

UNIVERSITY OF CAPE TOWN			
Hazardous Management Procedure	Reference Number	UCT_PRO_010	
	Implementation Date	February 2025	
	Rev / Amendment No	01	
	Rev / Amendment Date	June 2025	



HAZARDOUS WASTE MANAGEMENT PROCEDURE

SUMMARY: THIS DOCUMENT OUTLINES THE PROCEDURE FOR MANAGEMENT OF HAZARDOUS WASTE AT THE UNIVERSITY OF CAPE TOWN (UCT)

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APPROVAL PAGE

	NAME & TITLE	DATE	STATUS	SIGNATURE
Compiled by	Ms. Kim van Reenen (Environmental Risk Manager)	30 June 2025	completed	
Reviewed by	Hazardous Waste Working Group	Jan-May 2025	Completed	HWWG
Approved by	Ms. Kirshni Naidoo (Director: OHSE)	30 June 2025	approved	

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AMENDMENT HISTORY

Doc Issue	Date	Amendments	Doc changes proposal No.	Configuration
PRO_010	June 2025	New release	PRO_010	PN Nxumalo

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1. SCOPE

This document provides guidance on the handling, storage, and disposal of hazardous waste, aligned with the International Standards Organisation (ISO) framework for the Environmental Management System (EMS). It encompasses the efficient, sustainable, and environmentally responsible use of resources, along with the management of hazardous waste associated with operational activities.

This procedure establishes the framework for managing hazardous waste service providers, ensuring due diligence is upheld in maintaining the institution's responsibilities and promoting responsible care from "cradle to grave."

Please note that MSDS (Material Safety Data Sheets) has been changed to SDS (Safety Data Sheets).

1.1 Purpose

To ensure that there is a uniform approach to the handling of hazardous waste across UCT, promoting good governance and sustainable practices.

1.2 Applicability

This procedure is applicable to all faculties and departments within UCT that generate hazardous waste.

Central OHSE has a mandate to roll out the OHSE governance framework across UCT and ensure that effective review, control, and monitoring mechanisms are in place. It is therefore a requirement that all UCT faculties

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and departments comply with the framework provided by Central OHSE.

2. DOCUMENTS

2.1 Applicable Documents

NEMA 107 of 98 :	National Environmental Management Act
ISO 9001:2015 :	(International Organization for Standardization) Quality Management Systems - Requirements
ISO 14001: 2015 :	Environmental Management Systems
ISO 45001: 2018 :	Occupational Health and Safety Management System

2.2 Reference Documents (UCT Documents)

UCT-POL-001	:	UCT OHSE Policy Statement
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3. DEFINITIONS / ABBREVIATIONS

3.1 Definitions / Terminology / Word Descriptions

3.1.1 **Aspects**
A feature or characteristics of an activity, product, or service that affects or can affect the environment.

3.1.2 **Biological Aspects**
Parasitic protozoa and helminths are also indicators of water quality. Species of protozoa can be introduced into water supply through human or animal faecal contamination.

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3.1.3 ***Chemical***
A substance having a specific molecular composition, obtained by or used in a chemical process.

3.1.4 ***Chemical Aspects***
Chemical contamination of water sources may be due to certain industries and agricultural practices, or from natural sources. When toxic chemicals are present in drinking water, there is the potential that they may cause either acute or chronic health effects.

3.1.5 ***Compliance***
A state in which someone or something is in accordance with established guidelines, specifications, or legislation

3.1.6 ***Contaminants***
Microorganisms such as viruses and bacteria; inorganic contaminants such as salts and metals; pesticides and herbicides; organic chemical contaminants from industrial processes and petroleum use; and radioactive contaminants. Water quality depends on the local geology and ecosystem, as well as human uses such as sewage dispersion, industrial pollution and use of water bodies as a heat sink, and overuse (which may lower the level of the water).

3.1.7 ***Conservation***
In relation to energy resources, it means the efficient use and saving of energy of all types, achieved through measures such as energy efficient devices, sustainable energy systems, energy demand management and energy restrictions.

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3.1.8 ***Cradle-to-grave***
From creation to disposal; throughout the life cycle. The term is used most typically in company's responsibility for dealing with waste and product performance. Cradle to Grave would assess all impacts of the product from production until disposal.

3.1.9 ***Diffuse pollutants***
Pollutants that cannot be traced to specific sources e.g. Surface runoff can contain any number of different contaminants from a number of sources.

3.1.10 ***Domestic waste***
Waste emanating typically from homes and offices. Although Classified as a General Waste this waste contains organic substances and small volumes of hazardous substances

3.1.11 ***Duty of care***
This requires that any person who generates, transports, treats or disposes of waste must ensure that there is no unauthorised transfer or escape of waste from his control. Such a person must retain documentation describing both the waste and any related transactions. In this way, he retains responsibility for the waste generated or handled.

3.1.12 ***Emergencies***
A sudden state of danger requiring immediate action.

3.1.13 ***Environment***
Surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans and their interrelation.

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3.1.14 ***Environmental Management System (EMS)***
Comprehensive business / organisational approach designed to incorporate environmental protection into the operation of any business/organisation.

3.1.15 ***General waste***
The generic term for waste that if properly managed does not pose an immediate threat to man or the environment. It may comprise of the following:
Clean building rubble (no contamination with any hazardous waste e.g. Asbestos or used oil etc.)

3.1.16 ***Hazardous Material***
Any material that, because of its quantity, concentration or physical chemical characteristics may pose a real hazard to human health or the environment

3.1.17 ***Hazardous Waste***
Waste that has the potential, even in low concentrations, to have a significant adverse effect on public health and the environment because of its inherent toxicological, chemical and physical characteristics. It may comprise of the following:

- Used batteries and some degreasers (contain acids and alkalis)
- Waste containing asbestos fibres/products
- Oily waste (used oil rags, filters, drums, oil contaminated soil)
- Used grease
- Left-over paints, solvents and resins (and empty containers)
- Sewerage sludge
- Medical waste (waste contaminated by blood or other bodily

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fluids)

- Redundant chemicals
- Lead, nickel, cadmium (heavy metals) found in electrical/electronic appliances
- Mercury (heavy metal) found in fluorescent tubes and other electrical appliances.

Pesticides, insecticides, fertilisers, herbicides and their containers.

3.1.18 *Hazard Rating*

The rating into which a Hazardous Waste falls according to the degree of hazard they present. This shall include:

- Hazard Rating 1 – Extreme Hazard
- Hazard Rating 2 – High Hazard
- Hazard Rating 3 – Moderate Hazard
- Hazard Rating 4 – Low Hazard

3.1.19 *Hazardous Substances*

Any substance classified by SANS 10228 or other international standard. This shall include:

- Class 1 -Explosives
- Class 2 -Gases
- Class 3 -Flammable liquids
- Class 4 -Flammable solids
- Class 5 -Oxidizing substances and organic peroxides
- Class 6 -Toxic and infectious substances
- Class 7 -Radioactive substances
- Class 8 -Corrosives
- Class 9 -Other

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3.1.20 ***Impacts***
A positive or negative change to the environment caused by environmental **aspects**. Environmental aspects can have a direct or decisive impact on the environment or contribute only partially or indirectly to a larger environmental change.

3.1.21 ***Incidents***
Any occurrence that has potential to result in adverse consequences to people, the environment, property/plant, corporate wellbeing, or a combination of these.

3.1.22 ***Legal Register***
A document used to identify, manage or amend the legal obligations of the business with specific Reference to environmental legal compliance at international, national, regional and local level.

3.1.23 ***NEMA***
National Environmental Management Act (NEMA) of the republic of is a law that aims to ensure co-operative environmental governance. It enforces Section 24 of the South African Constitution, which guarantees everyone the right to an environment that is not harmful to their health or well-being and to have the environment protected for the benefit of present and future generations

3.1.24 ***Nuisance***
Any activity that can or could likely to be prejudicial to a person's health or interfere with a person's legitimate use and enjoyment of land or water.

3.1.25 ***Operations***
A planned activity involving many people performing various actions; a process or series of acts especially of a practical or mechanical nature

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involved in a particular form of work.

3.1.26 **Pesticide**
A chemical used to kill harmful animals or plants. Pesticides are used especially in agriculture and around areas where humans live. Some are harmful to humans, either from direct contact or as residue on food, or are harmful to the environment because of their high toxicity, such as DDT (which is now banned in many countries). Pesticides include fungicides, herbicides, insecticides, and rodenticides

3.1.27 **Pollution**
Any change in the environment caused by emissions from any activity, including the storage or treatment of waste or substances; construction and/or the provision of services, and where the change has an adverse effect on human health or well-being or on the composition, resilience and productivity of natural or managed ecosystems, or on materials useful to people, or will have such an effect in the future. This includes noise, odours, heat, radioactive or other waves and any other emission from any activity.

3.1.28 **Recycle**
The use, re-use or reclamation of a material so that it re-enters the industrial process rather than becoming a waste.

3.1.29 **Responsibility**
The relevant departments are responsible for the preparation and review of the Register of Environmental Objectives and Targets in conjunction with the Green Team members and the General Manager.

3.1.30 **Risk Assessment**
The potential for an activity or process to lead to an environmental incident.

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A process used to identify hazards that may be, or are a potential risk, by evaluating and comparing the level of the risk against predetermined standards, targets or other criteria.

3.1.31 **SANS**
SANS stands for **South African National Standards**. These are formal, published documents developed by the **South African Bureau of Standards (SABS)** that provide guidelines, specifications, and criteria to ensure the **quality, safety, and reliability** of products, services, and systems in South Africa. Mandated by the **Standards Act No. 8 of 2008**, which empowers SABS to develop and maintain these standards

3.1.32 **Scope**
 An area within which something or someone exists, acts, or has influence or power.

3.1.33 **Source Pollutants**
 Pollutants that can be traced back to a specific source e.g. Oil leakage from vehicles or equipment.

3.1.34 **Waste**
 An undesirable or superfluous by-product, emission, or residue of any process or activity, which has been discarded, accumulated or stored for the purpose of discarding or processing. It may be gaseous, liquid or solid or any combination thereof. In addition, may originate from a residential, commercial or industrial area. This definition excludes industrial wastewater, sewage, radioactive substances, and mining, metallurgical and power generation waste. *Government Gazette No. 12703, August 1990.*

3.1.35 **Waste disposal site**
 Any place at which more than 100 kg of a Hazardous Waste is stored for

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more than 90 days or at a place at which a dedicated incinerator is located is termed a Waste Disposal Site. It must be registered as such in terms of the Environmental Conservation Act (Act 73 of 1989).

3.1.36 ***Waste generator***
 An industry or company whose activities result in the production of waste. The responsibility for a Hazardous Waste remains from cradle-to-grave with the Generator of the waste and the Generator is held liable for any damage that the waste may cause to humans or to the environment.

3.1.37 ***Waste Hierarchy***
 Waste Hierarchy is a framework used in waste management that ranks waste management strategies according to their environmental impact. The hierarchy typically follows this order:

- i. Prevention – Avoiding the creation of waste in the first place.
- ii. Minimization – Reducing the amount of waste generated.
- iii. Reuse – Using items more than once before discarding.
- iv. Recycling – Processing materials to make new products.
- v. Energy Recovery – Converting waste into usable energy (e.g., incineration with energy capture).
- vi. Disposal – Final treatment or landfilling of waste, considered the least desirable option.

The phrase "See integrated waste management" suggests that the waste hierarchy is part of a broader strategy known as Integrated Waste Management (IWM), which combines various waste management techniques and policies to achieve the most efficient and sustainable outcomes.

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3.1.38 *Waste stream*

A waste stream refers to the complete flow of waste from its source through to recovery, recycling, or final disposal. In the context of South African environmental legislation, particularly under the National Environmental Management: Waste Act (Act No. 59 of 2008), a waste stream can be defined as: A specific category or type of waste that is generated from a particular source or activity, such as household waste, industrial waste, electronic waste, or construction and demolition debris.

3.2 Abbreviations / Acronyms

COHSAC	:	Central Occupational Health and Safety Advisory Committee
ERM	:	Environmental Risk Manager
NEMA	:	National Environmental Management Act
OHSE	:	Occupational, Health, Safety, and Environment
PRO	:	Procedure
P&S	:	Properties and Services
RMEC	:	Risk Management Executive Committee
SANS	:	The South African National Standard
UCT	:	University of Cape Town

4. APPROACH

We recognise our responsibility for the impacts of waste generated, and we are committed to ensuring the most responsible management of waste across all operations. To this end, we shall:

- **First priority:** Avoid waste creation.

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- **Second priority:** Reduce volume of waste sent to landfill.
- **Third priority:** Reuse waste materials whenever possible.
- **Fourth priority:** Recycle waste.
- **Fifth priority:** Dispose of waste in a responsible and compliant manner.

The following shall be incorporated:

- Recognise that responsible procurement practices form an integral part of our overall waste management strategy.
- Identify high waste-generating areas and activities.
- Identify all hazardous waste streams and monitor their volumes.
- Ensure effective separation of waste to support efficient recovery and recycling processes.
- Handle and dispose of hazardous waste with the utmost care and diligence.
- Ensure that hazardous waste management techniques, systems, and procedures consistently meet or exceed legislated minimum standards.
- Continually strive to achieve a 'zero-waste to landfill' status.

5. ROLES AND RESPONSIBILITIES

The following persons will ensure effective and continuous implementation, management and revision of environmental performance.

5.1 OHSE Director

Leads and implements an OHSE governance framework across UCT and ensures the following:

- A central stakeholder engagement forum, called the Central Occupational Health Safety Advisory Committee (COHSAC), is

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constituted with the appropriate delegation of authority, representative of every faculty and department.

- The COHSAC agenda includes reporting on Hazardous Waste Management.
- Each COHSAC member is formally appointed and informed of their responsibilities, including governance regarding hazardous waste management.
- COHSAC meets regularly and is independently chaired.
- All minutes of meetings and decisions are recorded.
- Matters of escalation are communicated to the Chair of Risk Management Executive Committee (RMEC).
- Where strategic decisions are required, appropriate support or advice will be provided.

5.2 The Environmental Risk Manager

The Environmental Risk Manager shall:

- Report to the relevant regulatory bodies on hazardous waste management, including submissions to the Integrated Pollution Waste Inventory System (IPWIS), providing detailed updates on waste management performance.
- Chair the Hazardous Waste Working Group (HWWG) meetings, ensuring that each meeting has a clearly defined agenda that promotes continual improvement in alignment with the waste treatment hierarchy, while consistently promoting strong governance.
- Ensure that all members of the Working Group are provided with the necessary information to make well-informed decisions relating to environmental performance.

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- Investigate environmental incidents thoroughly and document all findings in detail.
- Make recommendations aimed at preventing the recurrence of similar incidents in future.
- Ensure that the outcomes of Working Group meetings are comprehensively recorded, with all required mitigation actions reflected in the Mitigations Register.
- Ensure adherence to governance protocols regarding the management of hazardous waste service providers.
- Serve as the UCT Radiation Protection Officer.

5.3 Hazardous Waste Working Group Members

All members of the Working Group shall:

- Represent the faculties and/or departments that generate hazardous waste, primarily including the Faculty of Health Sciences, Faculty of Science, Faculty of Engineering and the Built Environment, Faculty of Humanities, and Properties & Services.
- Be fully conversant with UCT's Occupational Health, Safety and Environmental (OHSE) Policy, as well as procedure.
- Set a personal example in addressing and managing environmental issues.
- Liaise regularly with the Environmental Risk Manager to ensure alignment with institutional goals.
- Actively participate in Working Group meetings and, when unable to attend, ensure representation by an appropriate delegate.
- Implement all agreed actions promptly and as far as practicable.
- Conduct regular environmental risk inspections focusing on chemical inventories, environmental health, and hazardous waste

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management, while proactively managing and addressing environmental issues.

- Report any issues, challenges, or proposed improvements to this procedure to the Working Group.
- Provide updates on progress and activities to the respective OHSE Committee meetings within their faculties or departments.

5.4 All Employees

All employees are required to:

- Actively engage with and demonstrate commitment to the activities and initiatives communicated by the institution, while supporting, educating, and managing environmental responsibilities wherever possible.
- Cooperate fully in adhering to the duties and requirements outlined in the relevant statutory provisions and the procedures specified in this document.
- Familiarise themselves with the content of the Environmental Document to ensure understanding and compliance.
- Refrain from interfering with or misusing any resources or equipment provided in the interest of environmental protection.
- Promptly report all environmental incidents to line management and make use of the online incident reporting tool, which feeds directly into the Occupational Health, Safety and Environmental (OHSE) Division.

6. HAZARDOUS WASTE DISPOSAL GUIDELINES

Hazardous waste is defined as 'any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical, or

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toxicological characteristics of that waste, have a detrimental impact on health and the environment' (National Environmental Management Waste Act, Act No. 59 of 2008).

This includes:

- **Hazardous dry waste:** Materials that may be compacted (excluding radioactive waste).
- **Specific hazardous waste streams:**
 - Oil residues and oil-soaked rags from workshops.
 - Contaminated soils, such as those resulting from hydrocarbon spills.
 - Chemical wastes, including paints, thinners, and greases.
- **Additional waste types:**
 - Battery waste.
 - Fluorescent tubes.
 - Printer cartridges, copier toners, and electronic waste (e-waste).
 - Paint tins.
 - Effluent.
 - Waste from clinics.
 - Sanitary waste.

7. MANAGEMENT OF HAZARDOUS WASTE

- i. **Dedicated Receptacles:** Specialised waste containers must be provided for hazardous waste collection.
- ii. **Storage:** These receptacles must be stored in a designated hazardous waste area to ensure safety and prevent contamination.

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- iii. **Labelling and Colour Coding:** All hazardous waste containers must be clearly labelled according to the specific contents they hold. Colour coding should be used consistently to distinguish between waste types (e.g., red for halogenated, blue for inorganic aqueous waste, yellow for non-halogenated). Wherever possible, recycling and A-thermal destruction should be prioritized to support UCT's sustainability goals.
- iv. **Removal and Disposal:** Once full, the receptacles are removed by an authorised Hazardous Waste Management Service Provider. Waste is disposed of using the most appropriate and sustainable method. Landfilling is the least preferred option, while methods such as thermal destruction or recycling are prioritised for their sustainability.
 - A **Certificate of Safe Disposal** must be obtained from the service provider upon completion of hazardous waste disposal.
 - This certificate must be filed with the Occupational Health, Safety and Environment (OHSE) Division, as well as with the relevant operations management team within the respective faculty or department.
 - The quantities of hazardous waste disposed of must be recorded and included as part of the **environmental performance indicator process**, ensuring accurate tracking and reporting of environmental management efforts.
 - The Environmental Risk Manager shall record hazardous waste quantities as part of the environmental performance indicator process.

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- Hazardous waste must be stored in clearly labelled receptacles and containers specifically approved for the storage of the relevant waste type.
- All hazardous waste containers must display the date on which the container was first used for storage, to ensure proper control and monitoring.
- Waste storage containers must remain secured and closed at all times to prevent spillage or contamination, containers to be placed in a drip tray and/or bunding wherever possible.
- Hazardous waste shall only be handled and managed by authorised and trained personnel.
- If the quantity of any hazardous waste exceeds the prescribed storage guidelines, it must be removed from the premises by the contracted waste management company within the timelines prescribed by legislation and the Waste Management Company Service Level Agreement (SLA).
- Hazardous waste bins must have well-fitted lids and be positioned away from stormwater drains to prevent environmental contamination.
- Hazardous waste may only be collected and disposed of by a licensed contractor authorised for the specific waste category.
- All certificates of safe disposal must be retained on record by the OHSE Division and the applicable operations management team within the respective faculty or department.

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- Once full, the receptacles are collected by the Hazardous Waste Management Service Provider and disposed of at the VissersHoek Waste Management Facility (VWMF).

8. METHODS FOR HAZARDOUS MATERIAL AND CHEMICAL SUBSTANCES DISPOSAL &/OR RECYCLING

#.	Waste Type	Responsibilities	Storage Requirements	Disposal Process	Documentation & Compliance
a.	Hazardous chemical substances disposal &/or recycling	Faculties, departments, service providers, and contractors are responsible and evaluated against performance indicators.	Must be stored in compliance with Safety Data Sheets (SDS) regulations and standards. Dedicated receptacles stored in designated hazardous waste areas.	Disposal must follow SDS, Waste Management Service Provider/VissersHoek disposal methods and OSHE regulations.	Adherence to SDS and OSHE guidelines required.
b.	Hazardous chemical material disposal &/or recycling	Faculties or departments	Stored according to SDS with dedicated receptacles.	Disposal must follow SDS, Waste Management Service Provider/VWMF disposal methods and OSHE regulations.	Receptacles stored in designated hazardous waste areas.
c.	Contaminated plastic and metal drums disposal &/or recycling	Service providers and contractors	Plastic drums placed in designated weatherproof areas.	Collected monthly by Hazardous Waste Management Provider and taken to Vissershoek Waste Management Facility (VWMF).	Measured against performance indicators.
d.	Contaminated metal disposal &/or recycling	Service providers and contractors	Stored in dedicated hazardous waste area.	Collected by service provider and taken to VWMF or licensed recycler.	Safe disposal certificates obtained and filed. Quantities recorded. Paint container waste to be baled.



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e.	Used oil disposal &/or recycling (Storage – Fuels and Oils)	UCT Facilities	Tanks on impervious base with bunding; neutralising materials kept nearby.	Additives added every 6 months, reconditioning yearly, pressure testing every 24 months.	Any absorbents used disposed of as hazardous waste. Fuel stock management must be documented.
f.	Used oil disposal &/or recycling (Refuelling)	Refuelling contractors	Spill kits and trays used during operation.	Topped up using portable bowsers. Diesel waste from reconditioning to be properly disposed.	Compliance with relevant regulations required.
g.	Used oil disposal &/or recycling (Oil & Grease from Food Waste)	Departments generating food waste	Fats, oils, and grease effluent pass through fat-traps.	Waste collected by certified contractor. Cooking oil only sent to authorised recyclers.	Collection certificates obtained and filed. Fat-traps cleaned and dosed with enzymes as required.
h.	Battery waste	Departments, OHSE Division	Receptacles at office/building receptions, transferred to hazardous waste area.	Collected when full by Hazardous Waste Management Service Provider and sent to VWMF or recycler.	Certificate of safe disposal required. Quantities recorded.
i.	Fluorescent tubes	Service providers and contractors	Stored in labelled containers and at Maintenance Departments.	Tube crushing not allowed. Disposed at consumable store.	Certificates filed with OHSE. Quantities recorded.
j.	Contaminated spill kit equipment	Departments where spills occur	Stored in spill kit waste bags.	Neutralising agents used must match product SDS and VWMF	Disposal via hazardous waste provider. Included in hazardous waste inventory. Incident reporting to OHSE.
k.	Cylinders	Departments	Returned to supplier or stored for disposal.	Not to be handed to staff. Stored if not returned.	Disposal via approved service provider. Safe disposal certificates kept on record.
l.	Other electronic waste	Departments, ICTS	Designated bins for batteries, globes, printer cartridges, IT components.	Stored to avoid breakages. Disposed via authorised E-waste company	Sent to authorised recyclers or returned to suppliers. Must follow supply chain and duty of care procedures.
m.	Asbestos	Properties & Services with registered contractor	Stored to prevent exposure.	Must be removed thoroughly and all contact surfaces decontaminated.	Only disposed at authorised sites. PPE mandatory. Clearance

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				Disposed of via VWMF	certificate and hygiene surveillance report required.
n.	Building rubble	Contractors, Facilities	Assessed for hazardous materials. Stored in prescribed facilities.	Separated from other waste and collected by licensed contractors.	Handled at approved facilities only. May only be used for landfill with relevant approvals.
o.	Medical waste	Medical departments	Stored in identified, colour- coded biological hazardous bins.	Collected by authorised medical waste provider.	Disposal by approved company. Categories: sharps, infectious, pharmaceutical, anatomical, cytotoxic.
p.	Radioactive waste	ARPOs, OHSE, RPO	Inventory and movement tracked.	Stored per SAPHRA regulations.	Only approved disposal providers used. RPO informed; disposal records kept and submitted to SAPHRA.
q.	Mercury waste	Departments handling mercury lamps	Stored safely using replacement tube packaging.	Disposed via hazardous waste management service provider.	Avoid breakage and contamination.
r.	Pesticides & herbicides	Grounds and Gardens staff and experts	Stored locked if needed. No on- site storage unless absolutely necessary.	Legally permitted substances only. Used by trained experts. Disposed of via authorised waste company.	Containers disposed of via hazardous waste procedures.
s.	Paints, varnishes, solvents	Maintenance and Operations departments	Stored in ventilated facility with bunds and signage.	Used on demand. Cleaned only in demarcated areas. Disposed of as per VWMF disposal methods.	Disposal via hazardous waste provider.
t.	Effluent wastewater	Departments and OHSE division	Permit via Environmental Risk Manager (ERM).	High-risk effluent not discharged without authorisation.	Liaison with City of Cape Town for permit. Compliance with legal and environmental requirements.
u.	Weapon of mass destruction (WMD) waste	OHSE, ERM	Flagged and inventoried. Stored in compliant containers.	Segregated and labelled. OHSE informed and disposed of as per regulations via waste management service provider	Disposed by licensed hazardous waste contractors. Logs maintained. Reports to DFFE, NNR, or relevant bodies.

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9. CONSEQUENCES OF DEVIATION

The possibility of incorrect removal and disposal methods may result in uncontrolled nuisances, spillages, and/or pollution of soil and groundwater.

- An incident report will be generated; relevant training will be reintroduced.
- Periodic testing will be implemented based on the severity of the non-conformance.
- Penalties may be introduced, linked to performance, as per the agreed contract for sub-contractors and clients.

10. EMERGENCY RESPONSE PROCESS

- Drums filled with clean sand or appropriate spill kits shall be made available on-site were recommended by the risk assessment, to ensure that environmental impacts are minimised in the event of a spill.
- In the event of a spill, clean sand or neutralising agents from the spill kit must be spread across the affected area to absorb the material, then brushed up and disposed of at a recognised hazardous materials disposal site.
- For any spill involving hazardous materials and chemical products (HMCP), every effort must be made to protect nearby watercourses, stormwater drains, or soil from further contamination.
- In the case of a serious emergency, the environmental emergency spill response company, fire services, and ambulance services must be contacted as required, depending on the potential impact on biodiversity or human health.
- For chemical and pesticide spills, procedures outlined in the relevant Safety Data Sheets (SDS) must be followed.
- For any other spills, appropriate steps must be taken to mitigate,

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manage, and monitor the incident.

- All spills must be reported to the Occupational Health, Safety and Environmental (OHSE) Division and recorded in the Incident Register by the relevant personnel.
- A designated representative must be appointed to check and maintain the spill kits

11. MEASUREMENT AND INDICATORS

- UCT is required to record and report all waste generated to the Western Cape Government. These statistics must be maintained on-site and reported monthly and quarterly to the Committee on Occupational Safety, Health and the Environment (COSHAC) and the Radiation and Environmental Management Committee (RMEC).
- Additionally, UCT produces an Annual Report that includes sustainability initiatives and year-on-year waste statistics.
- Performance indicators must be documented and recorded according to the monitoring and measurement procedure. The contractor appointed to manage waste on-site for UCT must be used for disposals, alternative services to be confirmed with ERM.
- All waste must be identified and categorised into specific waste streams. Records of all waste-related data must be maintained monthly.
- Waste must be monitored according to the volume of waste disposed of and recycled to ensure effective performance management. Monthly reports shall be provided, indicating the weight (kg) and percentage (%) of total waste for each of the following:
 - Total waste generated
 - Waste sent to landfill
 - Hazardous waste disposed of

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12. HAZARDOUS WASTE MINIMISATION

The processes for the avoidance and minimisation of waste shall be outlined in the Purchasing and Procurement procedures.

13. FORMS AND RECORDS

The following are maintained by the Environmental Risk Manager:

- Hazardous Waste Management Service Level Agreement
- Environmental Aspects and Impacts register
- Legal Register
- Hazardous Waste Recycling Statistics and Data (define location)
- Waste statistics / Computerised system
- Contractor's licence / permit to collect and transport waste (define location)

The following are maintained by the service provider and should also be shared with the operational unit within Faculties and Departments responsible for hazardous waste management and to be made available to Environmental Risk Manager on request.

- Disposal certificates for all hazardous waste
- Safety Data Sheets (previously Material Safety Data Sheets)
- Incident reporting procedure

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<ul style="list-style-type: none"> • Spill kit contents and training in Emergency spill response
<ul style="list-style-type: none"> • Waste Manifest Document
<ul style="list-style-type: none"> • Waste Categorisation sheets
<ul style="list-style-type: none"> • Waste bin labels
<ul style="list-style-type: none"> • Skip and Lift slips
<ul style="list-style-type: none"> • Landfill sites certificates permitting contractors' disposal of waste

14. MONITOR AND REVIEW

This procedure will be reviewed as a minimum once every three years and/or when there is a change to operations as a result of legislative changes, adaptation or adoption of new techniques and methods of disposal or post internal reviews conducted by the Environmental Risk Manager.