

Environmental Management System 8.1.5 Chemical Waste Store User Procedure

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DO NOT PRINT THIS PROCEDURE UNLESS NECESSARY	



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 relevant staff	Ensure all hazardous chemical waste is packaged, labelled and disposed of correctly as per the steps in this procedure.
Sustainability Team	<p>Provide support to ensure that all departments take waste chemicals, solvents and other hazardous substances to the relevant chemical waste store.</p> <p>Arrange the subsequent packing and disposal of the chemicals and ensure legal compliance and compliance with this procedure.</p> <p>Additional responsibilities include:</p> <ul style="list-style-type: none">• Carrying out Duty of Care checks.• Notification and registration to the relevant authorities.• Provides the appropriate EWC for disposal (where applicable)
Chemcycle & Waste care	<p>Provide a competent chemist to pack chemicals, and following this, the collection and transportation of chemical waste for disposal.</p> <p>Ensure consignment notes are completed, signed and sent to the Sustainability Team.</p>
Mitie (main waste contractor)	<p>Provide a competent chemist to pack chemicals, and following this, the collection and transportation of chemical waste for disposal.</p> <p>Ensure consignment notes are completed, signed and sent to Sustainability Team.</p>

3 Legal Duty of Care and Responsibility

To ensure the that the University complies with its Duty of Care, as set out in Section 34 of the Environment Protection Act 1990 part II, 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, or cause environmental pollution or harm.
- 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, 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.
- 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.
- Managing chemical waste documentation.
- Responsible for the approvals process for the disposal of chemical waste to the Chemical Waste Stores, and opening of the stores at the times below:

Bay Campus (Service yard): Every Wednesday, 11am

Singleton Campus (Grove): Every Thursday, 10am

Faculties:

- Must ensure they have a system in place for [Chemical Risk Assessment](#)¹ 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 4.2.5](#))
- Must send correctly completed chemical waste disposal request forms to estates-waste@swansea.ac.uk (see “Section Chemical Waste Approvals” and have had approval granted prior to taking chemical waste to the storage area.

4.2 Disposal Instructions

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

1. Identify each waste item’s primary Hazardous Property
2. Correctly complete the [Chemical Waste Disposal Form](#)
3. Email form to estates-waste@swansea.ac.uk for assessment and approval
4. Once approved, ensure waste is securely, packaged and labelled
5. Transportation of waste to store in appropriate containment **with a paper copy of the complete Chemical Waste Disposal Form.**
 - For Bay Campus – bring out to the service yard store wearing PPE.
 - For Singleton Campus – bring out to the Grove waste store wearing PPE.

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 waste from site.

4.2.1 Step 1 - Identify the waste item’s primary Hazardous Property

Information is provided in [WMGN20](#). Further guidance on hazardous waste classification and threshold limits for the different hazard classifications can be found within [Appendix 2](#), and 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

4.2.2 Step 2 – Completion of the Chemical Waste Form

Any chemical waste that needs to be disposed of must be itemised on the [Chemical Waste Disposal Form](#)², with links to the REACH-compliant Safety Data Sheets (SDS) for each chemical.

¹ See local Health & Safety Lead for further information

² Found at the staff pages from <https://www.swansea.ac.uk/sustainability/sustainability-minimal-waste/>

4.2.3 Step 3 - Email form for assessment and approval









The completed waste disposal form should be emailed to 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, and will review each form to ensure all chemical wastes listed are compatible to be accepted into the store.

Once approved, the team will give you a time to attend the store.

4.2.4 Step 4 - Ensure waste is securely and appropriately 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 Label³

SWANSEA UNIVERSITY CHEMICAL WASTE	
College/PSU:	Contact name:
Building:	Date:
Substance/ Contents	Please state the pH level: <input type="text"/>
	Please tick relevant hazards.
	<div>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/> </div>
	<div>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/> </div>
	Please tick the relevant.
Flammable <input type="checkbox"/> non-Halogenated <input type="checkbox"/> Halogenated <input type="checkbox"/> Aqueous: Acid <input type="checkbox"/> Alkali <input type="checkbox"/> Neutral <input type="checkbox"/> Oxidiser <input type="checkbox"/> Toxic <input type="checkbox"/> Water/Air reactive <input type="checkbox"/> Does the aqueous liquid include Flammable solvent? <input type="checkbox"/> (MUST TICK)	
Lab number:	ID Quartz:

ALL SECTIONS MUST BE COMPLETED / PLEASE ENSURE ALL CAPS ARE TIGHT

Figure 1. Example of the Chemical Waste Label.

Containment of liquid wastes

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

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

³ Found at <https://www.swansea.ac.uk/sustainability/sustainability-minimal-waste/>

- 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 bottles 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 these requirements will result in the Winchesters not being accepted at the store.

Guidance with respect to suitable containment and packaging is outlined within individual chemical SDS.



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

Chemically Contaminated Solid Waste Red Bags

All red bags should contain chemically contaminated solids such as PPE and blue paper towels **only**. No sharps or other items⁴ 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 waste to prevent materials escaping. **Each bag must have a completed Chemical Waste Label.** See [WMGN21 Chemically Contaminated Laboratory Solids](#) for further guidance.

Solid waste (other than red bag)

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

⁴ See WMGN22 and WMGN23

disposal.

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 1.

- The **Singleton Campus Grove Chemical Waste Store** is located between Grove (Building 12) and Glyndwr (Building 11.1). **The Store is opened by the Sustainability Team every Thursday 10-10.30am for those with approval to dispose of waste.**
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 Sustainability Team every Wednesday 11am until 11.30am for those with approval to dispose of waste.**

Users can only bring waste to the stores if they had received confirmation and a timeslot from the Sustainability Team.

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.

Processing & Collection of Wastes for Offsite Disposal

The University chemical waste is collected by a registered hazardous waste contractor, who 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.

5 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 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

6 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**

7 Version Control

Date	Version	Update
XX/XX/XX	1	Original document
XX/XX/XX	2	- Updated template - Reviewed, updated and expanded 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
14/05/25	5	- Review date removed- procedures will now only be updated in the case of changing activity or legislation. - Changes of references from Waste and Recycling Officer to Sustainability team - Updated opening days of the chemical waste stores due to changing personnel

Environmental Management System – Documented Information

		<ul style="list-style-type: none">- Minor changes to formatting and wording.- Appendix 2 removed- Appendix added for hazardous property identification
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Appendix 1 - Chemical Waste Store Location Maps

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



BUILDINGS

Finance Building	1	Margam Building	9.4	Digital Technium	24
Singleton Abbey & Stableblock	2	Botanic Compound	10	Taliesin Arts Centre & Egyptology Centre	32
Keir Hardie Building	3	Glyndwr Building	11.1	Institute of Life Science 1	33
James Callaghan Building	4	Vivian Tower	11.2	Ulyr Building	34
1937 Library	5	Data Science Building	11.4	Institute of Life Science 2	36
Mosque	6	Grove Building	12	Centre for NanoHealth	36
Library	7	Richard Price Building	14	ORACLE	43
Faraday Building	8.1	Amy Dillwyn Building	15		
Faraday Tower	8.2	Haldane Building	16		
Talbot Building	8.3	Fulton House	17		
Wallace Building	9	Union House	18		

■ Buildings
 ■ Student Residences

SERVICES AND FACILITIES

P Visitors Car Park (Pay to Park)	👶 Baby Changing Facilities	🛒 Super
P Staff Car Parks	U Students' Union	🚗 The SI & Car
♿ Accessible Parking	👶 Nursery	£ ATM
🚌 Bus Stops	👶 Defibrillator	🦷 Dentis
🚲 Santander Cycles	🏠 The Lighthouse (Chaplaincy Centre)	OH Occu
🚖 Taxis	🚿 Shower	+ Docto
CP Cycle Park		myuni
 Food & Drink		

Bay campus Chemical Waste Store in the Engineering Service Yard, on the north side of Engineering East (building 3)



BUILDINGS

Energy Safety Research Institute (ESRI)	1
ORACLE II	1.1
Active Classroom	1.2
Active Office	1.3
Centre for Integrative Semiconductor Materials (CISM)	1.4
Institute of Structural Materials (ISM)	2
Engineering East	3
Engineering Central	4
Bay Library	5




Great Hall	6
School of Management	7
Y Twyni	7.1
The College	7.2
Rod Jones Hall	8.19
Tower Information Centre (TIC)	9
Computational Foundry	11
Engineering North	12




■ Buildings ■ Student Residences




SERVICES AND FACILITIES

P Visitors Car Park (Pay to Park)	🚿 Showers	🎮 Outdoor M Use Games
P Staff Car Park	🛒 Supermarket	🏠 Outdoor Gy
♿ Accessible Parking	🚑 Defibrillator	🔬 Site of Spec Scientific Int
🚌 Bus Stops	🏊 Sports Reception/Gym	🏞 Site of Spec Interest Park
🚲 Santander Cycles	👶 Baby Changing Facilities	🏠 UPP Recepti (Accommod
🚗 Taxis	🏠 The Haven (Chaplaincy Centre)	myuni MyUr
CP Cycle Park	🧺 Launderette	
🍽 Food & Drink	U Students' Union	
🏧 ATM	🚪 TIC Entrance	


Appendix 2. Hazardous property identification

Pictogram	Physical hazard classes	Hazard properties
	Unstable explosives	HP1 Explosive
	Explosives, divisions 1.1, 1.2, 1.3, 1.4	
	Self-reactive substances and mixtures, types A, B	
	Organic peroxides, types A, B	
	Oxidizing gases, category 1	HP 2 Oxidising
	Oxidizing liquids, categories 1, 2, 3	
	Oxidizing solids, categories 1, 2	
	Flammable gases, category 1	HP 3 Flammable
	Flammable aerosols, categories 1, 2	
	Flammable liquids, categories 1, 2, 3	
	Flammable solids, categories 1, 2	
	Self-reactive substances and mixtures, types B, C, D, E, F	
	Pyrophoric liquids, category 1	
	Pyrophoric solids, category 1	
	Self-heating substances and mixtures, categories 1, 2	
	Substances and mixtures, which in contact with water, emit flammable gases, categories 1, 2, 3	
	Organic peroxides, types B, C, D, E, F	

Pictogram	Physical hazard classes	Hazard properties
No pictogram	Explosive, division 1.5	HP 15
	Explosive, division 1.6	Not applicable
	Flammable gas, category 2	HP 3 Flammable
	Self-reactive substances and mixtures, type G	Not applicable
	Organic peroxides, type G	Not applicable
	Compressed gases	No hazardous property
	Liquefied gases	
	Refrigerated liquefied gases	
	Dissolved gases	
	Skin corrosion, category 1A	HP 4 Irritant HP 8 Corrosive
	Skin corrosion, categories 1B and 1C	HP 8 Corrosive
	Serious eye damage, category 1	HP 4 Irritant
	Corrosive to metals	Not applicable
	Acute toxicity (oral, dermal, inhalation), categories 1, 2, 3	HP 6 Acute Toxicity
	Respiratory sensitization, category 1	HP 13 Sensitising
	Germ cell mutagenicity, categories 1A, 1B, 2	HP 11 Mutagenic
	Carcinogenicity, categories 1A, 1B, 2	HP 7 Carcinogenic

Pictogram	Physical hazard classes	Hazard properties
	Reproductive toxicity, categories 1A, 1B, 2	HP 10 Toxic for reproduction
	Specific target organ toxicity following single exposure, categories 1, 2	HP 5 Specific Target Organ Toxicity / Aspiration Toxicity
	Specific target organ toxicity following repeated exposure, categories 1, 2	
	Aspiration hazard, categories 1, 2	
	Acute toxicity (oral, dermal, inhalation), category 4	HP 6 Acute Toxicity
	Skin irritation, categories 2, 3	HP 4 Irritant
	Eye irritation, category 2	
	Skin sensitization, category 1	HP 13 Sensitising
	Specific target organ toxicity following single exposure, cat. 3. Respiratory tract irritation Narcotic effects	HP 5 Specific Target Organ Toxicity / Aspiration Toxicity
No pictogram	Acute toxicity (oral, dermal, inhalation), category 5	Not applicable
	Reproductive toxicity – effects on or via lactation	Not applicable
Not subject to chemical labelling requirements	Not applicable	HP 9 Infectious
	Hazardous to the aquatic environment – acute aquatic hazard, category 1	HP 14 Ecotoxic
	Hazardous to the aquatic environment – long-term aquatic hazard, category 1, 2	

Environmental Management System – Documented Information

Pictogram	Physical hazard classes	Hazard properties
	Hazardous to the ozone layer	HP 14 Ecotoxic
No pictogram	Hazardous to the aquatic environment – acute aquatic hazard, categories 2, 3.	HP 14 Ecotoxic
	Hazardous to the aquatic environment – long-term aquatic hazard, categories 3, 4	HP 14 Ecotoxic

