

Environmental Code of Practice: ECP5 Hazardous and Offensive Waste

Responsible for this policy

Deputy Chief Executive, Organisational Enhancement

People who need to read this policy

University staff, students, users of and visitors to the university

Relevant to Academic Partnerships?

Νc

Date the policy was introduced

April 2015 (draft)

Date(s) when the policy was modified

September 2015, February 2018

Next review date

June 2020

Date policy approved

July 2018

Responsible for reviewing this document

Environmental Manager

Relevant documents

- Environmental Protection Act 1990
- EU Waste Framework Directive (2008/98/EC)
- Waste (England and Wales) Regulations 2005
- Hazardous Waste Regulations 2005
- Waste Electrical and Electronic Equipment Regulations 2013
- European Waste Catalogue (EWC) Codes
- <u>Technical Guidance WM3: Waste Classification</u> Guidance on the classification and assessment of waste
- Guidance and example documentation on www.gov.uk

Related policies and documents

- Health and Safety Codes of Practice
- ECP4 Recycling and Waste Resource Management
- Environmental and Sustainability Policy
- Recycling and Resource Management Policy

Contents

Responsible for this policy	1
People who need to read this policy	1
Relevant to Academic Partnerships?	1
Date the policy was introduced	1
Date(s) when the policy was modified	1
Next review date	1
Date policy approved	1
Responsible for reviewing this document	1
Relevant documents	1
Related policies and documents	2
Contents	2
Environmental Code of Practice: ECP5 Hazardous and Offensive Waste	5
Purpose of the Code of Practice	5
Definitions	5
Hazardous and Offensive Waste	6
Hazardous waste	6
Offensive waste	8
Legislation and Guidance	9
Responsibilities	10
University Responsibilities	10
Estate Management Responsibilities	10
Faculty and Divisional Responsibilities	11
Failure to Comply	12
Preparation and Storage (prior to disposal)	13
Identification and Classification of Waste	13
Decontamination, Disinfection and Sterilisation	13
Storing Hazardous Waste	14

Waste Sack Colour Coding	. 15
Contractors' Waste	. 15
Duty of Care – Employment of Hazardous Waste Contractors	. 15
Finance and Resources	. 15
Faculties / Schools and Divisions	. 15
Consignment Notes and Additional Paperwork	. 16
Consignment Notes	. 16
Additional Paperwork	. 17
LJMU Hazardous and Offensive Waste Disposal Arrangements	. 18
Asbestos	. 18
Batteries	. 18
Waste Electrical and Electronic Equipment ('WEEE')	. 18
Other WEEE, Laboratory Equipment with Hazardous and / or Ozone-Depleting Substances	. 19
Fluorescent Light Bulbs and Projector Lamps	. 19
Xerox Multi-Function Device (MFD) Cartridges	. 20
Clinical and Healthcare Waste (solid and / or fluid)	. 20
Chemicals	. 20
Herbicides and Pesticides	. 21
Waste Oils	. 21
Paints and Solvents	. 22
Radioactive Wastes	. 22
Containers Containing Trace Remnants of Hazardous Substances	. 22
Gas Cylinders	. 23
Fire Extinguishers	. 23
Laboratory Glass	. 23
Offensive Waste Disposal Arrangements	. 23
Appendix 1	. 24
Identifying Hazardous Waste	. 24
Appendix 2	. 25
Checklist for Hazardous Waste Disposal	. 25
Appendix 3	. 26
Model Decontamination and Cleaning Certificate	. 26
Appendix 4	. 27

Example of a Completed Consignment Note	27
Appendix 5	28
Checklist for Record Management of Hazardous Waste Disposal	28
Appendix 6	29
References	29

Environmental Code of Practice: ECP5 Hazardous and Offensive Waste

Important

This code of practice forms part of the university's recycling and resource management policy and replaces all previous issues

Purpose of the Code of Practice

This document supports the University's Recycling and Resource Management Policy and relates solely to hazardous and offensive wastes.

For information pertaining to non-hazardous waste streams (municipal recycling and mixed municipal general waste), please refer to ECP4 Municipal Recycling and Resource Management.

The purpose of this Code of Practice is to outline:

- The identification of the types of hazardous and offensive waste produced by the University in its day to day activities
- The duty of care for disposal of hazardous and offensive waste
- Nominal roles and responsibilities
- The correct internal processes for hazardous and offensive waste storage and disposal
- Penalties for being in breach of EU/UK waste legislation

This Code of Practice does not cover decontamination methods for each type of waste, or the measures that should be taken to protect the individual when handling hazardous substances. Those arrangements should be produced and kept locally within Faculties/Divisions, with reference to the appropriate Health and Safety Codes of Practice. Faculties/Divisions may seek guidance on the development of local arrangements from Estate Management if required.

This document will be reviewed annually (and additionally as required) to ensure information contained herein remains up to date and that the most current version is available from the <u>LJMU Policy Centre</u>.

Definitions

Waste

A material is considered to be "waste" when the producer or holder discards it, intends to discard it, or is required to discard it.

Waste Hierarchy

Regulation 12 of the Waste (England and Wales) Regulations 2011 requires that an organisation's volume of waste production be managed through the application of a 'Waste Hierarchy' which ranks waste management options according to what is best for the Environment. The hierarchy lists four control measures: prevention, preparing for reuse, recycling and other recovery that should be fully applied to waste before final disposal.

Discard

To 'discard' does not simply mean throwing away or getting rid of something. Discarding also covers activities such as assigning something for re-use, preparing materials and products for recycling/materials recovery operations all of which put waste products and material back into good use.

Producer

The term 'producer' applies to any person (student, staff member visitor or service provider/contractor) whose activities produce waste.

Holder

The waste 'holder' is the producer or otherwise legally responsible person who has custody of the waste prior to its collection from LJMU premises.

Consignor

The 'consignor' of the waste is the legally responsible person who causes the hazardous waste to be moved from any LJMU premises by a registered 'Waste Carrier'.

Waste carrier

The University's current waste collection service providers are classed as 'carriers' of waste. LJMU employ a number of different carriers depending on the type of waste.

Consignee

The 'consignee' is the waste receiver's employee who accepts the waste from the 'carrier' for recovery or disposal.

Hazardous and Offensive Waste

Hazardous waste

'Hazardous waste' is that which is (or contains substances which are) harmful to public health and/or the environment. Hazardous waste at LJMU includes the following items below:

Waste type	Fraction EWC Code	Product/material
Asbestos	16.02.12	Discarded equipment
	17.06.01	containing free asbestos
	17.06.05	Insulation materials
		containing asbestos

		Construction materials containing asbestos
Batteries	20.01.33 16.06.01 16.06.04	Domestic/light industrial batteries Car batteries Lithium batteries
WEEE (waste electrical and electronic equipment)	16.02.11 16.02.14	Refrigerators/freezers Microwaves, toasters, kettles etc. Laboratory equipment
Fluorescent tubes	20.01.21	Fluorescent tubes and other mercury containing waste
Printer cartridges	08.03.17*	Ink jet cartridges and toner cartridges *Containing hazardous substances
Clinical and healthcare (fluid and solid)	18.01.01 18.02.01 18.01.03 18.02.02 18.01.03	Sharps – human treatment Sharps – animal treatment Human infectious wastes Animal infectious wastes Municipal offensive wastes (e.g. hygiene waste and sanitary protection such as nappies and incontinence pads)
Equipment that is contaminated with anatomical waste and/or chemicals.	18.01.03 18.02.02 16.05.06	Human infectious waste Animal infectious waste Laboratory chemicals containing hazardous substances
Chemicals, solvents and pesticides	16.05.05 14.06.02 20.01.19	Laboratory chemicals Chlorinated solvents mixed Pesticides
Oils	13.02.06 16.01.07 15.02.02 12.01.08 20.01.25	Synthetic engine, gear and lubricating oils Used oil filters Oil contaminated rags and absorbent media Cutting oils Edible oil and fat
Paints	20.01.27	Paints containing dangerous substances

	20.01.28	Paints not mentioned in 20.01.27
Radioactive substances	Not Applicable	Radioactive wastes have their own legislation
Hazardous and infectious biological wastes	18 01 03	Human and animal waste (faeces), catheter and stoma bags, nasal secretions, sputum, condoms, urine, vomit and soiled human bedding. Wastes, whose collection and disposal is subject to special requirements in order to prevent infection.
Hazardous waste containers	16.05.06	Laboratory chemicals containing hazardous substances
Glass	20.01.02 17.02.02	Glass Window panes
Gas cylinders	16.05.04 16.05.05	Gases in pressure containers containing dangerous substances Gases in pressure containers other than those mentioned in 16.05.04

If there is any uncertainty as to whether a substance article or material is classified as hazardous waste, information may be available:

- On the product/packaging guidance
- From the manufacturer/supplier
- Line management.

Offensive waste

'Offensive waste' is non-clinical waste that is non-infectious and does not contain pharmaceutical or chemical substances, but may be unpleasant to anyone who comes into contact with it.

Offensive waste is that which is classed as non-hazardous under environmental legislation, but may include non-infectious hygiene materials. In light of this, offensive waste must be disposed of in the correct waste sack to identify it as offensive waste (see Section 7.4) within the general waste stream. Examples of offensive waste include:

Waste type	Fraction EWC Code	Product/material
Autoclaved waste	18.01.04	Laboratory hazardous or infectious biological wastes must be rendered safe by autoclaving prior to disposal. This waste can be treated as non-infectious once it has been inactivated by autoclaving. GMO contaminated laboratory wastes that have been effectively autoclaved.
Offensive waste	18.02.03	Human healthcare offensive waste, e.g. outer dressings and protective clothing like masks, gowns and gloves that aren't contaminated with body fluids, and sterilised laboratory waste. Municipal offensive waste e.g. hygiene waste and sanitary protection like nappies and incontinence pads Medical/veterinary items of disposable equipment such as gowns, plaster casts etc. Plasters (minor first aid or self-care) generated by personal use Animal healthcare as above
	18.02.03	Animal healthcare as above

Legislation and Guidance

There are three key pieces of legislation, which underpin waste law in the UK. These are:

- EU Waste Framework Directive (2008/98/EC)
- Environmental Protection Act 1990
- Waste (England and Wales) Regulations 2011 (amended 2012; 2014)

Supplementary legislation underpinning this includes:

• Environmental Protection (Duty of Care) Regulations 1991

- Environmental Act 1995
- Hazardous Waste (England and Wales) Regulations 2005 (amended 2009)
- Waste Electrical and Electronic Equipment Directive 2012/19 EU

For UK guidance on hazardous waste, please visit www.gov.uk.

Responsibilities

University Responsibilities

As a producer/holder/consignor/carrier of hazardous and offensive waste, the Institution has an overarching duty of care under The EU Waste Framework Directive 2008 – transposed into The Waste (England and Wales) Regulations 2011 – to ensure the following steps are fulfilled:

- a) Classify waste using Technical Guidance WM3 where appropriate and to accurately describe the waste using the European Waste Catalogue (EWC) code.
- b) Separate and store waste safely and securely, prior to its collection.
- c) Ensure that hazardous and non-hazardous waste is never mixed or stored together.
- d) Register for relevant environmental permits and/or exemptions, as required.
- e) Apply for and manage 'Carriage' licences and exemption permit; this refers to permits for individual staff and vehicles to transfer waste and certain types of hazardous waste from one site to another for purposes of consolidation prior to collection.
- f) Ensure that any intermediary the University transfers waste to has a current, valid waste carrier's licence for the category of waste being transferred.
- g) Produce consignment notes.
- h) Receive consignee returns (received from the waste collector every quarter).
- i) Keep records for a minimum of three years.

The University duty of care responsibilities are discharged as listed in 'Estate Management Responsibilities' and 'Faculty and Divisional Responsibilities'.

Estate Management Responsibilities

The following delegated responsibilities are discharged by Estate Management:

- Registration of premises and payment (if applicable) for permits/exemptions to store
 and manage waste engendered by Estate Management's activities and defined
 support services to the Estate, including registration for Carriage Permits and
 associated waste management Exemption Certificates
- Tendering and oversight, ensuring legal compliance of the contract(s) regarding the collection, treatment and disposal services for the hazardous wastes referred to in a) above

- Ensuring each building has a secure, compliant hazardous waste storage area with suitable and sufficient storage capacity to safely accommodate and contain the volume of hazardous wastes referred to in a) above
- Hazardous waste data aggregation for Estate Management Return reporting purposes, advising the Environment and Sustainability Panel on hazardous waste policy, targets and objectives
- Production of hazardous waste-related Codes of Practice as directed/commissioned by the Environment and Sustainable Development Panel.
- To host, support and develop the University's Environmental Management System (EMS)
- Periodic auditing of Faculty and Divisional hazardous waste management arrangements as directed/commissioned by the Environment and Sustainability Panel
- Through its embedded Environmental Team to:
 - Provide access to competent advice to facilitate compliant discharge of local responsibilities as listed in section Faculty and Divisional Responsibilities.
 - Assist with the identification and delivery of University/Faculty/Divisional hazardous waste management awareness training
 - Assist with the identification and delivery of University/Faculty/Divisional hazardous waste management awareness training for Estate Management staff with an active role in the University's waste management arrangements
 - Act as a point of contact for enquiries pertaining to the waste data reported to the annual Estate Management Return
 - Supporting production of University guidance on selection of waste and resource signage and receptacles

Faculty and Divisional Responsibilities

Executive Deans and Divisional Deputy Chief Executives must ensure that the responsibilities listed below are communicated to, understood and discharged by all those whose Faculty/Divisional activities result in the production and disposal of hazardous waste:

- Identify and classify hazardous waste streams in line with Guidance WM3
- Provide an accurate description of the waste in line with the European Waste Catalogue
- Identify and record local roles (including secondary contacts), responsibilities and levels of competency required by those regularly involved in hazardous waste disposal to evidence compliance with statutory requirements and good practice
- Identify and facilitate appropriate training for these roles and ensure that it is carried out and documented
- Ensure appropriate storage and pre-treatment/decontamination of materials pending collection
- Procurement, oversight and Duty of Care assessment regarding any contract of service for hazardous/offensive waste collection, treatment and disposal generated by the Faculty/Division

- Arrange and manage responsible hazardous waste treatment/collection/disposal via the University's procurement system (i-Buy)
- Complete the consignment notes during collection of the waste
- Manage a record-keeping system for three-year retention of consignment notes (this system must be organised, secure and accessible in the event of an emergency and/or audit)
- Receive Consignee Returns (reports sent quarterly to those named on the consignment note) and include these within the local record-keeping system
- Include carrier schedules in the record-keeping system
- Ensure that details of the Faculty/Division's record-keeping and processes outlining local hazardous waste arrangements are registered in the University's EMS.

As stipulated in the EU Waste Framework Directive 2008 (transposed into the Waste (England and Wales) Regulations 2011), documentary evidence that the management operations have been carried out shall be preserved for at least three years and must be supplied at the request of the competent authorities.

Divisions/Faculties may seek guidance on the development of local arrangements from Estate Management if required.

Failure to Comply

Responsibility for disposal of hazardous waste is a matter of legal compliance. Failure to comply with UK law will place Liverpool John Moores University at risk of prosecution.

Additionally, the person who has produced the hazardous waste is, by law, obliged to dispose of the waste. This role cannot legally be fulfilled by any person who did not produce the waste. Failure of an individual to dispose of hazardous waste responsibly could incur penalties upwards of £200,000.

It is illegal and therefore prohibited for LJMU staff to dispose of hazardous waste in a non-compliant manner.

This includes, but is not limited to, such activities as flushing away animal pathogens (including human waste), burning organic matter without the correct permits, leaving hazardous material or containers exposed indoors or outdoors, and emptying hazardous waste into any general or recycling bin / Eurocart.

If there is any uncertainty about whether a substance article or material is classified as hazardous waste, information may be available:

- On the product/packaging guidance
- From the manufacturer/supplier
- Line management

In the event that research and/or teaching activities could occasion the production of a waste with the potential to be hazardous, or of a nature not covered in this document, staff should

notify their line management in advance so that the correct additional processes can be put in place prior to the production of the waste.

If a member of staff or student discovers that a waste they consider to be hazardous in nature is being disposed of in a non-compliant and dangerous manner, they are advised to raise the issue with their immediate line manager or through the University's Whistleblowing Policy.

Preparation and Storage (prior to disposal)

Identification and Classification of Waste

Pursuant to Section 34(9) of the Environmental Protection Act 1990, there is a Duty of Care by the waste Producer or Holder to provide an accurate description of the waste to the next Holder/Waste Carrier/Consignee. The description must contain all the information that the Producer is reasonably in a position to provide to ensure the lawful and safe handling, transport, recovery or disposal by hazardous waste disposal service providers. Such information can be obtained by referencing:

- European Waste Catalogue (EWC) Codes
- Technical Guidance WM3: Waste Classification Guidance on the classification and assessment of waste.

The Producer should also consider whether the waste they are seeking to discard has any unusual or unique properties that they need to further describe so that subsequent Holders/Consignors/Waste Carriers/Consignees can handle it safely and correctly, examples include whether the:

- Waste needs a special container
- Needs particular treatment or handling, for example batteries or waste electrical and electronic equipment (WEEE)
- Waste can or cannot be mixed with other waste
- Could cause a problem during treatment or disposal (e.g. risk of explosion/fire, dusty, smelly or otherwise offensive waste)
- Has been pre-treated or had certain materials removed from it (e.g. packaging) to meet basic characterisation requirements of wastes destined for landfill or decontamination by others using processes such as autoclaving
- Displays a hazardous property (e.g. flammable) or presents a chemical hazard
- Has other issues (e.g. risk of spillage or leakage of liquids).

Decontamination, Disinfection and Sterilisation

Laboratory / Medical / Clinical Equipment and Larger Appliances Used in the Same

In instances where equipment and larger appliances have been used to store, process or handle hazardous materials, the producer must ensure that the items undergo an approved and recognised decontamination treatment prior to its disposal. At the point of transfer to a holder, the producer must provide the same with a duly completed 'Certificate of Decontamination and Cleaning', a model of which is shown in Appendix 3.

Laboratory / Medical / Clinical Consumables

Laboratory / medical / clinical consumables shall be classified and treated as having come into contact with hazardous materials. Accordingly, the producer must ensure that the items undergo an approved and recognised decontamination treatment prior to its disposal. This is sometimes referred to as sterilisation or autoclaving (guidance can be found in SCP6 and SCP15). The producer must keep individual records of every such processing detailing:

- The original properties of the hazardous waste
- The process used to render the hazardous waste inert/inactive/neutralised
- Evidence that the treatment was completed successfully
- Ensure that all such treated waste is contained within the appropriately coloured waste sack as detailed in 'Waste Sack Colour Coding' below
- Apply a means of identification to each waste sack listing its origin, weight, producer and certification that the waste is safe for the Holder to collect to assist with safe and compliant disposal processes.

All Faculties and Divisions that produce and consign hazardous waste must record all local arrangements within their relevant Schools and Departments on these processes, ensuring they are up to date. The records must include details relating to all decontamination, disinfection and sterilisation processes undertaken or commissioned, maintenance and validation of autoclave equipment, autoclaving/sterilisation processes and chemical disinfection, etc. The arrangements must be appropriately organised, secure and readily accessible in the event of an emergency and/or audit.

Storing Hazardous Waste

There are some extra statutory requirements associated with storing hazardous waste:

- Equipment, which has been in contact with hazardous chemicals and biological materials, must be treated before it can be stored for disposal. This includes decontamination, disinfection and sterilisation ('autoclaving') and will be completed by the producer prior to collection by a holder/carrier
- Laboratory/medical/clinical equipment and larger appliances used in the same will
 only be moved from their normal location for storage prior to collection by a carrier if
 a Certificate of Cleaning and Decontamination has been provided
- Liquid hazardous waste must be kept in a dedicated area with a barrier to stop any leaks from spreading

 Waterproof covers must be used outdoors to prevent rain from causing contaminated run-off. This includes ensuring that covers to fluorescent light and battery storage chests are on at all times.

Waste Sack Colour Coding

The following colour waste sacks must be used in order to prevent injury occurring from concealed sharps, and to ensure that hazardous and offensive waste may be readily identified:

Waste Type	Bag / Sack Type
Clinical / Infectious	Yellow with a rigid yellow bin
Autoclaved	Blue
Offensive	Yellow with black stripes
General	Translucent / clear printed with 'LJMU General Waste'
Recycling	Translucent green printed with 'LJMU Recycling'

Contractors' Waste

Contractors working on the University's premises or on behalf of Liverpool John Moores shall not place their waste in the University's waste facilities but should make arrangements for the safe and compliant disposal of wastes arising from their activities themselves as per the LJMU Working as a Contractor booklet.

Upon discovering contractor's waste within LJMU waste facilities report the incident to the appropriate Building Supervisor.

Duty of Care – Employment of Hazardous Waste Contractors

Finance and Resources

Finance and Resources will conduct a desk top Duty of Care audit on all categories of waste contractors commissioned by Estate Management on behalf of the University.

The audit will include obtaining a copy of the current waste carriers and waste management permits and competence certificates, as well as an annual check of the Environment Agency's Public Registers website as part of the standard financial solvency checks of University service providers.

Faculties / Schools and Divisions

Where a Faculty/School or Division commissions a waste contractor/processor to remove, treat and/or dispose of hazardous wastes on its behalf, the Faculty/School/ Division, as the producer, has to complete the Duty of Care.

The Duty of Care consists of taking all reasonable steps to ensure that when waste is transferred to another waste holder that the waste is managed correctly throughout its complete journey to disposal or recovery.

The Faculty / School / Division can do this by:

• Checking the next Waste Holder is authorised to take the waste.

An authorised person is one of the following:

- Someone who has a valid registration as a carrier, broker or dealer of waste
- A waste management operator who has an environmental permit or registered exemption to accept such waste

They should ask the person or business they are planning to transfer their waste to or who arranges the transfer for evidence of their authorisation, such as a copy of their permit or proof of their exemption registration.

They should also use the public register to check any evidence they provide. The register contains information on:

- Waste carrier, broker and dealer registrations
- Environmental permits for waste operations
- Waste exemptions

In England, registrations can be checked on the Environment Agency's <u>Public Register</u> or by calling 03708 506 506

- Asking the next waste holder where they are going to take the waste
- Carrying out more detailed checks if it is suspected that the waste is not being handled in line with the duty of care, e.g. requesting evidence that your waste has arrived at the intended destination and that it has been accurately described.

All records must be maintained for a minimum of 3 years.

Consignment Notes and Additional Paperwork

Consignment Notes

When hazardous waste is moved it must be accompanied by correctly completed paperwork called a Consignment Note. The note must be prepared before it is moved and is frequently provided by the Waste Carrier.

A Consignment Note is required for all transfers/movements of hazardous waste, including:

Collections from businesses by registered waste carriers

Movements from one premises to another within the same business

To be valid the consignment note must include all the information fields and be as near as possible to the format in the example note (Appendix 4).

Do not use any note if:

- Information fields are missing or have been altered to reduce/change what is required for example e-mail, phone or weight is missing
- Declarations are worded differently
- The format is different for example it does not have separate tables in Part B and E

If you have any concerns about the validity of a note telephone the Environment Agency on 03708 506 506.

When a collection takes place, the consignor is required to review and process the Consignment Note as follows:

- Part A checked and signed by the consignor
- Part B checked and signed by the consignor
- Part C checked and signed by the waste carrier
- Part D checked and signed by the consignor when satisfied that all details on the note are correct.

The Consignment Note is generally a multipart/page form comprising of three pages:

- The producer's/holder's/consignor's copy is handed to the person who completed and signed the waste transfer note. It should be filed in local records for three years to comply with the producer's legal duty
- The carrier's copy is retained by the waste carrier
- The consignee's copy is given to the receiver of the waste by the waste carrier

When producing an internal waste consignment note for the movement of hazardous wastes in between University sites for consolidation prior to collection for treatment/disposal the consignment note code number (XXXXXX/YYYYY) is generated using the following:

- XXXXXX = "JMU" followed by the last three digits from the building finance code
- YYYYY = sequential number starting from 00001 for the waste producing building.

Additional Paperwork

The following additional paperwork must also be retained and filed in the Faculty/Division record-keeping system:

- Carrier schedules (a copy of the collection schedules of the various Universityapproved waste contractors)
- Consignee Returns (the Consignee is the 'receiver' who receives the waste from the carrier; they send quarterly reports back to the producer detailing material received over the previous three months).

LJMU Hazardous and Offensive Waste Disposal Arrangements

A user-friendly A-Z Municipal Recycling and Waste Disposal Guide is being developed as a supporting tool to this Code of Practice, and for use by LJMU staff. Pending completion of the Guide, the information below describes the University's various waste disposal arrangements.

There are numerous approved waste carriers for collection of the different types of hazardous waste. Unless advised otherwise, Faculties / Divisions and their respective Departments / Schools must follow the instructions below. For most arrangements, you will be required to contact the Estate Management Helpdesk; for others you may contact the carrier directly. Please see below for the relevant processes.

Asbestos

The removal/disposal of asbestos and asbestos containing materials shall only be carried out with the express authorisation of the Estate Management. Copies of all asbestos consignment notes must be provided to Estate Management. At no time shall suspected or known asbestos be disturbed.

Please refer to SCP29 Asbestos (Policy and Management Plan) and contact the Estate Management Helpdesk on extension 5533.

Batteries

Battery recycling units can be found at most University buildings' Reception Desks. <u>These</u> <u>are for standard, non-rechargeable domestic batteries only</u>. Spent batteries deposited in the recycling units must be free of any packaging materials, plastic bags etc.

Care must be taken not to overfill battery recycling units. Each unit includes a maximum fill line. Where this is reached, removal and replacement of the unit must be requested. This is to ensure that manual handling operations for these units can be completed safely. Advice on guidance on storage and disposal of other types of batteries is available from the Estate Management Environment Team on 5731.

Waste Electrical and Electronic Equipment ('WEEE')

For IT equipment (PCs, Monitors, Laptops, Tablet computers):

- Complete an IT Equipment Disposal request via helpme.ljmu.ac.uk (Select Service Catalogue and search 'Disposal')
- You will need to supply the computer numbers of the equipment to be disposed of (from the blue Computer Number sticker on the equipment)
- IT Services will remove your unwanted equipment from their systems before forwarding the details to Estate Management to arrange the collection.

For other types of electrical appliances and electronic equipment (kettles, toasters, microwave cookers, coffee machines, mobile phones, chargers, cameras, etc.), disposal should be arranged by contacting the Estate Management Helpdesk on 5533.

Estate Management will contact the University's WEEE contractor (CDL Ltd.) on behalf of the producer and relay the information provided to them. The contractor will contact the nominated person (the Producer) by e-mail and/or telephone to arrange to collect the WEEE appliance(s) during the next available collection cycle (normally within two weeks). This service is free to use. Please note that the appliances must be kept in their normal location pending collection.

As the producer, you will be asked to provide:

- Full details of the item for disposal (type of appliance, serial number, approximate weight)
- Location from where the appliance can be collected
- Contact name and telephone number of a person who may oversee the collection of the items and complete the consignment form
- To affix a label to the device for disposal showing the Estate Management
 Maintenance Request number and contact details of the person who will be
 overseeing the collection by the waste carrier.

Other WEEE, Laboratory Equipment with Hazardous and / or Ozone-Depleting Substances

In addition to the requirements in 'Waste Electrical and Electronic Equipment' above, larger types of WEEE (such as freezers, refrigerators, incubators, machinery, etc.) and other electrical equipment used in a laboratory environment will require additional preparation or information to facilitate compliant disposal.

In instances where equipment has been used to store or process hazardous materials such as chemicals or biological materials, the equipment will require decontamination treatment prior to reuse/recycling.

The item(s) must not be moved from their normal environment until such decontamination and cleaning as may be required to render any hazardous residues etc. inert has been completed and a Certificate of Decontamination and Cleaning signed by a competent person produced.

Fluorescent Light Bulbs and Projector Lamps

Linear and compact fluorescent lamps and projector lamps must be deposited in the correct designated container located in each building's recycling and Waste Resource Management Area. Lighting tubes and projector bulbs should be free from packaging materials.

Ensure that the lighting tubes are stored securely inside the container, not protruding and that the lid is replaced and closed to prevent ingress of rainwater and damage of the lighting tubes. Failure to comply with the above could lead to refusal of the contractor to uplift the container and an abortive collection charge being applied by the contractor.

Disposal of Faculty / Divisional fluorescent / projector lamps can be arranged through the Estate Management Helpdesk on ext. 5533.

Xerox Multi-Function Device (MFD) Cartridges

Empty Xerox MFD cartridges should be returned to the LJMU Print and Post Unit via the internal mail reusing the packaging of the replacement cartridge. Xerox re-use/recycle them as part of the Print contract.

Ink jet and other printer cartridges outside of the Xerox contract can be disposed of via BCMY Ltd and their fundraising activity Recycle4Charity.

• Website: https://www.recycle4charity.co.uk/Home

• Telephone: 01273 400185

• Email: Info@recycle4charity.co.uk

Clinical and Healthcare Waste (solid and / or fluid)

Hazardous fluids and solids are the responsibility of the producer to dispose of safely and compliantly. The University has two approved Waste Carriers/Waste Treatment contractors who provide hazardous waste disposal services:

- Biffa Waste Services Ltd: Fluids and fluid containers
- SRCL Ltd: Solids (including clinical waste)

Chemicals

Every effort should be made to ensure that labels do not become detached or defaced as this could lead to a dangerous situation, additionally it is extremely expensive to dispose of unknown substances and this may cause additional charges to be made to the Producer of the same. The responsibility for identifying the contents/properties of unlabelled drums/canisters/containers etc. lies with the Faculty/School/Division/Service having custody of the same.

Waste substances must be segregated according to chemical compatibility and should be packaged in suitable, secure and chemically compatible containers. It must be correctly labelled as to the contents, hazards, originator of the waste and the date. Waste should be stored in a secure, fit for purpose area until collection is arranged. Further guidance on disposal can be found in Health. Health and Safety Code of Practice SCP6 Control of Substances Hazardous to Health.

Faculties/Schools/Divisions/Services should provide a suitable area for the storage of waste chemicals that are awaiting collection by the approved Chemical Waste Contractor. These stores should be secure, dry and well ventilated. Fire detection requirements should be identified by risk assessment. Appropriate hazard warning signs should be clearly displayed and emergency spill kits easily accessible.

Where large volumes of liquids/solvents are likely to be kept (>50 litres), drums should be stored on bunded pallets or trays to aid containment of any large spills or leaks. Containment should be designed to accommodate at least 110% of the stored volumes.

A responsible person should be identified to manage the area and a risk assessment of each waste storage area should be carried out. If appreciable volumes of flammable or explosive

substances are stored, the area should be classified according to the Dangerous substances and explosive atmospheres 2002 (DSEAR) regulations. (See SCP42 Dangerous Substances and Explosive Atmospheres). Waste stores should be included in the school's regular laboratory Health and Safety inspections.

It is the responsibility of the producer to dispose safely of any waste chemicals. If you require any assistance in identifying an authorised waste carrier, please contact the Estate Management Environment Team on 5731.

Herbicides and Pesticides

The use of Herbicides and Pesticides is subject to regular regulatory review that can result in the withdrawal of permits to both store and use certain types of the same. Accordingly, regular checks must be made to ensure that University buildings and grounds do not contain any quantities of unused/unwanted herbicides/pesticide.

If a container (or other packaging) containing these products is damaged, but the product is still approved for use, the owner of the same may be able to carefully transfer the product to the equipment used to apply it, leaving only the container to be disposed of.

Despite good management, some concentrates or ready-to-use pesticides may require adhock disposal. Unwanted concentrate must not be diluted and disposed of through LJMU internal drains or external surface water systems. Compliant disposal may be facilitated by:

Contacting the supplier to ascertain whether if they will take back any unwanted, unused product that is still packaged, labelled and of good quality.

Pesticide concentrates may present a significant risk to the environment or to humans. Unwanted concentrates and ready-to-use formulation must be stored in a suitable chemical store to make sure they are secure and that any spills will be contained.

It is the responsibility of the Producer to dispose safely of any waste chemicals. Assistance in identifying an authorised waste carrier may be obtained by contacting the Estate Management Environment Team on ext. 5731.

Waste Oils

All waste mineral oils are classed as hazardous waste including contaminated rags and other absorbent materials used to clean up spillages. These materials must be stored securely to prevent leaks into the environment.

All oil storage facilities should be sited on an impervious base within an oil-tight secondary containment system such as a bund or containment pallet. The bund walls should be constructed without a damp-proof course or drainage outlet from the bund itself.

As a minimum, the bund or containment pallet should be capable of containing 110% of the volume of the oil container.

Where more than one container is stored, the bund capacity should be at least 110% of the largest tank or 25% of the total storage capacity, whichever is the greater. Fill pipes, funnels,

draw pipes and sight gauges should be enclosed within the secondary containment system, and any tank vent pipe should be directed downwards into it.

Where oil is stored within a bunded area or a containment pallet, rainwater and oil can build up. This build-up reduces the storage capacity of the secondary containment and should be removed regularly by bailing from the using a manually operated pump. This residue is likely to be contaminated with oil and as such may be often cheaper in the long term to provide a roof for the storage facility to prevent the accumulation of rainwater.

Vegetable oil from catering activities must not be disposed of in the general/ municipal waste stream. Whilst the vegetable oils are not hazardous, they must be collected by a specialist contractor.

It is the responsibility of the producer to dispose safely of any waste oils. If you require any assistance in identifying an authorised waste carrier please contact the Estate Management Environment Team on 5731.

Paints and Solvents

Paints and solvents must be stored in approved containers and areas on drip trays or bunded pallets. Incompatible products (those that may cause hazardous reaction if they come into contact with each other) must not be stored together. Paint solvent and volatile organic compound containers must be kept closed and secure when being transported/not in use.

Smoking is prohibited in flammable liquid storage areas and also within all LJMU buildings. Flammable liquids are not to be stored near sources of ignition) sparks, electricity, flames or hot objects).

When containers are empty, they must be disposed of correctly by an appropriately licensed carrier. Product/material safety data sheets and COSHH risk assessments should be available for all dangerous products in case of spillage or misuse on site. All paints and solvent tins/containers should be clearly marked.

It is the responsibility of the producer to dispose safely of any waste paints/solvents. If you require any assistance in identifying an authorised waste carrier please contact the Estate Management Environment Team on 5731.

Radioactive Wastes

The University is registered for keeping and use, and authorised for accumulation and disposal of radioactive waste. The Radiation Protection Supervisors will send monthly lists of waste to be disposed of as liquid down the dedicated drains or as solid awaiting removal by a registered disposal contractor. The disposal of radioactive wastes should be in line with SCP 16 Ionising Radiation.

Containers Containing Trace Remnants of Hazardous Substances

Hazardous waste containers (i.e. containers which have held clinical and healthcare waste, or substances such as pesticides, solvents, chemicals, paints and oils), should be treated in

the same process as the waste itself – see the above Sections 'Preparation and Storage' and 'Clinical and Healthcare Waste'.

Gas Cylinders

Empty or unwanted gas cylinders must be returned to the supplier that they were obtained from by the Faculty / School / Division. This is important as often suppliers will charge rental on the cylinders and once they leave the Faculty / School they become more difficult to track down and return.

Advice and support is available from the Estate Management Environment Team (ext.5731) in the event that the Faculty / School / Division be unable to return the cylinder to the supplier.

Fire Extinguishers

Discharged or unwanted fire extinguishers should be notified to the Estate Management Helpdesk on 5533 to arrange collection and disposal or refill.

Laboratory Glass

Glass waste may arise from laboratories from a number of sources:

- Low thermal expansion borosilicate glass (e.g. Pyrex)
- Chemical/solvent bottles (e.g. Eurobottles, Winchesters)

Any glassware that is contaminated with hazardous materials, and which cannot reasonably be decontaminated, must be disposed of as Hazardous Laboratory Wastes.

Disposal of Laboratory Glassware

If laboratory glassware has been broken into small pieces (so as to constitute a sharps hazard) it should be disposed of by the Producer in a laboratory sharps bin.

Low thermal expansion borosilicate glass cannot be recycled and as such must not be placed into the same receptacles as Eurobottles / Winchesters and domestic grade glassware.

Glass bottles (including chemical and solvent bottles) may be returned to the supplier for reuse or recycling if the supplier offers this service. If this is the case then the Producer must follow the instructions provided for this service by the supplier.

Larger items of laboratory glassware (which do not constitute a sharps hazard) should have any metal, rubber or plastic fittings removed before being put carefully into one of the glass recycling bins located around the LJMU estate.

Offensive Waste Disposal Arrangements

Offensive waste must be clearly identified as described in the Section 'Identification and Classification of Waste' of this document and be labelled with the following information:

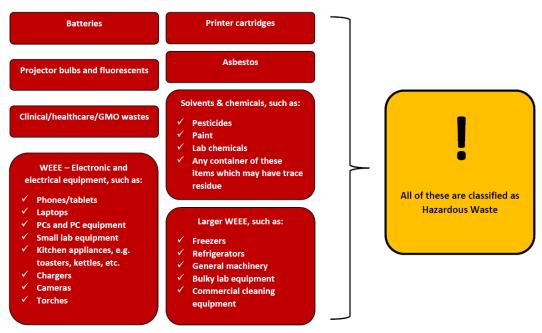
- A description of the waste
- Details of any treatment applied to the same by the Producer
- Formal confirmation that the waste has been rendered safe/inactive/inert and can be collected, transported and disposed.

Due to the restrictions referred to in the table in the Section 'Responsibilities', it is not permissible to place offensive waste into the municipal recycling or general waste streams. Accordingly, the producers of such waste must ensure that they have compliant arrangements in place to dispose of the same.

Appendix 1

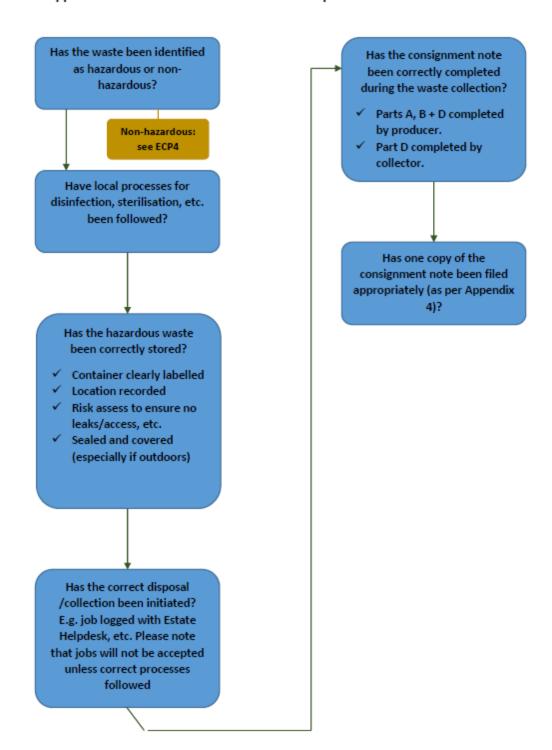
Identifying Hazardous Waste

Appendix 1: Identifying hazardous waste



Checklist for Hazardous Waste Disposal

Appendix 2: Checklist for hazardous waste disposal



Model Decontamination and Cleaning Certificate

Appendix 3: Model Decontamination and Cleaning Certificate

Name of Faculty/Division

DECLARATION AND RECORD OF DECONTAMINATION FOR ELECTRICAL AND NON ELECTRICAL EQUIPMENT SCHEDULED FOR DISPOSAL

Description of aguinm	ant/itam			
Description of equipment/item		-		
Manufacturer's name				
Serial numbers				
Model no.				
Estimated weight	Under 25Kg	Over 25Kg	Over 50Kg	Specialist movers
	Yes/No	Yes/No	Yes/No	Yes/No
Rough dimensions in c	m.	B 00 cm	W 00 cm	H 00 cm
Other information		Bulky item	Top heavy	COG off centre
		Yes/No	Yes/No	Yes/No
Electrical appliance		Yes/No	Mechanical only	Yes/No
Computer equipment		Yes/No	Used for radiological work at some point.	Yes/No
Decontamination meth	nods external	Detergents	Bleach	Disinfectants
	Date			
	Date			
	Date			
Electronic facsimile sig	natures			
Decontamination methods internal		Detergents	Bleach	Disinfectants
Date				
Date				
	Date			
Electronic facsimile sig	natures			
Other decontamination	n methods	Abrasive cream	"Decon" 90	70% Alcohol
Details of other metho	ds.	Date	Date	Date
		Other (1)	Other (2)	Other (3)
		Date	Date	Date
Electronic facsimile signatures				
Original owners Faculty and School				
Method of disposal. Removal by		Licenced Contractor		
Contractor's signatory				
Actual date of disposal				
Hand written signature of waste Producer authorising the disposal and removal of			Print Name >	
equipment from site.				

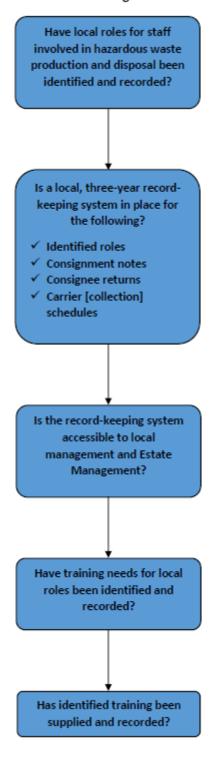
Example of a Completed Consignment Note

Appendix 4: Example of a completed consignment note

PART A No	tification De	tails						
1. Consignment note code: ABC123/AB001 2. The waste described below is to be removed from: (name, address, postcode, telephone, e-mail & fax) The Green Grocer, High Street, New Town, The Shire, XX12 3YY Tel 0123 456789, GG@hotmail.com 3. Premises Code (where applicable): ABC123			4. The waste will be taken to (name address and postcode): The Waste Treatment Plant, Low Street, Okl Town, The Shire YY12 4XX 5. The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail & fax):					
PART B De		V. (10.00)		2422380000		577.7337 rgs4-23		
3. WASTE DETAIL	S (where more than	one waste type is	collected a	II of the in	ocess giving rise to the formation given below r	must be completed for		
Description of Was	te	List of Wastes (EWC) code	(kg)	compo	emical / biological nents of the waste, th trations mg/kg or %	Physical Peir Form	Hazard code(s)	Container type, number & size
Part filled tins of glo	ss paint	20 01 27*	8 kg	ethyl m naptha	ityl ketone <1% ethyl ketoxime D4 dearomatised 10-30 D6 high flash <1% <1%	0% liquid	нз-в	3 x 10 litre tins
The information g	iven below is to b	e completed for	each EW	C identifie	ed .			
EWC code	(UN identifie	for Carriage cation number(s) I class(es), Pack			Special Handling re	equirements		
20 01 27*	1263, PAINT	1263, PAINT, Class 3:Flammable liquids, III			EMS F-E, S-E Emergency Action Code •3YE Hazard No. (ADR) 30 Tunnel Restriction Code (D/E)			
Carriers registratio	collected the consignation of a multi- prises part of a multi- e; (please PRINT) To e, address, postcont Plant, Low Sireet, 221 e.mail: waster in no J reason for e 3/X21234AB	tiple collection the cony Driver de, telephone, e-cold Town, The Signotmall.com	mail & fax) hire, YV12	ber and	precautionary measi the carrier has been I confirm that I have Regulation 12 of the 1. Consigner nar On behalf of fax):	advised of any speci- fulfilled my duty to ap Waste (England and me (please PRINT) : (name, address, p Grocer, High Street, N 1123 456789, GG@ho	is packaged and handling requipite waste in Wales) Regular Mr Eric Smith costcode, teleview Town. The stream, com	d labelled correctly and irements. ierarchy as required by itions 2011. hephone, e-mail &
PART E Consign	ie(s) Quant	tity of each EWC		EWC	cled all of the informati code accepted /	Waste Managem-		r each EWC)
received 20 01 27*	receiv	red (kg)	Described)	rejec		(R or D code)		
I received this wa Whicle registratic Where waste is n Certify that the was authorises the ms Where the consig	n no (or mode of tra ejected please provi te management lice	insport if not by re- ide details: nos / permit / auth 598PP/V002 iste described in B f a multiple collecti	orised exents at the addr	2/2012 T 7 WEE applion no(s ress given	ime: 17:00 i). at A4	Name: Peter H On behalf of (name The Waste	, address, post	

Checklist for Record Management of Hazardous Waste Disposal

Appendix 5: Checklist for record management of hazardous waste disposal



References

Appendix 6: References

Item	Internet address
The List of Wastes (England) Regulations 2005 (EWC) Codes	http://www.legislation.gov.uk/uksi/2005/895/contents
Technical Guidance WM3: Waste Classification – Guidance on the classification and assessment of waste.	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/427077/LIT_10121.pdf
Guidance and example documentation on www.gov.uk	https://www.gov.uk/managing-your-waste-an-overview/your-responsibilities
LJMU Policy Centre	https://policies.ljmu.ac.uk/UserHome/Policies/Default.aspx
Whistleblowing Policy	https://policies.ljmu.ac.uk/UserHome/Policies/PolicyDisplay.aspx?&id=215&l=1
UK Guidance on Hazardous Waste	https://www.gov.uk/dispose-hazardous-waste/overview
LJMU Recycling Web Pages	https://www2.ljmu.ac.uk/Sustainability/128228.htm
Sentencing Council: Environmental Offences – Definitive Guideline	https://www.sentencingcouncil.org.uk/wp- content/uploads/Final_Environmental_Offences_Definitive_Guideline_web1.pdf
SCP3 Safe Use of Plant and Equipment	https://policies.ljmu.ac.uk/UserHome/Policies/PolicyDisplay.aspx?&id=33&l=1
SCP6 Control of Substances Hazardous to Health	https://policies.ljmu.ac.uk/UserHome/Policies/PolicyDisplay.aspx?&id=236&l=1
SCP18 Risk Assessment	https://policies.ljmu.ac.uk/UserHome/Policies/PolicyDisplay.aspx?&id=24&l=1
SIC code	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/455263/SIC_codes_V2.pdf

END OF POLICY