System 202947C-650-CN-0007-00650.
- Waste Disposal Memo, Revision 2, 1 August 2023, LanzaTech.

Appendix 1 provides a list of all the expected waste types produced by the Installation. Table 2 below details the waste types, estimated quantities, site storage and disposal for the Installation based on a ATJ Waste Summary provided by LanzaTech in August 2023 (ref. 16).

Details of the specific process packages mentioned in Table 2 can be found in the Process Description (ref. 10). As this Waste Management Plan comes to be reviewed, the waste stream quantities will be updated where necessary.

Waste classification, and hazardous properties is based on waste classification guidance WM3 from NRW (ref. 3).

Any products used at the Installation will be accompanied by Safety Data Sheets detailing their hazardous properties and their safe waste handling and disposal.

Table 2 Main installation operational waste types and storage. t/a = tonnes per year.

Description	Waste Stream	Quantity (tonnes/year)	Hazardous/Non-Hazardous	Removal/Storage	Destination	Associated EWC
PROCESS FLUIDS						
Organic waste containing hazardous substances	Process	30	Hazardous	Tanker	Offsite incineration (Note 1)	07 01 11
Aqueous liquid waste containing hazardous substances	Process	500	Hazardous	Tanker	Specialist third party responsibility (Note 2)	07 01 01 07 01 04
WATER TREATMENT						
Sludge from on-site effluent treatment	Waste Water Treatment Package Z-695	8,000	Non-hazardous	Tanker	Landfill	07 01 12
SPENT CATALYSTS, RESINS & ABSORBENTS						
Spent catalysts, resins & absorbents	Process	60	Hazardous	Closed containers	Specialist third party for metals recovery/landfill	16 08 07 07 07 11 07 01 99
OTHER						
Paper/cardboard	General	60	Non-hazardous	Skips/bins	Specialist third party for recycling	20 01 01
Glass	General	5	Non-hazardous	Skips/bins	Specialist third party for recycling	20 01 02
Plastics	General	5	Non-hazardous	Skips/bins	Specialist third party for recycling	20 01 39
Metals	General	5	Non-hazardous	Skips/bins	Specialist third party for recycling	20 01 40 17 04 07
Wooden packaging	General	15	Non-hazardous	Skips/bins	Specialist third party for recycling	20 01 38 17 02 01
Biodegradable waste	General	5.8	Non-hazardous	Skips/bins	Specialist third party	20 01 08

Description	Waste Stream	Quantity (tonnes/year)	Hazardous/Non-Hazardous	Removal/Storage	Destination	Associated EWC
General waste	General	10 (Note 3)	Non-hazardous	Bins	Specialist third party	20 03 01
Septic tank sludge	Domestic waste water.	2 (Note 3)	Non hazardous	Septic chamber.	Specialist third party	20 03 04
Waste Electrical and Electronic Equipment. Batteries	From site maintenance and admin activities.	0.5 (Note 3)	Hazardous and non-hazardous	Workshop and office stores.	Specialist third party	20 01 34 20 01 35 20 01 36
Laboratory chemicals	Laboratory	0.5 (Note 3)	Hazardous	Specialist containers, bottles and crates.	Specialist third party	16 05 06
Interceptor waste	Solids and sludges from grit chambers and oil/water separators.	1 (Note 3)	Hazardous	Interceptor chambers.	Specialist third party	13 05 01 13 05 02

Note 1: Normally utilised as liquid fuel source for the HP Steam Boiler for recovery of calorific value.

Note 2: Normally treated onsite through EWWTP with water recovered and recycled. Removal via tanker is an alternate removal path only if EWWTP is unavailable.

Note 3: Estimated for installation based on site design and expected numbers of shift personnel.

5 SAMPLING

Effluent and spent catalyst waste in Table 2 will be tested to ensure their correct classification of the waste stream to determine toxicity and composition. The schedule of testing will follow Waste Classification guidance (ref. 3). The testing records will be kept for future reference (see Section 6 below). These tests will be conducted by a third-party UKAS facility.

6 RECORDS

The appointed construction contractor Health, Safety and Environment department will control and supervise construction waste, including records.

LanzaTech's HSSEQ Manager will manage records of operational waste management at the Installation as follows:

- Duty of Care records will be kept for three years.
- Waste Transfer Notes minimum of two years. Appendix 2 has an example Waste Transfer Note.
- Hazardous Waste Consignment Notes kept minimum of three years. Appendix 3 has an example Hazardous Waste Consignment Note.
- Management of hazardous waste will be compliant with the site record and return requirements from Part 7 of the Hazardous Waste Regulations (ref. 4):
 - Reg 49(1) - A producer shall keep a record of the quantity, nature, origin and, where relevant, the destination, frequency of collection, mode of transport and treatment method of the waste.
 - Reg 49(2) - Where the waste is transported, the duty includes a requirement to keep a record of particulars sufficient to identify the carrier.
 - Reg 49(3) - The producer shall preserve the records for at least three years afterwards commencing on the date on which the waste is transferred to another person.
 - Reg 55(1) - A person who is required to retain any record shall, at any time during the period in which the record is required to be retained produce that record to NRW or emergency services on request.
- Hazardous waste returns (ref. 14).
- Sample results for effluent and spent catalysts.

7 AVOIDANCE, RECOVERY AND DISPOSAL OF WASTES

The project design adopts the principles of the waste management hierarchy, which is considered to be BAT and is summarised in Figure 1.

The appointed construction contractor Health, Safety and Environment department will control and supervise construction waste during construction.

Responsibility of waste management at the operational Installation is with the HSSEQ Manager (ref. 2).

LanzaTech's site management team will avoid the generation of wastes detailed in Table 2 through site policies and procedures underlined by the Environment Management System (EMS) (ref. 5).

As per the Environmental Basis of Design (ref. 8), all waste materials will be segregated, classified into the appropriate non-hazardous and hazardous categories/codes, collected separately at the point of origin, labelled, and stored appropriately to ensure safe containment and transportation (by a registered waste carrier) for their final re-use, recycling or disposal. Efforts is made to avoid, reduce (minimise) or recycle wastes at all times. All waste has appropriate documentation and an inventory tracking system in place.

7.1 Waste Hierarchy

LanzaTech will follow the waste hierarchy (Figure 1) as referred to in Article 4 of the Waste Framework Directive (ref. 7) is applied to the generation of waste by the activities at the Installation. Where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.



Figure 1 Waste Hierarchy (ref. 7).

7.2 Recycling and Recovery

Recycling and recovery options at the operational DRAGON Installation includes the following:

- Off-spec intermediates and fuels re-used in the oligomerisation and hydrogenation processes.
- Commercial mixed waste recovered and recycled as far as possible by appointed waste carrier supplier (e.g., paper/cardboard, glass, metal and plastic).

Further recovery of waste, such as commercial waste, will be routinely assessed within this WMP in collaboration with appointed licenced waste carriers.

7.3 Operational Waste Storage

Specific waste compounds and storage areas will be designated and labelled in the final site layout plan (drawing 202947C-050-DW-0051-00001).

Waste Storage (see Table 2) will not give rise to secondary environmental impact such as odour or pollution of groundwater due to rainwater infiltration or site run-off. The site design and operation prevents cross-contamination of wastes or the mixing of incompatible materials (ref. 8).

Storage areas for waste containers, such as Intermediate Bulk Containers (IBCs), drums and bags, is incorporated into the design. These are sited appropriately and operated to minimise the risk of releases to the environment (ref. 8). In particular:

- Waste storage areas are located away from any watercourses and sensitive boundaries, (e.g., those with public access).
- Waste storage areas have signs, notices and be clearly marked-out for waste segregation, and all containers and packages clearly labelled.
- Waste storage areas have appropriate kerbing and bunding and be lined.
- The maximum storage capacity of storage areas shall be defined and not exceeded, and the maximum storage period for containers shall be specified and adhered-to.
- Appropriate storage facilities is provided for waste substances with specific requirements (e.g., hazardous, flammable, sensitive to heat or light). Hazardous waste substances will be stored exclusively in areas laid with impervious hard standing and provided with secondary containment.
- All waste containers are stored with lids, caps and valves secured and in place.
- Skips will be colour coded and clearly identified for the different waste types (i.e., plastic, glass, metals, wood and general).
- All waste containers, bottles, drums and small packages are regularly inspected.
- Spill response procedures are in place to deal with damaged or leaking waste (ref. 9).
- Laboratory waste is collected in special containers and treated separately in accordance with the relevant UK legislation.
- Waste storage areas will be inspected daily by the Production Manager and Shift Managers. The HSSEQ Manager will be provided with updates on waste storage by the Production Manager, with the HSSEQ Manager inspecting waste storage areas quarterly.

No waste will be stored on site for longer than 12 months.

7.4 Operational Waste Disposal

Where disposal of waste is undertaken, this is because it is either technically or economically unfeasible for the Installation to undertake.

For hazardous operational waste (Table 2), arrangements will be in place by LanzaTech to fully and accurately complete hazardous waste consignment notes in accordance with NRW guidance (ref. 13).

Measures planned to avoid or reduce any impact on the environment includes:

- Disposal of wastes will follow conditions of the NRW environmental permit, such as Duty of Care, under the Environmental Permitting (England and Wales) Regulations 2016 (ref. 6). This includes record keeping, monitoring and control obligations.
- Hazardous waste disposal will follow the Hazardous Waste Regulations (ref. 4), including additional labelling, record keeping, monitoring and control obligations from the "cradle to the grave". Substance Safety Data Sheets (SDS) will be used to inform safe and controlled disposal of products used. Waste Classification guidance WM3 (ref. 3) will be used to classify all other wastes.
- All wastes will be accurately categorised under WM3 Waste Classification in Appendix 1 by appropriately trained personnel appointed by the HSSEQ Manager.
- Only licenced waste carriers, ideally with ISO 14001, will supply waste collection, transfer and disposal of waste from the Installation.
- Wastes for disposal will be stored according to details in Table 2.
- Appointed site staff will be provided with training on the management of all wastes for disposal. This will be managed by the HSSEQ Manager.

7.5 Duty of Care

Checks will be conducted by the Installation's HSSEQ Manager on waste carriers and waste management facilities. This includes periodical checking of their licenses and environmental permits, as well as on-site audits. Records of checks and audits will be kept by the HSSEQ Manager.

Example Duty of Care logs to be used by LanzaTech are provided in Appendix 4.

7.6 Review

As a new installation, LanzaTech will review and record at least every two years whether changes to those measures should be made and take any further appropriate measures identified by a review.

8 REFERENCES

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2. Stopford (2023), LanzaTech Alcohol to Jet FEED Organogram. R6716-PM-0014.
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4. UK Government (2005), The Hazardous Waste (England and Wales) Regulations 2005. <https://www.legislation.gov.uk/uksi/2005/894/contents/made>
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12. LanzaTech (2023), Framework Construction Environmental Management Plan. Project Dragon, Port Talbot.
13. Natural Resources Wales (2023), How to complete a hazardous waste consignment note - Guidance. Natural Resources Wales. <https://naturalresources.wales/guidance-and-advice/environmental-topics/waste-management/how-to-complete-a-hazardous-waste-consignment-note/?lang=en>
14. Natural Resources Wales (2023), Submit your hazardous waste return. <https://naturalresources.wales/guidance-and-advice/environmental-topics/waste-management/submit-your-hazardous-waste-return/?lang=en>
15. CL:AIRE (2011), The Definition of Waste: Development Industry Code of Practice. Version 2. <https://www.claire.co.uk/projects-and-initiatives/dow-cop>
16. LanzaTech (2023), Emission Effluent Summary revision 7 (29-09-23). Excel Spreadsheet.

APPENDIX 1 – WASTE TYPES

The table below lists the waste types from the DRAGON Installation following the Environment Agency's guidance on waste classification (ref. 3). The listed waste types provides the site management team/HSSEQ Manager a point of reference for the various waste descriptions and their hazard categories.

The waste types have the following waste hazard categories:

- AH – Absolute Hazard
- MH – Mirror Hazard
- MN – Mirror Non-hazardous
- AN - Absolute non-hazardous

EWC code	Description	Hazard
07	Wastes from organic chemical processes	
07 01	Wastes from the manufacture, formulation, supply and use of basic organic chemicals	
07 01 01	Aqueous washing liquids and mother liquors	AH
07 01 04	Other organic solvents, washing liquids and mother liquors	AH
07 01 08	Other still bottoms and reaction residues	AH
07 01 10	Other filter cakes and spent absorbents	AH
07 01 11	Sludges from on-site effluent treatment containing hazardous substances	MH
07 01 12	Sludges from on-site effluent treatment other than those mentioned in 07 01 11	MN
07 01 99	Wastes not otherwise specified	AN
13	Oil wastes and wastes of liquid fuels	
13 02	Waste engine, gear and lubricating oils	
13 02 05	Mineral-based non-chlorinated engine, gear and lubricating oils	AH
13 02 06	Synthetic engine, gear and lubricating oils	AH
13 02 08	Other engine, gear and lubricating oils	AH
13 03	Waste insulating and heat transmission oils	
13 03 06	Mineral-based chlorinated insulating and heat transmission oils	AH
13 03 07	Mineral-based non-chlorinated insulating and heat transmission oils	AH
13 03 08	Synthetic insulating and heat transmission oils	AH
13 03 10	Other insulating and heat transmission oils	AH
13 04	Bilge Oils	
13 04 02	Bilge oils from jetty sewers	AH
13 04 03	Bilge oils from other navigation	AH
13 05	Oil/water separator contents	
13 05 01	Solids from grit chambers and oil/water separators	AH
13 05 02	Sludges from oil/water separators	AH
13 05 03	Interceptor sludges	AH
13 05 06	Oil from oil/water separators	AH
13 05 07	Oily water from oil/water separators	AH
13 05 08	Mixtures of wastes from grit chambers and oil/water separators	AH
13 07	Wastes of liquid fuels	
13 07 01	Fuel oil and diesel	AH
13 07 03	Other fuels (including mixtures)	AH
13 08	Oil wastes not otherwise specified	
13 08 99	Wastes not otherwise specified	AH

EWC code	Description	Hazard
14	Waste organic solvents, refrigerants and propellants	
14 06 02	Other halogenated solvents and solvent mixtures	AH
14 06 03	Other solvents and solvent mixtures	AH
14 06 04	Sludges or solid wastes containing halogenated solvents	MH
14 06 05	Sludges or solid wastes containing other solvents	MH
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing.	
15 02	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 hazardous substances.	MH
15 02 03	Absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02	MN
16	Wastes not otherwise specified	
16 02	Wastes from electrical and electronic equipment	
16 02 14	Discarded equipment	AN
16 02 16	Components removed from discarded equipment	AN
16 05	Gases in pressure containers and discarded chemicals	
16 05 04	Gases in pressure containers (including halons) containing hazardous substances	MH
16 05 05	Gases in pressure containers other than those mentioned in 16 05 04	MN
16 05 06	Laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals	MH
16 05 07	Discarded inorganic chemicals consisting of or containing hazardous substances	MH
16 05 08	Discarded organic chemicals consisting of or containing hazardous substances	MH
16 05 09	Discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08	MN
16 08	Spent catalysts	
16 08 04	Spent fluid catalytic cracking catalysts (except 16 08 07)	MN
16 08 07	Spent catalysts contaminated with hazardous substances	MH
16 10	Aqueous liquid wastes destined for off-site treatment	
16 10 01	Aqueous liquid wastes containing hazardous substances	MH
16 10 02	Aqueous liquid wastes other than those mentioned in 16 10 01	MN
16 10 03	Aqueous concentrates wastes containing hazardous substances	MH
16 10 04	Aqueous concentrates wastes other than those mentioned in 16 10 01	MN
17	Construction and Demolition Wastes	
17 01 01	Concrete	MN
17 01 06	Mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing hazardous substances.	MH
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06.	MN
17 04 05	Iron and steel	MN
17 04 11	Cables	MN
17 05 03	Soil and stones containing hazardous substances.	MH
17 05 04	Soil and stones other than those mentioned in 17 05 03.	MN
17 09 03	Other construction and demolition wastes (including mixed wastes) containing hazardous substances.	MH
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 03.	MN

EWC code	Description	Hazard
20	Commercial and industrial waste	
20 01	Separately collected fractions	
20 01 01	Paper and cardboard	AN
20 01 02	Glass	AN
20 01 08	Biodegradable kitchen and canteen waste	AN
20 01 13	Solvents	AH
20 01 34	Batteries and accumulators	AN
20 01 35	Discarded electrical and electronic equipment containing hazardous components	AH
20 01 36	Discarded electrical and electronic equipment	AN
20 01 38	Wood	MN
20 01 39	Plastics	AN
20 01 40	Metals	AN
20 03	Other municipal wastes	
20 03 01	Mixed municipal waste	AN
20 03 04	Septic tank sludge	AN

APPENDIX 2 – EXAMPLE WASTE TRANSFER NOTE

Duty of care: waste transfer note Keep this page and copy it for future use. Please write as clearly as possible.

Section A – Description of waste

A1 Description of the waste being transferred

List of Waste Regulations code(s)

A2 How is the waste contained?

Loose ☐ Sacks ☐ Skip ☐ Drum ☐
 Other ☐

A3 How much waste? For example, number of sacks, weight

Section B – Current holder of the waste – Transferor

By signing in Section D below I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011 Yes ☐

B1 Full name

Company name and address

Postcode SIC code (2007)

B2 Name of your unitary authority or council

B3 Are you:

The producer of the waste? ☐

The importer of the waste? ☐

The local authority? ☐

The holder of an environmental permit? ☐

Permit number

Issued by

Registered waste exemption? ☐

Details, including registration number

A registered waste carrier, broker or dealer? ☐

Registration number

Details (are you a carrier, broker or dealer?)

Section C – Person collecting the waste – Transferee

C1 Full name

Company name and address

Postcode

C2 Are you:

The local authority? ☐

C3 Are you:

The holder of an environmental permit? ☐

Permit number

Issued by

Registered waste exemption? ☐

Details, including registration number

A registered waste carrier, broker or dealer? ☐

Registration number

Details (are you a carrier, broker or dealer?)

Section D – The transfer

D1 Address of transfer or collection point

Postcode

Date of transfer (DD/MM/YYYY)

D2 Broker or dealer who arranged this transfer (if applicable)

Postcode

Registration number

Time(s)

Transferor's signature

Name

Representing

WMC2A Version 3, August 2011

Transferee's signature

Name

Representing

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APPENDIX 3 – EXAMPLE HAZARDOUS WASTE CONSIGNMENT NOTE

The Hazardous Waste Regulations 2005: Consignment Note
Copy

Producer's/ Holder's / Consignor's

Part A: Notification Details									
1. Consignment Note Code:					4. The waste will be taken to (name, address & postcode):				
2. The waste described below is to be removed from (name, address, postcode, telephone, e-mail, facsimile):					5. The waste producer was (if different from 2.) (name, address, postcode, telephone, e-mail, facsimile):				
3. Premises Code (where applicable):									
Part B: Description of the waste									
1. The process giving rise to the waste(s) was:					2 SIC for the process giving rise to the waste				
3. WASTE DETAILS (where more than one waste type is collected all of the information given below must be completed for each EWC identified)									
Description of waste	List of Wastes (EWC) code (6 digits)	Quantity (kg)	The chemical/biological components in the waste and their concentrations are		Physical Form (Gas, Liquid, Solid, Powder, Sludge or Mixed):	Hazard code(s)	Container type, number & size:		
			Component	Concentration (% or mg/kg)					
The information given below is to be completed for each EWC identified									
EWC Code	UN identification number(s)	Proper shipping name(s)	UN Class(es)	Packing Group(s)	Special handling requirements				
Part C: Carrier's certificate					Part D: Consignor's certificate				
(If more than one carrier is used, please attach Schedule for subsequent carriers. If schedule of carriers is attached tick here ☐). I certify that I today collected the consignment and that the details in A2, A4 and B3 are correct and I have been advised of any specific handling requirements. Where this consignment forms part of a multiple collection, the round number and collection number are /					I certify that the information in A, B and C has been completed and is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011.				
1. Carrier Name: On behalf of (name, address, postcode, telephone, e-mail, facsimile):					Consignor Name: On behalf of (name, address, postcode, telephone, e-mail, facsimile):				
2. Carrier registration no./ reason for exemption: 3. Vehicle registration no.(or mode of transport, if not road) Signature Date Time					Signature Date Time				
Part E: Consignee's certificate (where more than one waste type is collected all of the information given below must be completed for each EWC)									
Individual EWC code(s) received	Quantity of each EWC code received (kg)	EWC Accepted/Rejected	Waste Management operation (R or D code)						
1. I received this waste at the address given in A4 on Date At: Time									
2. Vehicle registration no (or mode of transport, if not road) 3. Where waste is rejected please provide details: I certify that waste permit / exempt waste operation number: authorises the management of the waste described in B at the address given in A4 Where the consignment forms part of a multiple collection, as identified in Part C, I certify that the total number of consignments forming the collection are:									
Name On behalf of (name, address, postcode, telephone, e-mail, facsimile): Signature Date Time									

APPENDIX 4 – EXAMPLE DUTY OF CARE LOGS

Waste Carriers Details

EA Public Register: <https://environment.data.gov.uk/public-register/view/index>

[illegible]

Waste Destination Environmental Permit or Exemption Details

[illegible]

Movement number	Date of movement (dd/mm/yyyy)	Ticket number	Waste description	LOW / EWC code	Construction, demolition or excavation	Waste carrier	Waste destination	Type of container	Measure or volume of container	Individual container volume	Number of loads per day	Tonnes	Total
1													
2													
3													
4													
5													
6													
7													