



Document Name:

Policy for Waste Management

Document Number:

DUHS / WM / SOP / 01

DOW UNIVERSITY OF HEALTH SCIENCES



STANDARD OPERATING PROCEDURE

Policy for Waste Management

(CLAUSE 1.1 OF ISO 9001:2008)

	NAME	DESIGNATION	SIGNATURE	DATE
PREPARED BY:	Dr. Shobha Luxmi	Asst. Professor		2-8-19
REVIEWED BY:	Ms. Sanam Soomro	Director, QEC-DUHS		2-8-19
APPROVED BY:	Dr. Zarnaz Wahid	Pro Vice Chancellor-DUHS		2-18-19
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TERMS AND DEFINITION

TERMS	DEFINITION
Incineration	The destruction of waste material, by burning.
Contingency arrangement	A contingency arrangement is an arrangement made to help an organization respond effectively to a significant future event or situation that may or may not happen.
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LIST OF ABBREVIATIONS

DOC	Document
DUHS	Dow University of Health Sciences
FM	Form
HEC	Higher Education Commission
PMDC	Pakistan Medical and Dental Council
ISO	International Organization for Standardization
OC	Organization Chart
QEC	Quality Enhancement Cell
QMR	Quality Management Representative
QMS	Quality Management System
QSP	Quality System Procedure
SOP	Standard Operating Procedure
VC	Vice Chancellor



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1. PURPOSE:

The purpose of this policy is to ensure that the processes of management of healthcare waste are such that the safe healthcare is provided to the patients, protecting the health of all its employees the waste generated is disposed of in the manner that it is not dangerous to the environment.

Health care waste is a by-product of health care that includes sharps, non-sharp blood contaminated items, blood, body parts and tissues, chemicals, pharmaceuticals and radioactive materials. Poor management of health care waste exposes health care workers, waste handlers, patients and their families and the community to preventable infections, toxic effects and injuries. Safe management of health care waste involves three key principles: reduction of unnecessary wastes, separation of general waste from hazardous wastes, and waste treatment that reduces risks to health workers and community.

2. SCOPE:

This procedure is applicable to the waste disposal authorities provided by the Dow University Hospital Administration, under the supervision of DUHS.

3. RESPONSIBILITIES:

The following are the Responsibilities of Officers with regards to the Waste Management System:

3.1. Chief Operative Officer /Medical Superintendent

COO/MS accepts overall responsibility for the management of waste generated in the hospital premises, responsibility will be delegated via the Chief Operating Officer to a designated waste control officer.

3.2. Infection Control Management Team

The Infection Control team will provide support, advice and guidance to managers on all matters relating to infection controls, segregation and the definition of appropriate waste categories, to assist them in making the final decision on whether waste is Infectious or not.

3.3. Waste Officer

The hospital waste officer will provide advice, support and guidance on all matters



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3.4. Management Responsibilities

All managers/ward In-charges will be responsible for ensuring that their work areas comply with the requirements of this policy and that their staff are appropriately trained and have received sufficient information to be able to handle and dispose of waste correctly. The infection control team will conduct workshop on waste segregation, where necessary, Managers / Ward In-charges will carry out risk assessments in order to identify any necessary precautions/control measures that may need to be implemented.

3.5. Staff Responsibilities

All staff, volunteers and contractors will comply with the requirements of this policy and report any hazards and incidents immediately to their managers/supervisors/COO.

4. PROCEDURE:

4.1. Categories of Waste:

4.1.1. Hazardous waste E.g.

- Infectious waste
- Fluorescent tubes
- Laboratory chemicals
- Cleaning chemicals
- Oils
- Batteries
- Waste electronics
- Paints
- Solvents
- Cytotoxic and Cytostatic waste
- Mercury

4.1.2. Non-Hazardous waste E.g.

- Domestic waste
- Food waste
- Offensive/hygiene waste
- Prescription only Medicines not containing dangerous chemicals
- Cytotoxic or Cytostatic medicines
- Packaging waste



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- Furniture
- General Construction waste
- Confidential waste

4.1.3. Clinical waste

- a) Any waste which consists wholly or partly of human (or animal) tissue, blood or other body fluids, excretions, drugs or other pharmaceutical products, swabs or dressings, syringes, needles or other sharp instruments, being waste which unless rendered safe may prove to be hazardous to any person coming into contact with it.
- b) Any other waste arising from medical, nursing, dental, pharmaceutical, veterinary or similar practice, investigation, treatment, care, teaching or research, or the collection of blood for transfusion, being waste which may cause infection to any person coming into contact with it.

4.1.4. Medicinal Waste

- a) Cytotoxic and Cytostatic medicines
- b) Medicines other than those classified as Cytotoxic and Cytostatic

Other hazardous wastes include Amalgam and Mercury.

It is important that a proper assessment of the hazardous properties of each waste management is undertaken in accordance with material safety data sheet.

4.1.5. Infected/used medical devices

Where implanted medical devices have been in contact with infectious bodily fluids and have been assessed to be infectious they should be classified and treated as infectious waste.

Disinfected medical devices should be classified as non-infectious waste.

4.1.6. Offensive/hygiene waste

Waste which is non-infectious and does not require specialist treatment or disposal, but which may cause offence to those coming into contact with it. Examples include, incontinence and other waste produced from human hygiene, sanitary waste, nappies and items of equipment which do not pose a risk of infection including gowns, plaster casts etc.

4.1.7. Domestic waste



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This could be Non-Hazardous waste which may include paper, aerosols, non-contaminated glass, cardboard, outer packaging, plastics and other similar materials.

These materials will be pretreated prior to land fill or disposal, e.g. recovered, recycled or reused.

4.1.8. Waste food

Accumulated food waste generated from catering facilities, including central dish-washing facilities. All waste foodstuff will be disposed of via the ward kitchen disposal units or the main Kitchen waste disposal unit.

4.1.9. Confidential waste

Material that requires to be made unintelligible prior to final disposal E.g. patient or staff records, will be designated confidential shall be clearly identified and disposed. The Departmental Manager or Head of Department who generates the waste is responsible for the decision whether waste is confidential.

Electronic or magnetic data media, e.g. floppy disk, CD ROMs, Hard drives, USB memory sticks, etc. will be collected separately to ensure that all potential confidential or personal data is destroyed. The types of electronic materials will be destroyed by shredding.

4.1.10. Low level radioactive waste

Material containing low levels of radioactivity usually generated from a pharmacy department, radiotherapy unit or from certain clinical procedures in a ward/clinic. Such waste may be disposed of under specific supervision and controls via a designated drainage route or, appropriately packaged, labelled and monitored, via incineration.

4.1.11. Construction waste

Construction waste must be assessed to ensure that all hazardous materials have been separated where this is technically feasible; if not possible to separate then the whole waste will be deemed hazardous and must be disposed of accordingly. General building debris will be normally nonhazardous.

Disposal of retained tissue/organs following surgeries (body parts, amputations/transplant)

It is a bio hazard waste and must be disposed of in red bins.



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4.2. Segregation of Waste

Segregation at source is essential to good waste management. The following color codes will be used for disposal purposes:

- Hazardous waste which requires disposal by incineration will go in red bag.
- Non-hazardous waste which is collected by Karachi Metropolitan Corporation will go in green bag for disposing off in landfill.
- Sharps will go in sharps bin which will be sent for incineration.
- Offensive/hygienic waste which can be disposed of via a deep landfill site.
- Domestic waste disposed of via landfill site.

4.3. Personal protection and hygiene

Where a risk assessment identifies the need for personal protective equipment this will be provided. Any necessary information and training will also be provided to ensure its safe use. Suitable Showering/changing and alternative hand hygiene facilities will be provided in all areas where there is a need to handle and/or store waste.

4.4. Sharps injuries

It is the responsibility of the individual to notify their manager/supervisor immediately if they sustain a sharp injury. The infection control team will facilitate testing for blood borne viruses.

4.5. Emergencies

There may be occasions when an emergency situation occurs when handling or storing waste for example, a spillage of a hazardous material. The manager of the work area will ensure that appropriate procedures are put in place and where necessary spill kits are provided with suitable information and training.

4.6. Storage of Waste

Each ward/department has a designated waste storage or disposal area and waste must not be stored outside this area. Waste will be collected from these areas at a frequency determined by local circumstances.



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4.7. Disposal of Waste

- All infectious waste will be contained within sealed, labelled and Tie tagged red clinical waste sacks are disposed of via incineration. These waste sacks will be stored and transported to the incinerator plant in rigid plastic containers.
- All Sharps will be disposed of within a suitable sharps container which is appropriately labelled, tie tagged and stored separately to any clinical waste sacks.
- All Cytotoxic and Cytostatic waste will be disposed of in an appropriate sealed container and transported separately back to Pharmacy.
- Any radioactive waste, electrical waste or waste for recovery will be collected from the relevant work area and recycled or disposed of as required.
- Chemical waste all chemical waste will be disposed of in accordance with the data held in the Manufacturers safety data sheets.
- General equipment/furniture, etc. which is no longer required should be disposed of in accordance with the hospital Disposal Policy. The equipment will be required to be decontaminated.
- The hospital will ensure that there are adequate contingency arrangements in place for the collection, storage, transportation and disposal of all wastes, in the event of an emergency that will delay the collection and disposal of waste.

4.8. Staff Training

All staff will be trained in waste handling and segregation procedures in line with this policy. All staff must attend the mandatory training programme, this training will ensure that all staff are aware of the types of waste, hazards, risks and the correct disposal procedures, including safe manual and other handling techniques.

4.9. Policy Monitoring and Review

This policy and its effectiveness will be monitored annually this will include:

1. A comprehensive audit of staff training will be carried out annually; this audit will include a random sample of training objectives and their effective use in the day to day activities.
2. Quarterly reports of all waste and related incidents will be reviewed by the quality and



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safety committee, which will include detailed trend analysis, risk assessment and the effectiveness of any follow up action.

3. Patient and staff surveys, on the environment
4. Annual performance target review, e.g. a reduction in Clinical waste, household waste and an increase in recycled materials.

5. RELATED DOCUMENTS:

6. RELATED RECORDS: