



20/11/2018

Waste Management Strategy

Vision

The University is committed to the protection of the environment through the implementation of an effective waste management strategy.

The University is committed to achieving full legal compliance with all current waste management legislation. In doing so, the University commits to:

- Provide bins and containers across the University to ensure the effective segregation of waste and to maximize reuse and recycling opportunities.
- Develop targets for waste minimisation, recycling rates and diversion from landfill.
- Measure and monitor waste disposal rates, recycling rates and recovery rates, to identify where waste management improvements can be made.
- Raise awareness amongst all staff, students and other stakeholders of the importance of sustainable waste management through education initiatives and campaigns.
- Establish a Zero Waste to Landfill Management system within five years (July 2017).

Site Profile

City, University of London employs over 2,000 staff and provides education for approximately 19,000 students. The University's main campus is located at Northampton Square in Islington and there are an additional five key sites located across London.

Northampton Square – The Northampton Square campus comprises of a number of premises located around the north of Northampton Square in Islington and provides academic programmes mainly from three main schools: the School of Arts and Social Sciences, the School of Mathematics, Computer Sciences and Engineering, and the School of Health Sciences. The campus also contains the Students Union (SU) offices and bar, the University's main library, IT Services, and several cafes and catering outlets. The majority of the University staff, administrative and student support offices and departments are also located at this campus.

Waste management is overseen by the Property and Facilities department (PAF), and specifically by the Sustainability team and Facilities Management team. Waste is disposed of in general waste and DMR bins, as well as a few food bins that are strategically placed across campus in areas that serve a variety of purposes including lecture halls, kitchen areas,

restaurants and office space. All waste is collected in clear (DMR) or black (General waste) bags by Julius Rutherford, the cleaning contractors on site, before it is taken to the relevant waste storage area and disposed of in 240l bins. All 240l bins are collected on a weekly schedule by Veolia while other items such as the general waste compactor, engineering and biological waste are collected on request from the basement. Biological waste is produced by the School of Health Sciences and engineering waste (hazardous liquids, aggregate, metal, wood) by the School of Mathematics, Computer Science & Engineering.

Sir John Cass Business School – This site is located on Bunhill Row in the City of London. The site contains a single premise which includes lecture theatres, seminar rooms, computer laboratories and a specialist library. A canteen and café are also located at the site.

The Cass Business School is based in Moorgate and is a Higher Education facility for postgraduates, and at peak capacity has approximately 3,000 students enrolled each year. For a large proportion of these students English is not their first language and students are predominantly from China or Europe, this in some cases may create additional language barriers when trying to communicate the University's waste policy.

Cass Business School is ranked in the top 20 Business Schools in Europe, and as a result has a prestigious reputation. Historically Cass Business School and Northampton square have acted independently of each other, however, a centralisation programme that has been running for approximately three years has recently redistributed staff members of PAF to ensure that City is managed as a whole. Feedback obtained throughout the interview process indicates that this integration is still in its early stages.

Waste bins on site at Cass Business School are distributed across 8 floors, with bins available for the following waste streams; general waste, food waste, plastic cups, confidential waste, paper, bottles, cans and paper and cardboard. Across Cass Business School bins are provided by various suppliers (Glasdons, Bywaters, Veolia) and display different messages. All these bins are then taken to the ground floor facilities depot where the bags are sorted into the following 1100l bins; general waste, DMR, glass and food waste. All waste is collected by Veolia on a daily schedule, as shown in Figure 2. Further information relating to bin messaging and subsequent disposal routes can be found in section 7, table 3. All waste on site is managed by the cleaners Julius Rutherford and supervised by members of the PAF team at Cass, which is split into premises and services.

City Law School – The City Law School includes the former Inns of Court School of Law and is located at Gray's Inn near Holborn in the Camden district of London. The site comprises three buildings which are occupied by the University, including Gray's Inn Place, the Atkin Building and a premise on Princeton Street. City Law School provides education at all levels of legal qualification and the site includes a library, staff offices, a lecture theatre and several smaller seminar rooms. The City Law School is soon to move to new premises on Sebastian Street; part of the Northampton Square campus.

The University is open throughout the year, however its peak occupation occurs during term times, which run (based on 17/18 year) from; 25th September to 15th December, 15th January to 13th April, 14th May to 29th June. As a result, waste fluctuates throughout the year based on occupation levels, this also impacts the University's recycling rates.

Aims and Objectives

- Ensure that waste at the University is managed according to the Waste Hierarchy.
- Ensure legal compliance with the management of all waste across the University.
- Ensure best practice in waste management during construction activities and when the site is operational.
- Outline a programme of staff and student engagement.
- Establish effective monitoring and reporting principles.

These aims may be achieved by:

- Establishing clear recycling and waste prevention targets.
- Reporting regularly on progress against waste targets to the City, University of London Sustainability Committee and annually through the Annual Sustainability Report.
- Developing individual action plans to ensure that the strategy is communicated and enacted at a local level.
- Providing guidance and procedures on aspects of strategy implementation to all relevant staff and students.
- Working in partnership with the contracted Waste contractors to ensure optimum performance, through the use of key performance indicators (KPIs).
- Undertaking regular audits as part of the University's wider Environmental Management System (EMS) to ensure legal compliance and best practice is achieved and scheduling programmes of corrective action as necessary.

Waste Arisings Assessment

Table 1 below provides a summary of the University's waste streams according to the locations where they are generated. Managed waste streams on site include; general waste, dry mixed recycling (DMR), food waste, glass, bulky wastes, hazardous and Waste Electrical and Electric Equipment (WEEE). These waste streams are managed across several sites within the University's estate.

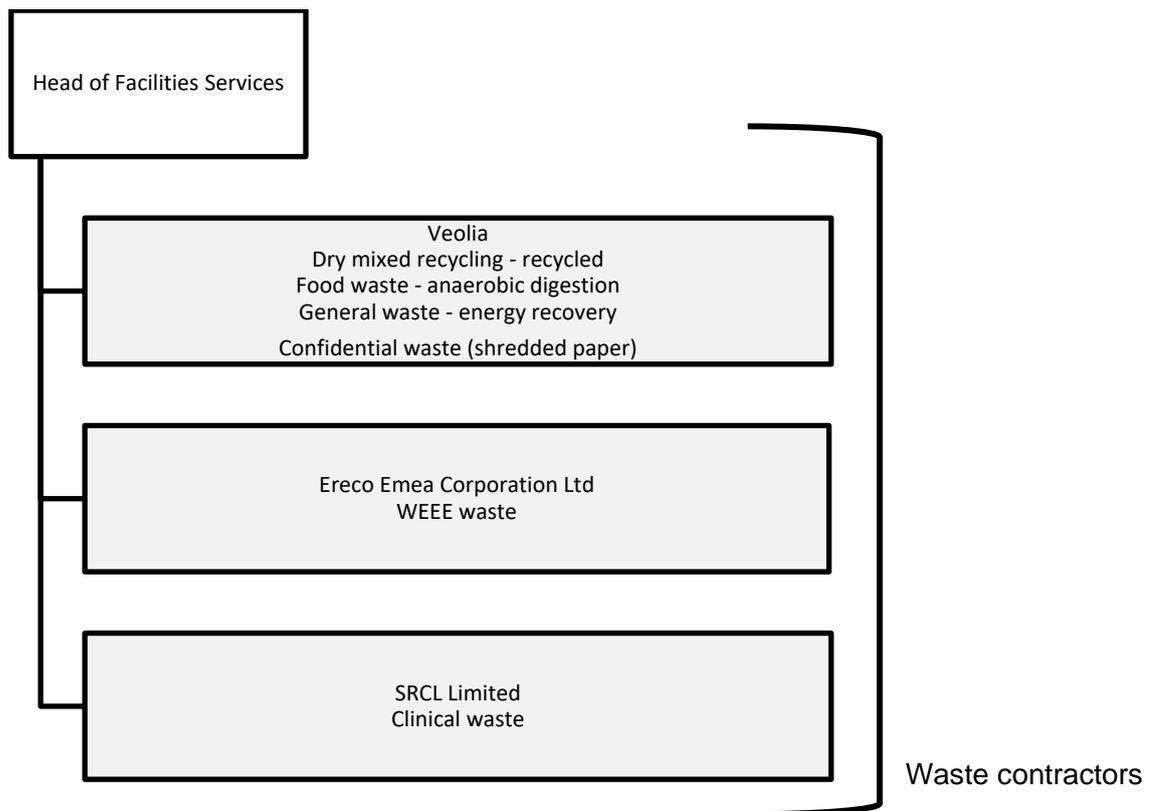
Table 1 – Waste Type Analysis per Location (coloured boxes indicate significant waste streams)

	Northampton Square: offices, teaching areas, communal areas	Northampton Square: School of Mathematics, Computer Sciences and Engineering	Northampton Square: School of Health Sciences	Students Union Bar and Catering Outlets	Sir John Cass Business School	City Law School
Waste Type						
General Waste						
Mixed Recyclables						
Segregated Paper						
Segregated C/board						
Confidential Paper						
White Paper						
Newspaper						
Books/Journals						
Segregated Glass						
Food Waste						
Composted Waste						
WEEE – IT						
WEEE - White Goods						
WEEE – Medical						
Acid Batteries						

Alkali Batteries						
Toners & Cartridges						
Fluorescent Tubes						
Sanitary Waste						
Clinical Waste						
Sharps Waste						
Biohazardous Waste						
Medication & Drugs						
Lab Chemicals						
Hazardous Solvents						
Acids and Alkalis						
Paints						
Waste Coolant						
Engine Oil/Diesel						
Waste Cooking Oil						
Furniture						
Scrap Metals						
Wood & Pallets						
Clays & Cement						
Textiles & Clothing						
Concrete & Rubble						
Asbestos						
Plasterboard						
Waste Spectacles						

* Mixed Recyclables –includes paper, cardboard, plastic bottles, aluminium tins and cans and glass.

Management and Infrastructure



Legislation and Compliance

Through this waste strategy and by working with our appointed waste contractor the University will ensure compliance with the following legislation as applicable

DIRECT

Legislation - ENVIRONMENTAL PROTECTION ACT 1990 PART II: THE DUTY OF CARE, AS AMENDED

Applicability – Section 34 of the Environmental Protection Act (EPA) 1990 imposes a 'duty of care' on anyone who produces, imports, carries, keeps, treats or disposes of 'controlled' wastes, or as a broker has control over such waste.

The four key requirements of this legislation are:

- Keep waste so as to prevent its escape into the environment;
- Transfer waste to a registered carrier;
- Keep records and transfer notes; and
- Check that others in the waste management chain abide by the Duty of Care (audit waste management facilities).

The University's general waste storage area is located in the basement roadway beneath the Northampton Square site. As this is a covered area, the risk of surface water run-off entering the surface water drains in the area is considered reduced. This area is secure and cannot

be accessed by the public, and waste is not subject to the elements so is unlikely to escape to the wider environment.

The general waste storage area is managed by the facilities manager and general services manager. The University uses Veolia for the collection and treatment of general waste, recyclable waste, hazardous waste and food waste. Other waste streams on-site include WEEE (removed by Eresco Emea Corporation Ltd) and clinical waste (removed by SRCL Limited).

Internal waste audits are completed by the sustainability team, who have staff trained as internal auditors to undertake audits of the EMS system. Waste audits are completed on a monthly basis and include auditing of documentation and waste storage areas.

Legislation - CLEAN NEIGHBOURHOODS AND ENVIRONMENT ACT 2005

Applicability - This legislation can apply to any person or business and sets out controls and penalties for environmental crimes such as fly-tipping.

City University should ensure that wastes and other materials are stored securely to prevent releases.

This Act includes powers against fly tipping. The site has reportedly not been subject to fly tipping to date. However, the university should ensure adequate measures are in place to prevent fly tipping on its premises.

Legislation - HAZARDOUS WASTE (ENGLAND AND WALES) REGULATIONS 2005, AS AMENDED

Applicability – These regulations outline controls in place for those producing, transporting and disposing of hazardous waste including tracking of the movement of hazardous waste.

Hazardous waste streams are generated on site from infrequent activities on the central site, and primarily the engineering and nursing departments.

Hazardous wastes generated include:

- contaminated water and residue from flushing pipework
- asbestos clearance (where required)
- silica and oil contaminated waste (engineering department)
- Waste oil
- clinical waste (nursing department)
- WEEE – including fluorescent tubes and computers

Hazardous waste is stored in covered skips and waste oil is stored within 205 litre steel drums on banded pallets. All waste is stored in covered areas, therefore the risk of contaminated surface water run-off entering the surface water drains located in these areas is considered reduced.

Where construction/refurbishment works are being undertaken, the contractors are responsible for removing their own waste from site. Contractors are also responsible for commissioning and arranging for the removal of their own skips as part of their contract with the University. Larger contractors are given a designated compound for waste storage, and smaller contractors are expected to remove waste from site. The internal City University audits ensure that no potentially hazardous waste is disposed of in City University skips.

Legislation - WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE) REGULATIONS 2006, AS AMENDED

Applicability – These Regulations set out a regime for recycling electronic waste in the UK. All producers of electrical and electronic equipment (EEE) are responsible for financing its collection, treatment, recovery and environmentally sound disposal.

WEEE generated on-site predominately comprises IT equipment and electrical equipment used on certain research projects. WEEE is removed on an ad hoc basis by Eresco. The amount of WEEE generated is project dependent; equipment is often replaced in batches. The site should however be aware that WEEE should not be stored on site for longer than 12 months before being removed by a contractor.

Legislation - WASTE (ENGLAND AND WALES) REGULATIONS 2011

Applicability - These regulations require the consideration of the waste hierarchy in decisions about waste management; introduce a new standard consignment note; make amendments to the content of transfer notes and consignment notes; introduce new conditions regarding hazardous waste mixing and the waste hierarchy into environmental permits; and provide for waste prevention programmes and national waste management plans.

Waste transfer notes or 'alternative written documentation' must cover all movements of non-hazardous waste. Documents must provide all information required by these regulations, including the carrier's licence number, the European Waste Catalogue entry for the waste(s) and signatures from the producer and carrier.

The enforcement of the waste hierarchy as outlined in this legislation came into force on the 28th September 2011. Sites now must be able to demonstrate that they are considering the waste hierarchy in the production and treatment of any waste they produce. This involves reducing, reusing and recycling as priorities with recovery and finally landfill as the final option.

INDIRECT

Legislation - LANDFILL: WASTE ACCEPTANCE CRITERIA

Applicability - European Council Decision 2003/33/EC sets out Waste Acceptance procedures, waste acceptance criteria (WAC) and sampling and testing methods for wastes being sent to landfill.

All types of waste going to landfill must be characterised. The basic characterisation of each type of waste involves gathering all necessary information for the safe disposal of the waste in the long term, and includes:

- Source and origin of the waste
- Information on the process producing the waste
- Description of the waste treatment applied or why treatment is not considered necessary
- Data on the composition of the waste and leaching behavior, where relevant
- Appearance of the waste including smell, colour, physical form
- EWC
- Relevant hazard properties of hazardous wastes
- Information to prove that the waste is not a banned waste

- The landfill class at which the waste may be accepted
- Any additional precautions to be taken at the landfill
- Check if the waste can be recycled or recovered

City University do not dispose of waste to landfill under their existing waste contractor with Veolia. However, the University should remain aware of these regulations should circumstances change and waste is required to be diverted to landfill.

Legislation -RADIOACTIVE CONTAMINATED LAND (MODIFICATION OF ENACTMENTS) (ENGLAND) REGULATIONS 2006, AS AMENDED

Applicability - These Regulations make provision for Part 2A of the Environmental Protection Act 1990 to have effect with modifications for the purpose of the identification and remediation of radioactive contaminated land other than in circumstances where the operator of a nuclear installation is liable under the Nuclear Installations Act 1965 (c.57), or in related circumstances.

The site have previously held a radioactive substances permit for use of radioactive sources on site. These have since all been removed and the permit has been surrendered. However, this legislation would hold the site liable for any radioactive contamination that occurred on site during their occupancy. At present the only radioactive substances onsite are enclosed within the X-ray machines which are checked by the HPA for which no permits are required.

Contamination is unlikely, given that only minor use of radioactive substances within enclosed X-ray machines is present onsite and the site were previously obligated under the terms of their radioactive substances authorisation or permit at the time, which will have minimised the risk of any contamination. However, this legislation is included for reference for the University.

Legislation - PRODUCER RESPONSIBILITY OBLIGATIONS (PACKAGING WASTE) REGULATIONS 2007, AS AMENDED

Applicability - This legislation makes companies dealing with packaging financially responsible for recycling or recovering a proportion of packaging waste arising in the UK.

These regulations implement the Packaging and Packaging Waste Directive ([94/62/EC](#)).

The requirements of this legislation state that companies who in the last financial year had a turnover of more than £2 million and in the previous year handled more than 50 tonnes of packaging or packaging materials must register with the regulator and meet recovery and recycling targets.

City University use small amounts of packaging and packaging materials, but do not meet the criteria outlined above (meaning they are not obligated under these regulations). However, Sodexo Holdings Ltd and Lexington Catering operate on the site. It is understood that Lexington Catering solely operate in the Cass Building School building.

As a large catering contractor, it likely that Sodexo will obligated under these regulations. Compliance certificate (Ecosurety Packaging Producer Number NWD109143 Membership ID 1827 dated 16 May 2016) for Sodexo Holdings Ltd was requested and reviewed, which indicate that they were compliant with this legislation.

Legislation - WASTE BATTERIES AND ACCUMULATORS REGULATIONS 2009, AS AMENDED

Applicability - These Regulations implement the Batteries Directive (2006/66/EC) alongside the Batteries and Accumulators (Placing on the Market) Regulations 2008. The Regulations apply to all batteries and accumulators except those used in certain defence equipment and equipment designed to be sent into space.

City University are a downstream user of batteries. Batteries on site are collected for recycling, and removed by a by a licenced waste contractor from the site. Battery collection facilities are located throughout the University campus.

Legislation - CONTROLLED WASTE (ENGLAND AND WALES) REGULATIONS 2012

Applicability - These regulations define controlled waste for the purposes of the Environmental Protection Act 1990, as amended.

Controlled waste is waste that is classified as either a household, industrial or commercial waste and waste that meets the definition in the Waste Framework Directive (2008/98/EC).

The Controlled Waste Regulations 2011 alter the way in which waste from universities is classified. These regulations require universities to pay for waste disposal as opposed to receiving free disposal paid for by Local Authorities, for any wastes collected from their premises as of 1st April 2012.

City University are currently under contract with Veolia (a private contractor) for waste collection and disposal, and as such are not directly impacted by this legislation.

Legislation - CONTROL OF WASTE (DEALING WITH SEIZED PROPERTY) (ENGLAND AND WALES) REGULATIONS 2015

Applicability - These regulations extend vehicle seizure powers of the Environment Agency, Natural Resources Wales and Waste Collection Authorities.

City University do not undertake any waste management activities offsite. All waste management activities are undertaken by an approved subcontractor. The company should be aware that their property may be seized if they are convicted of any waste management offences.

Waste Prevention and Minimisation – Overview and potential application of concepts and principles

The University procurement department will look to minimise waste by judicious purchasing of equipment, with a view to reducing the amount of packaging or other controllable items. Furthermore, the University will look to reuse items such as furniture, office equipment and computers where possible.

The University will continue to operate a comingled recycling system with the following materials being recyclable in the dry mixed recycling bins:

	YES please	NO thanks
Paper and card	<ul style="list-style-type: none"> • White & coloured paper • Envelopes • Newspapers & magazines • Junk mail • Cardboard (brown & white) • Greeting cards • Post-it notes • Booklets/manuals/telephone books 	<ul style="list-style-type: none"> • Shredded paper • Paper towels, napkins • Tissues • Juice and milk cartons
Metal tins & cans	<ul style="list-style-type: none"> • Aluminium cans • Metal tins & cans (rinsed clean) • Foil containers (e.g. food trays, rinsed of all food) 	<ul style="list-style-type: none"> • Aerosol cans • Jar lids • Tin foil sheets
Glass	<ul style="list-style-type: none"> • Bottles (lids removed) • Jars (lids removed) 	<ul style="list-style-type: none"> • Broken glass (to be collected directly)
Plastic	<ul style="list-style-type: none"> • Plastic bottles (lids ok, but must be removed) • Plastic containers including food packaging (rinsed completely) 	<ul style="list-style-type: none"> • Plastic bags • Coffee cups • Any packaging with food still in it • Cellophane (crisp bags, granola bar and candy wrappers)

The University will continue to collect food waste separately in catering outlets and all staff kitchens. This includes cooked and uncooked food, tea and coffee grounds, and biodegradable and compostable packaging.

The University will continue to operate the following additional recycling streams:

- Batteries
- Clothes
- Printer and toner cartridges
- Writing instruments and mobile phones

The University will work closely with its waste contractor, to identify the best methods to increase recycling rates. This may include the rebranding of existing bins to ensure a consistent approach to signage and guidance, and changing the communications to a “recycling bin first” message.

Measuring, Monitoring and Reporting

The University will, where possible, accurately measure and monitor its waste arisings and performance. The co-operation of all waste contractors is key to the success of this monitoring and, as such, KPIs will be placed on waste contractors to ensure this data is collected. This information should be provided to the University in an electronic format and be provided at least monthly.

Basic requirements of the monitoring reports should include:

- A breakdown of the materials collected
- Accurate weights on the total quantities of all waste being collected
- Accurate weights for all materials recovered, recycled, disposed to landfill etc
- Recovery rates of materials recovered, for example through Energy from Waste
- Recycling rates of materials recycled, for example through a Materials Recovery Facility MRF or through composting
- Disposal to landfill rates of all materials disposed to landfill.

Implementation Plan and Delivery Schedule

Short term (Year 1)

The focus will be on:

- Communicating the 2018 waste audit results
- Considering if a “recycling bin first” message would be an effective way to increase recycling rates
- Managing the basement roadway to ensure all WEEE waste is correctly stored
- Providing additional bins next to the Engineering Department skip for staff to separate materials
- Providing signage for the Engineering Department skip to specify bulky waste only
- Developing communications for a focus on reducing single-use coffee cups

Medium term (Years 2 and 3)

The focus will be on:

- Unifying the bins across all buildings and sites
- Unifying the messaging and signage across all buildings and sites
- Providing refresher training for contractors including cleaning and catering staff

Long term (Years 4 and 5)

The focus will be on:

- Formulating a process for furniture re-use