

# Environmental Management System

## 8.1.5 Chemical Waste Store User Procedure

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<b>DO NOT PRINT THIS PROCEDURE UNLESS NECESSARY</b>	



## 8.1.5 Chemical Waste Store User Procedure

### 1 Purpose

To define Swansea University's legal obligations and procedures associated with the storage, collection and disposal of used chemicals, solvents and other hazardous chemical substances. This procedure applies to waste chemicals, solvents and other hazardous chemical substances generated by the University.

### 2 Responsibilities

All staff	Ensure all hazardous chemical waste is packaged, labelled and disposed of correctly.
Waste & Recycling Officer	Provide support to ensure that all depts. take waste chemicals, solvents and other hazardous substances to the relevant chemical waste store;  And arrange the subsequent packing and disposal of the chemicals and ensure legal compliance and compliance with this procedure.
Chemcycle & Waste care	Provide a competent chemist to pack chemicals, and following this, the collection and transportation of chemical waste for disposal.  Ensure consignment notes are completed, signed and sent to the Waste & Recycling Officer.
Mitie (main waste contractor)	Provide a competent chemist to pack chemicals, and following this, the collection and transportation of chemical waste for disposal.  Ensure consignment notes are completed, signed and sent to Waste & Recycling Officer.

### 3 Legal Duty of Care and Responsibility

To ensure that the University complies with its Duty of Care, as set out in Section 34 of the Environment Protection Act 1990, the University must ensure that all waste is stored in such a way as to prevent escape or leakage whilst on site or in storage.

- Waste is only kept, treated, deposited or disposed of in accordance with a waste management licence or other authorisation
- Waste does not escape from the control of the holder

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- Waste is only transferred to authorised persons such as registered waste carriers or licensed disposal operations permitted to accept that type of waste
- All transfers / movements of the waste are accompanied by an adequate written description of the waste which will allow waste to be identified and subsequently handled correctly

The University must act to keep stored waste safe against:

- corrosion or wear of waste containers;
- accidental spilling or leaking or inadvertent leaching from waste unprotected from rainfall;
- accident or weather breaking contained waste open and allowing it to escape;
- waste blowing away or falling while stored or transported; and
- scavenging of waste by vandals, thieves, children, trespassers or animals

This Duty of Care begins with the person/s who produced the waste and it cannot be delegated to others. This duty is legally enforceable and breaches can lead to criminal prosecution of individuals and the University. As a result, the University (its staff and students) must make every effort to categorise, segregate and contain waste according to standards imposed by current legislation.

Prior to collection chemical wastes must be segregated and stored in accordance with compatibility in the University's Chemical stores in order to minimise risk and to prevent chemical reactions. Further guidance on chemical waste classification and storage is provided by WMGN20 Chemical Waste Classification and Storage Guidance and the UK Government's "Technical Guidance WM3: Waste Classification - Guidance on the classification and assessment of waste".

## 4 Process

### 4.1 Key Activities

Sustainability team:

- Appointing and managing the licensed Waste Disposal Contractor(s).
- Co-ordinating the collection and subsequent disposal of chemical waste.
- Carrying out Duty of Care checks.
- Managing chemical waste documentation.
- Notification and registration to the relevant authorities.
- Provides the appropriate EWC for disposal (where applicable)

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- Ownership of the Grove Chemical Waste Store and responsible for the approvals process for the disposal of chemical waste to the Bay Chemical Waste Store

### PSUs/Colleges:

- Must ensure they have a system in place for **Chemical Risk Assessment**<sup>1</sup> of hazardous substances and that assessments identify the correct means of disposal.
- Must ensure that chemicals are stored in suitable containers and are correctly labelled for collection.
- Take chemical waste to the appropriate chemical waste store for disposal (NB except high risk chemicals – covered in point 2)
- Must send correctly completed chemical waste disposal request forms to [estates-waste@swansea.ac.uk](mailto:estates-waste@swansea.ac.uk) (see “Section Chemical Waste Approvals” and have had approval granted prior to taking chemical waste to the storage area. A paper copy of the approved form should be provided when taking the chemical waste to the store.

### College of Engineering;

- Ownership of the Bay Chemical Waste Store
- Service yard staff are responsible for opening and visually assessing the reliability of waste chemicals containers and the integrity of red bags brought to the Bay Campus Chemical Waste Store before the waste consignment can be placed into the store<sup>2</sup>.

## 4.2 Disposal Instructions

A quick reference step by step guide is provided below on the procedure required to dispose of chemical waste via the University’s Chemical Waste Store;

1. Identify each waste item primary Hazardous Property
2. Correctly complete the Chemical Waste Disposal Form
3. Email form to [estates-waste@swansea.ac.uk](mailto:estates-waste@swansea.ac.uk) for assessment and approval
4. Ensure waste is securely, packaged and labelled
5. Wait for approval
6. Transportation of waste to store
  - For Bay Campus – bring out to store wearing PPE
  - For Singleton Campus – bring to store on allotted open days, wearing PPE

A paper copy of the complete Chemical Waste Disposal Form **must** be brought with the waste out to the store.

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<sup>1</sup> See local Health & Safety Lead for further information

<sup>2</sup> See Appendix B for **Chemical Waste Store Safety Check List**

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The University's appointed chemical waste contractor's chemist will identify and apply the correct European Waste Code (EWC) to the wastes prior the removal of the consignment from site.

### **4.2.1 Step 1 - Identify the each waste item primary Hazardous Property**

Further information is provided in WMGN20. If there are any queries contact the Sustainability team for further support.

### **4.2.2 Step 2 – Completion of the Chemical Waste Form**

Any chemical waste that needs to be disposed must be itemised on the [Chemical Waste Disposal Form](#)<sup>3</sup>

REACH-compliant Safety data sheets (SDS) provide information relating to the Hazardous Property (HP) of a substance and outline the recommended handling, disposal and storage measures. This information must be captured on the Chemical Waste Disposal Form.

Further detailed guidance on hazardous waste classification and threshold limits for the different hazard classifications can be found within 's Technical Guidance WM3: Waste Classification and the University's WMGN20 Chemical Waste Classification and Storage Guidance. For further support please contact [estates-waste@swansea.ac.uk](mailto:estates-waste@swansea.ac.uk)

### **4.2.3 Step 3 - Email form for assessment and approval**

The completed form should be emailed to [estates-waste@swansea.ac.uk](mailto:estates-waste@swansea.ac.uk) for assessment and approval by the Sustainability team. There are mandatory fields highlighted on the form, failure to accurately complete these fields will lead to delays in gaining approval for disposal. The Sustainability team may request further information to support the assessment. The Sustainability Team will review each consignment to ensure all chemical wastes listed are compatible to be accepted into the store.

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<sup>3</sup> Found at the staff pages from <https://www.swansea.ac.uk/sustainability/sustainability-minimal-waste/>

## 4.2.4 Step 4 - Ensure waste is securely and appropriate packaged

All wastes brought to the store **must** be clearly labelled with the Hazardous Property (HP) identified. **No items** will be accepted into the store without a completed University [Chemical Waste Label](#)<sup>4</sup>


SWANSEA UNIVERSITY CHEMICAL WASTE	
College/PSU	Contact name
Building	Date
Substance/ Contents	<b>Hazards:</b>
	
Lab/ room number	ID Quartz

Figure 1 – Example of the Chemical Waste Label

### 4.2.4.1 4.a Containment of liquid wastes

Winchesters must be suitable for the type of waste, therefore the following guidelines should be followed:

- Glass Winchesters: may be used for most chemicals, but not hydrofluoric acid waste
- Plastic Winchesters: suitable for acids and alkalis. However do use for aggressive solvents, or mixtures containing aggressive solvents,

Containers/bottles designed for solids **must not** be used for liquids wastes.

It is the responsibility of the waste producer to check the condition of all Winchesters and containers prior to disposal. Colleges/PSUs/Research groups are required to source their own bottle or Winchesters for waste disposal.

Winchesters must not be overfilled. They should be **filled only** to the shoulder and caps should be secure, with no holes. Winchesters containing a highly or extremely flammable liquid (HP3) must not be more than 3/4 full. Failure to adhere to this requirements will result in the Winchesters not being accepted at the store.

Supplier guidance with respect to suitable containment and packaging to be used when appropriate as outlined within SDS.

<sup>4</sup> Found at <https://www.swansea.ac.uk/sustainability/sustainability-minimal-waste/>



Figure 2 – Maximum fill height of a Winchester and the consequences of overfilling and incorrect use

#### 4.2.4.2 4.b Solid waste (other than red bag)

All solid chemical waste e.g. powders, must be appropriately, and securely packaged in accordance with SDS and user guidelines. This is to ensure safe transportation to the chemical waste store, and during transport for disposal.

#### 4.2.4.3 4.c Chemically Contaminated Solid Waste Red Bags

See [WMGN21 Chemically Contaminated Laboratory Solids](#) for further guidance. All red bags should contain chemically contaminated solids such as PPE and blue paper towels **only**. No sharps or other items<sup>5</sup> likely to compromise the integrity of the bag should be placed into the red bag. Bags must be integrally sound, with no rips, when brought to the store. If necessary, double bag the red bags to prevent waste escaping. Each bag must have a completed Chemical Waste Label.



Figure 3 – Example of acceptable red bag (prior to label addition)

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<sup>5</sup> See WMGN22 and WMGN23

### 4.2.5 Step 5 – Transfer to the Chemical Waste Store

Any chemicals with the following **primary** Hazardous Property must be directly collected from laboratories;

- HP-1 (Explosive) e.g. Picric Acid
- HP-6 (Toxic, in particular toxic on inhalation) e.g. Hydrofluoric Acid

However, each consignment will be review by the Sustainability Team on a case-by-case basis dependent on concentration.

There are two chemical waste stores located on University premises, the locations of which are shown in Appendix A.

- The **Singleton Campus Grove Chemical Waste Store** is located between Grove (Building 12) and Glyn Dwr (Building 11.1). The Store is opened by the Waste & Recycling Officer weekly, every Thursday 10am until 10.30 **by appointment**.

All visitors, tenants', contractors utilising the stores (without Sustainability accompaniment) will need to undertake the Chemical Store induction prior to use.

- The **Bay Campus Chemical Waste Store** is located in the Engineering Service Yard. The Store is opened by the Waste & Recycling Officer weekly, every Tuesday 11am until 11.30am and Friday 12pm until 12.30pm **by appointment**.

Please see Appendix A for mapped locations of the Chemical Waste Stores.

To gain access to both campuses stores, a Chemical Waste Disposal Form and corresponding MSDS **must** be sent to [Estates-Waste@swansea.ac.uk](mailto:Estates-Waste@swansea.ac.uk) for approval before a timeslot can be provided for the chemical waste can be taken to the store.

### 4.2.6 Chemical waste transport requirements

Individuals bringing waste to the Singleton and Bay Chemical Waste Stores **must** wear appropriate PPE including a lab coat, gloves, closed shoes.

**All waste items must be transported in a safe and secure manner, in a winchester carrier, or bunded trolley.**

If you do not have access to a Winchester carrier, or bunded trolley one can be booked out from the Chemicals Waste Store on each campus when requesting a disposal slot.



A paper copy of the Chemical Waste Disposal Form must be brought with the consignment.

### 5 Processing & Collection of Wastes for Offsite Disposal

The University chemical waste is collected by a registered hazardous waste contractor, which hold all necessary permits and licences with both Natural Resources Wales (NRW) and the Environment Agency (EA).

The University waste is taken to a registered hazardous waste transfer station before transportation to specialised facilities, which neutralise, incinerate, or prepare the chemical waste for reuse in industry.

### 6 Disposal Cost

Charges apply for the disposal of chemical waste to University tenants. Tenants who wish to dispose of chemical waste must fill out the [Chemical Waste Disposal Form](#) and email [estates-waste@swansea.ac.uk](mailto:estates-waste@swansea.ac.uk) to discuss arrangements and indicative costs.

Colleges and PSUs requiring the mass disposal (i.e. laboratory clear-out) of chemicals, including direct collect for high volumes of HP1 and HP6 chemicals, will be required to supply a cost code for services.

For further guidance please contact [Estates-Waste@Swansea.ac.uk](mailto:Estates-Waste@Swansea.ac.uk)

### 7 Effects and Actions on Non Conformance

Failure to comply with this procedure may result in:

- Non-conformance with the requirements of EcoCampus and the ISO 14001:2015 standard.

Departure from this procedure is addressed in the procedure **10.1 Nonconformity and Corrective Action**

### 8 Version Control

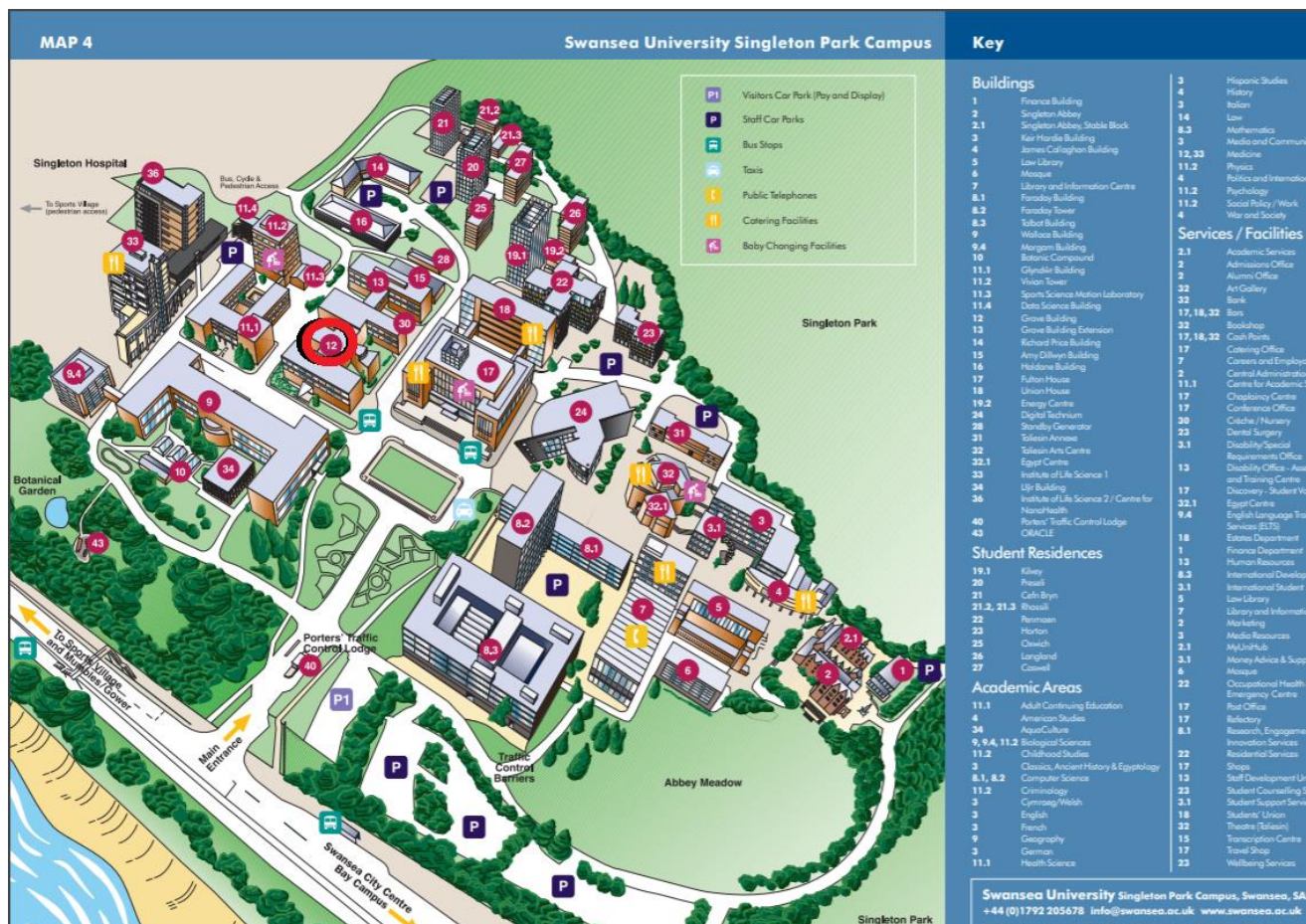
Date	Version	Update
XX/XX/XX	1	Original document
XX/XX/XX	2	- Updated template - Reviewed, updated and expanded information

## Environmental Management System – Documented Information

26.01.2021	3	- Various hyperlink updates and insert to changes in store opening times
04.08.2023	4	- Veolia is no longer the primary contractor, Mitie is now the service provider - Opening times updated - Further detail added regarding transportation, creation of 4.2.6

## Appendix A - Chemical Waste Store Location Map

Singleton Campus Grove Chemical Waste Store is located between Grove (Building 12) and Glyn Dwr (Building 11.1)



### 8.1 Bay Campus

Engineering Yard Chemical Waste Store; Location 3.1 in the Engineering Service Yard

# Environmental Management System – Documented Information



## 9 Appendix B

### Bay Campus Engineering Yard Office Chemical Waste Store Safety Check List

Check List	Tick
Consignee name Lab/Room Number Date	
Are all chemicals labelled?	
Are all hazardous identified?	
Are all winchers and containers integrally sound? (visual check)	
Are all Winchesters appropriately filled? (only to the base of the neck)	
All red bags are labelled?	
All red bags are integrally sound? (visual check)	
The Service Yard Officer has signed initialled and dated all chemical waste labels before accepting waste into the store?	