

# Republic of the Philippines Department of Environment and Natural Resources

# ENVIRONMENTAL MANAGEMENT BUREAU Region 9

Lantawan Pasonanca Zamboanga City Telephone Nos: (062) 985-04-28 Website: http://r9.emb.gov.ph

#### HAZARDOUS WASTE GENERATOR REGISTRATION CERTIFICATE

Pursuant to Chapter 3 of DENR Administrative Order (DAO) No. 2013-22, the Implementing Rules and Regulations of Republic Act (RA) 6969, this Certificate is issued to:

Name of Establishment: PREMIER MEDICAL CENTER ZAMBOANGA

Facility Address: #228 DON ALFARO STREET, TETUAN, ZAMBOANGA CITY, ZAMBOANGA DEL SUR

You are hereby assigned with the new on-line registration na

OL-GR-R9-73-040928

This certifies that the above-named Hazardous Wastes Generator generates the following types of wastes:

Waste Class	Waste Number
Arsenic and its compounds	D402
Mercury and mercury compounds	D407
Used industrial oil including sludge	1101
Pathological or infectious wastes	M501
Pharmaceuticals and drugs	M503

- The above-named HW Generator shall comply with all the requirements of R.A 6969 and its Implementing Rules and Regulations particularly DAO 2013-22: Revised Procedures and Standards for the Management of Hazardous Wastes (Revising DAO 2004-36).
- Submission of the online Self Monitoring Report (SMR) shall be made within fifteen (15) days after the end of every reporting period.
- Please refer to this assigned registration number for every transaction related to the online Hazardous Waste Management System.
- Non-compliance to the above stipulations shall be subjected to the penalty provisions as provided under Section 41 of DAO 1992-29 and Chapter 11 of DAO 2013-22.

Engr. Alex D. Jimenez Regional Director February 08, 2023

This is a computer generated certificate.

To verify the authenticity of this file, kindly scan the generated QR Code using your QR Code scanner / reader or visit the HWMS website for details.











DEPARTMENT	HOSPITAL WIDE	ISSUE DATE
TITLE/DESCRIPTION	HEALTHCARE WASTE MANAGEMENT COMMITTEE	EFFECTIVE DATE
POLICY NO.	PMCZ-HC-2022-004	REVIEW DATE ORIGINAL

# **HEALTHCARE WASTE MANAGEMENT COMMITTEE**

	TABLE OF CONTENTS
1	Introduction
2	Purpose
3	Scope
4	Definition
5	Policy
6	Guidelines and Procedure
7	Constitution of committee (names of chairman/members as provided)
8	Roles / Responsibilities
9	Reference

Code: PMCZ-IPC-PP-37 IssueNo.:1IssueDate: Act

**Activation Date:** 

**Revision Date: ORIGINAL** 



#### 1. INTRODUCTION

A waste management committee assesses and develops programs, policies and goals that focus on waste management and minimization. The committee should include representatives from the numerous departments that impact waste management within the facility. The committee is responsible for determining the waste-related programs to implement within the facility and assumes accountability for attaining pre-defined goals.

#### 2. PURPOSE

This embodies the guidelines and educate healthcare personnel of Premier Medical Center Zamboanga about the correct waste segregation, collection, disposal, and transport of health care waste by giving an overview of the various kinds of medical waste. Enhance awareness of environmental problems related to medical waste.

#### 3. SCOPE

Applicable to all the members of healthcare waste committee

#### 4. DEFINITION OF TERMS

- **a. Materials Recovery Facility (MRF)** shall include solid waste transfer station or sorting station, drop-off center and a recycling facility.
- **b.** Hazardous waste substances that are without any safe commercial, industrial, agricultural or economic usage and are shipped, transported or brought from the country of origin for dumping or disposal into or in transit through any part of the territory of the Philippines; by-products, side-products, process residues, spent reaction media, contaminated plant or equipment or other substances from manufacturing operations and as consumer discards of manufactured products which present unreasonable risk and/or injury to health and safety to the people or to the environment
- **c. Hazardous waste generator** a person who generates or produces hazardous wastes, through any institutional, commercial, industrial or trade activities. Hazardous waste generator also refers to the project/establishment
- **d.** Hazardous waste manifest is the hazardous waste tracking system through a receiving and shipping documentation and certification process following the "cradle to cradle" cycle of hazardous waste management.
- **e. Hazardous waste transporter** means a person who is registered to transport hazardous wastes
- **f. Hazardous waste treater/STP/TSD** facilities where hazardous wastes are transported, stored, treated, recycled, reprocessed, or disposed of.
- **g. Ignitable** are substances which can create fire under certain conditions, including but not limited to the following: liquids, such as solvents that readily catch fire and friction sensitive substances.



- **h.** Infectious waste is a type of health care waste suspected to contain pathogens (bacteria, viruses, parasites or fungi in sufficient concentration or quantity to cause disease in susceptible hosts
- **i. Reactive** are defined as substances that: Are unstable under normal conditions and readily undergo violent change without detonating React violently with water and create spontaneously Explosive mixtures like toxic gases, vapors or fumes Are capable of detonating
- **j. Special wastes** shall refer to household hazardous wastes such as paints, thinners, household batteries, lead-acid batteries, spray canisters and the like. These include wastes from residential and commercial sources that comprise bulky wastes, consumer electronics, white goods, yard wastes that are collected separately, batteries, oil, and tires. These wastes are usually handled separately from other residential and commercial wastes.
- **k. Toxic** are substances, which when inhaled or ingested or if it penetrates the skin, may involve acute or chronic health risks including carcinogenicity, mutagenicity, or teratogenicity on human or other life forms.
- **I. Recycle** Using waste as material to manufacture a new product. Recycling involves altering the physical form of an object or material and making a new object from the altered material.
- **m. Residual waste** wastes that are non-compostable and non-recyclable that are deemed for disposal at DENR-accredited engineered sanitary landfill.
- **n. Re-use** Using an object of material again, either for its original purpose or for a similar purpose without significantly altering the physical form of the object or material.

#### 5. POLICY

- **5.1**. Hospital waste is disposed by specialized company and includes all types of medical waste.
- **5.2.** Hospital waste containers must be cleaned and maintained regularly.
- **5.3.** Hazard signs must be fixed in all medical waste containers.
- **5.4.** All hospital employees share responsibility in proper waste management and segregation.
- **5.5.** All employees are required to dispose waste on the right waste bin. Staff not following policies and procedures on health care waste management will be reprimanded, warned and subjected to disciplinary action of repeatedly committing the same violation.
- **5.7.** Staff who fail to follow health care waste management rules and procedures will be reprimanded, cautioned, and subjected to disciplinary action for repeating the same infraction.
- **5.8.** Healthcare facilities must follow regulations (DOH, DENR, and other recommendations) to guarantee proper waste classification, segregation, containment, treatment, and disposal.

#### 6. GUIDELINES AND PROCEDURE

#### **CATEGORIES OF HEALTH CARE WASTE:**

# 1. General Waste:

Comparable to domestic waste, this type of waste does not pose special handling problem or hazard to human health or to the environment. It comes mostly from the administrative and housekeeping functions of health care establishments and may also include waste generated during maintenance of health care premises.

#### 2. Infectious Waste:

This type of waste is suspected to contain pathogens in sufficient concentration of quantity to cause disease in susceptible host. This includes:

Cultures and stocks of infectious agents from laboratory work



- Waste from surgery and autopsies on patients with infectious diseases (tissues, materials equipment that have been in contact with human blood or other body fluids)
- Waste form infected patients in isolation wards (excreta, dressings from infected or surgical wounds, clothes heavily soiled with human blood or other body fluids)
- Waste that has been in contact with patients (e.g. tubing, filters, disposable towels, gowns, apron, gloves and laboratory coats)
  - Any other instruments or materials that have been in contact with infected persons.

# 3. Pathological Waste:

Pathological waste consists of tissues, organs, body parts, human fetus, blood and body fluids.

#### 4. Sharps:

Includes needles, syringes, sharps, saws, blades, broken glass, infusion sets, knives, nails and other that can cause cut or puncture wounds. Whether or not they are infected, such items are usually considered as highly hazardous health care waste.

#### 5. Pharmaceutical Waste:

Includes expired, unused, split, and contaminated pharmaceutical products, drugs, vaccines and sera that are no longer required and need to be disposed of appropriately.

#### 6. Chemical Waste:

Consist of discarded solids, liquid, gaseous chemicals, for example from diagnostic and experimental work and from cleaning, housekeeping and disinfecting procedures. Chemical waste from health care may be hazardous or non-hazardous.

Chemical waste is considered hazardous if it has at least one of the following:

- > Toxic
- Corrosive (e.g. acids ph<2 and bases ph>12)
- > Flammable
- Reactive ( explosive, water reactive, shock sensitive)
- Genotoxic (e.g. cytostatic drugs)

# 7. Genotoxic Waste:

May include certain cytotoxic drugs, vomit, urine, or feces from patients treated with cytotoxic drugs, chemicals, reagents and radioactive materials. This type of waste is hazardous and may have mutagenic, teratogenic, or carcinogenic properties.

#### 8. Radioactive Waste:

Includes disused sealed radiation sources, liquid and gaseous materials contaminated with radioactivity, excreta of patients who underwent radionuclide diagnostic and therapeutic applications, paper cups, straws, needles, syringes, test tubes, and tap water washing of paraphernalia.(Nuclear Med)

# **EXPOSITION TO DANGEROUS HEALTH CARE WASTE:**

## 1. Infectious Waste and Sharps Hazards:



Infectious waste can include a wide variety of pathogenic organisms. Infectious waste pathogens can enter the human body through a variety of routes, including puncture, abrasion, or cut in the skin, mucous membrane, inhalation, and ingestion.

The presence of concentrated pathogen cultures and contaminated sharps (particularly hypodermic needles) in the waste stream provides the greatest danger to human health. Sharps can not only create cuts and punctures, but if contaminated with germs, they can also infect wounds. Sharps are a particularly hazardous class due to the simultaneous risk of damage and disease transmission.

# 2. Chemical and Pharmaceutical Waste Hazards:

Although chemical and pharmaceutical products may be detected in small amounts in medical waste, they are harmful. These can produce intoxication through acute or chronic exposure, as well as injuries such as burns. Intoxication is caused by the absorption of a chemical or medicinal agent through the skin or mucous membranes, as well as by inhalation or ingestion. Contact with flammable, caustic, or reactive chemicals (e.g., formaldehyde and other volatile compounds) can cause damage to the skin, eyes, or mucous membranes of the airways. Burns are the most common type of injury. Chlorine and sodium hypo chloride are two of the most prominent members of these groupings.

# 3. Radioactive Waste Dangers:

Exposure to radioactive substances or objects polluted with radiation can induce health effects ranging from skin reddening and nausea to more significant issues such as cancer induction and genetic ramifications for future generations of the exposed individual.

External and internal exposures from an undiscovered contaminated working environment, as well as poor treatment and storage of radioactive waste and spent/unused radiation sources, can all pose health risks from low activity contaminated wastes.

## **Waste Disposal Procedure**

The procedure shall provide familiarization with the requirements of RA 9003 and its implementing rules and regulations (DENR Administrative Order No. 2013-22), including but not limited to proper hazardous waste handling, storage, labeling, transport, and treatment.

Its IRR or DAO 2013-22 ensures that hazardous waste generators, transporters, and treaters' requirements are developed and presented in a useful information/reference document for various stakeholders. It furthermore streamlines procedures for hazardous waste generation and compliance with legal and technical requirements.

This procedure was established to ensure that waste disposal at the workplace is carried out safely and in accordance with the law.

- 1. Use only the appropriate containers to store garbage. Do not place rubbish in containers that are not designated for that particular use. Note any segregation rules that may apply, such as those for recyclable materials.
- 2. Refrain from throwing rubbish into receptacles recklessly; instead, store it correctly within the unit.



- 3. Do not overfill waste containers. Inform a responsible person when additional resources are likely to be required.
- 4. The bags should be changed right away with new ones of the same type.
- 5. Sharp equipment and disposable items needles should not be recapped, bent or broken by hand, or handled in any other way by hand. To prevent manually recapping needles, forceps can be employed. Before disposing of disposable needles, scalpel blades, and other sharp objects, they must be kept in puncture-resistant containers and cleansed with a hospital-approved disinfectant.
- 6. Sharps should all be collected together, regardless of whether or not they are contaminated.
- 7. Containers should be puncture resistant and equipped with coverings; they should be rigid and impermeable in order to hold not only sharps but also any remaining liquids from syringes.
- 8. Infectious waste bags and containers should be labeled with the international infectious substance symbol. Report any leakage or overflow of waste from a waste container to a responsible person.
- 9. Ensure that any spillage of substances at the workplace is cleared in an approved manner and that any materials that have been used for cleaning are properly disposed of.
- 10. Staff should never try to fix segregation concerns by removing items from a bag or container after disposal or by putting one bag inside another bag of a different color.
- 11. If general and hazardous wastes are inadvertently combined, the resulting combination should be classed as hazardous health care waste.
- 12. Implement a preparation procedure, as well as a proper collecting system and disposal-soak needles in a hospital-approved disinfectant.
- 13. Make a note of any special arrangements or precautions that will have to be taken by the authorized waste remover.
- 14. Unless you are trained and authorized to do so, do not use disposal preparation equipment and machinery.
- 15. Wear any personal protective equipment that is required for the safe handling of waste products.
- 16. All secretaries of doctors should be provided with puncture proof containers for their sharps and are also instructed to follow hospital policies in waste disposal.
- 17. Storage area until transported to a designated off-site treatment facility. The area shall be marked with warning sign:

"Caution: BIOHAZARDS WASTE STORAGE AREA – UNATHORIZED PERSONS KEEP OUT."

# A. Waste Segregation

This establishment priority will be to reduce volume at the source. All Departments must actively promote the reduction and minimization of waste generation among their personnel. Responsibility for sorting and segregating biodegradable and non-biodegradable wastes shall be shared across all levels and sources (e.g., wastes are properly segregated in the offices and the material recovery facility or MRF).

# **Segregation of Health Care Waste**

After identifying types of hospital waste, they are segregated and placed in respective color-coded plastic bags accordingly. All patients room have two colored bins lined with color coded plastic bags

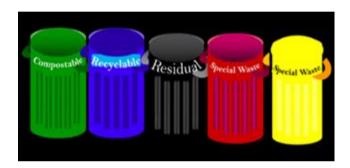


for dry and wet waste and special waste which located on the toilet. These bags are tied and placed in a big bin and properly segregated at the MRF and ready for transport.

## **Color-coded waste containers**

The strategy is based on a waste hierarchy which ranks the options for managing waste in order of what is best for the environment, starting with:

- Reduction reducing the quantity of waste or its hazardousness by using resources more efficiently.
- Re-Use putting materials back into service so that they do not enter the waste stream.
- Recovery through recycling, composting or recovery of energy from waste.
- Disposal the least attractive of the options with the emphasis on ensuring that disposal is undertaken to high standards to make it as sustainable as possible.



# **BLACK CONTAINER**

#### Non-infectious, non-biodegradable waste

- Plastic dextrose bottles and plastic distilled water containers
- Macroset/microset/soluset
- Plastic medicine bottle
- Dry food wrappers
- Empty cans
- Plastic bags/cellophane
- Paper and paper products

#### **GREEN CONTAINER**

# Non-infectious, biodegradable waste (Wet Waste-Kitchen Waste and Dietary Wastes)

- Peeling of fruits and vegetables
- Kitchen waste
- Egg shells
- Grasses and leaves
- Discarded foods
- Used cooking oils
- Non-infectious left over foods

# **YELLOW CONTAINER**

- Potentially infectious, pathological wastes
- Placenta and other body products
- Body tissues and specimen from laboratory
- Blood bags and used Tubing's
- Gloves
- Soiled dressings and swabs
- Rubber drains
- NGT and ET tubes



- Gauze, cottons, bandage, cotton applicators, soaked with blood and body fluids from dressing or infected wounds
- Used test strips
- Used mask or face mask
- Used oxygen catheter
- Specimen containers of blood and body fluids
- Used blood products bags and tubing

#### **YELLOW CONTAINER with Black Band**

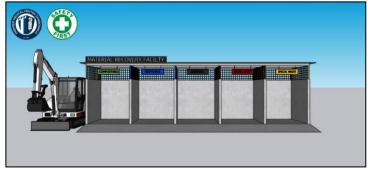
- Empty bottles of laboratory reagents
- > Empty bottles of acetone, alcohol, lacquer
- Busted fluorescent bulb
- Defective thermometer
- Expired and adulterated drugs and medicines
- Used batteries

# **RED CONTAINER**

- Sharps and Pressurized Containers
- Cannulas
- Disposable needles
- Surgical blades
- Razor blades
- Glass vials and ampoules
- Capillary tubing
- Needles and syringes
- > Stylet
- Pipette slides
- Blood lancets
- Rusty pins, nails, clips and screws
- Broken glasses

# **Material Recovery Facility (MRF) Policies:**

- > Shall be provided for proper segregation of wastes. The MRF shall be designed and constructed and shall cater the collection of waste on daily basis enough to temporarily store hospital wastes while waiting for haul out.
- Cytotoxic waste should be stored separately from other waste in a designated secured location.
- Radioactive waste should be stored separately in containers that prevent dispersion, and if necessary, behind lead shielding.
- MRF must have a designated washing area and pressure washer for cleaning purposes and should not be used by unauthorized person.
- MRF and dump area/yard shall be readily cleanable and easily accessible to vehicles that will be used for haul out. Recommended design of MRF is shown below:



# **Collection and Transport of Health Care Waste:**



The proper collection and transportation are important component in health care waste management. Its implementation requires the direct involvement of the health care facilities maintenance services, housekeeping services, motor pool service personnel and cooperation of all the health care personnel.

- 1. Health care waste collection practices should be designed to achieve an efficient movement of waste from points of generation to storage while minimizing the risk to personnel.
- 2. Suggested collection frequency on room-to-room basis is twice every shift or as often as necessary.
- 3. Time of collection regardless of category should be at the start of every shift.

#### **B. ON SITE COLLECTION OF WASTE:**

- ➤ Waste should not be allowed to accumulate at the point of production.
- Nursing Services and other clinical staff should ensure that waste bags are tightly closed or sealed when they are about three-quarters full and must inform the housekeeping dept. for the collection of waste.
- Garbage bag can be closed by tying the neck, but heavier gauge bags probably require plastic sealing tag of the self-locking type if available.
- Bags should not be closed by stapling.
- > Sealed sharp containers should not be placed in a labeled yellow infectious health care waste bag, it should be in a red labeled punctured proof container.
- > The bags and containers should be replaced immediately with new ones of the same type.

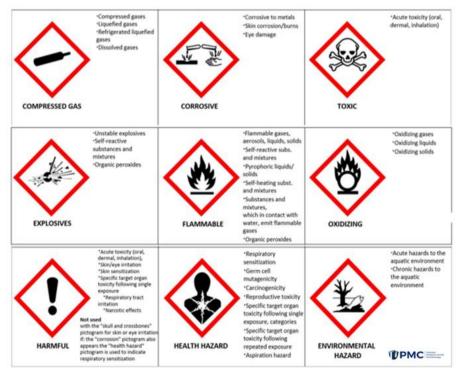
#### C. ON SITE TRANSPORT FROM GENERATOR POINT:

- > Transportation of waste within the area could utilize wheeled trolleys, containers, or carts that are dedicated solely for the purpose.
- The on-site collection vehicle (MOA) should be cleaned and disinfected daily with an appropriate disinfectant like chlorine compounds, formaldehyde.
- > All waste bag seals should be in place and intact at the end of transportation.
- Workers who will involve on transporting the waste should be equipped with appropriate personal protective equipment including heavy duty gloves, coveralls, and thick soled boots and leg protectors.



# **Pictorgrams:**

PPMC HW CLASS	HW NATURE/FORM	HW CHARACTERISTICS	GHS LABEL
Infectious Waste	Liquid	Toxic-Pathogens	INFECTIOUS WASTE Named with Gaze  Caution Named with Gaze
Radioactive Waste	Solid, Liquid, Gaseous	Radionucleids	
Waste with Inorganic Materials	Solid	Toxic,Corrossive	<u> </u>
Ink, Dyes, Pigments, Adhessive, Paints, Organic Sludge	Liquid	Toxic,Flammables	<u> �</u> �
Organic Waste (Grease Trap Waste)	Liquid	Toxic	
Oil (Used Cooking Oil)	Liquid	Toxic,Flammables	<b>№</b>
Oil (e.g.Contaminated Materials,rags)	Solid	Toxic,Flammables	<b>№</b>
Containers(e.g.Chemical,Paints Containers)	Solid	Toxic,Flammables	<u> </u>



Note: The aforementioned tables are subject to review and modification. -DCO/PCO



# 7. CONSTITUTION/COMPOSITION OF COMMITTEE

## **HEALTHCARE WASTE MANAGEMENT COMMITTEE**

Chairman: Chief Operating Officer - Dr. Giovanni Gimena

PCO Managing Head

Co - Chairman: Facility Manager - Engr. Carlos T. Santiago

Secretary: Pollution Control Officer / - Diana Rose Y. Landero

Waste Management Officer

Members:

All Department/Section Heads

Safety Officer - Al- Raffy Jumaani

Admin Coordinator - Mae-Ann Pallar

Nursing Director -

Nurse Senior Manager - CJ Ramos,RN

ICU -

OR -

NICU -

DR -

ER -

WARD -

Infection Control Nurse - -----

Dialysis Nurse Manager - Lanny Espirusanto, RN

Chief Pharmacist - -----

Chief Radiologic Technologist- Mark Jeffrey Mabalot, RRT

Chief Nutritionist Dietician - -----

Chief Medical Technologist - Ms. Luzette Halili, RMT

Housekeeping Supervisor - -----

Supply Officer/Procurement - Rico Enriquez

# 8. ROLES AND RESPONSIBILITIES

**Chairman: Chief Operating Officer / PCO Managing Head** 



- 1. Organizes an HWMC (Hospital Waste Management Committee) to develop the hospital's waste management plan (WMP).
- 2. The WMP is supervised and coordinated by a WMO (Waste Management Officer), but the Chief of the Hospital retains overall responsibility for ensuring that medical waste and other wastes are disposed of in accordance with national guidelines.
- 3. Keeps the management plan up to date.
- 4. A Pollution Control Officer is appointed/designated (PCO)
- 5. Provide adequate financial and human resources to ensure the plan's successful implementation.
- 6. Makes certain that the monitoring procedures are included in the plan. The disposal system's efficiency and effectiveness should be monitored so that it can be updated and improved as needed.
- 7. Ensures adequate training for key staff members and designates the staff responsible for course coordination and implementation.

# **Co-Chairman: Facility Manager**

- 1. He or She is responsible for the installation and maintenance of waste storage facilities and handling equipment that comply with the specifications of the national guidelines.
- 2. He or she is also accountable for the adequate operation and maintenance of any on-site waste treatment equipment.
- 3. He or she is also responsible for the staff involved in waste treatment.

## **Secretary: Safety Officer**

- 1. Make meeting arrangements and notify members of the meeting's date, time, and location.
- 2. Responsible for organizing all hospital staff waste segregation, storage, transportation, and disposal training.
- 3. Coordinate with Dept. Heads must ensure that training activities and other waste management issues specific to specific departments are coordinated.
- 4. Reports to the Chairman on the work of the waste management committee.
- 5. Launch and
- 6. Expand Environmental Management Activities, such as a public awareness campaign within their organization and another department; and
- 7. Participate in multi-party monitoring team activities and meetings, as appropriate.
- 8. Constant monitoring and collaboration with the PCO/WMO.

# **MEMBER:**

#### **Pollution Control Officer**

 Attends to all hospital requirements prior to the construction or installation of pollution control facilities, including the application and security of necessary pollution permits, registrations, and renewals;



- 2. Reports must be submitted on time and validated/certified as correct by the Managing Head, as specified in section 7 of DENR Administrative Order No. 26 or as required by the Department.
- 3. As liaison officer with the Department, he shall keep himself abreast with the requirements of the Department and the latest available technology on the prevention, control, and abatement of pollution;
- 4. Maintains contact with the city/provincial/municipal or local pollution control officer;
- 5. Attends meetings for the Pollution Control Officer as the duly authorized representative of the Establishment, as well as technical conferences. Hearings and meetings, particularly on issues concerning the establishment's pollution cases.
- 6. Facilitate compliance of the establishment he represents with the requirements that may be prescribed by the Department from time to time;
- 7. Recommends to management the installation and operation of additional pollution abatement equipment; and
- 8. As needed, handles other environmental concerns together with the Waste Management Committee.

# **Waste Management Officer**

- 1. The WMO is in charge of the waste management system's day-to-day operations and monitoring.
- 2. He or she should have direct access to all hospital staff members.
- 3. The WMO reports directly to the Chief of Hospitals/ Managing Head.
- 4. WMO works in collaboration with the Infection Control Officer, Pharmacist, Radiation Officer, Admin Coordinator and other departments. Heads to become acquainted with the proper procedure for handling and disposing of all types of waste in the hospital.
- 5. He or she should have authority over internal waste container collection and transportation to the waste storage facility/waste holding area.
- 6. He should ensure the availability, proper use, and upkeep of waste collection supplies and facilities.
- 7. The WMO should coordinate and monitor all waste disposal operations, ensuring that wastes collected from the hospital are transported to the designated treatment and disposal site by an appropriate vehicle.

# **Department/Section Heads**

- 1. The Department/Section Heads are in charge of the segregation, storage, and disposal of waste generated in their departments.
- 2. They must ensure that all personnel in their department are aware of the segregation and storage procedures, and that all personnel adhere to the highest standards.
- 3. They should also make certain that key personnel in their department receive waste segregation and disposal training.

#### **Infection Control Nurse**

- 1. Monitors all hospital personnel's adherence to proper waste management.
- 2. Reports on the hospital's organizational compliance with waste management disposal.



- 3. Recommends improvements in waste management, including the handling of hazardous healthcare waste, as well as infection control.
- 4. Encourage medical and nursing staff to be vigilant as to ensure that hospital attendants and ancillary staff follow correct procedures at all times.
- 5. Observes aseptic practice and provides advice on isolation techniques.

# **Housekeeping In-Charge**

- 1. Maintain a high level of cleanliness and general upkeep in all areas for which the department is responsible.
- 2. Comply with all statutory and organizational requirements for health, safety, and waste management.
- 3. Responsible for keeping a record of all waste collected, stored, and disposed of from all waste generators in the establishment.

#### 9. REFERENCE

- 1. MODULE 5: HCWM Planning in a Healthcare Facility <a href="https://cdn.who.int/media/docs/default-source/wash-documents/wash-in-hcf/training-modules-in-health-care-waste-management/module-5---hcwm-planning-in-a-health-care-facility.pdf?sfvrsn=9761e19a 4</a>
- 2. RA 6969: Toxic Substances and Hazardous Waste Management Act (DENR Administrative Order No. 29 Series 1992)
- 3. RA 9003 or the Ecological Solid Waste Management Act of 2000
- 4. DOH Health Care Waste Management (4th Edition)



DEPARTMENT	HOSPITAL WIDE	ISSUE DATE
TITLE/DESCRIPTION	HWCM CONTINGENCY AND EMERGENCY PLAN	EFFECTIVE DATE
POLICY NO.	PMCZ-HCWM-2022-005	REVIEW DATE ORIGINAL

# **HEALTHCARE WASTE MANAGEMENT COMMITTEE**

	TABLE OF CONTENTS
1	Introduction
2	Purpose
3	Scope
4	Policy
5	Contingency and Emergency Plan
6	Reference



#### 1. INTRODUCTION

A waste management committee assesses and develops programs, policies and goals that focus on waste management and minimization. The committee should include representatives from the numerous departments that impact waste management within the facility. The committee is responsible for determining the waste-related programs to implement within the facility and assumes accountability for attaining pre-defined goals.

#### 2. PURPOSE

This embodies the guidelines and educate healthcare personnel of Premier Medical Center Zamboanga about the correct waste segregation, collection, disposal, and transport of health care waste by giving an overview of the various kinds of medical waste. Enhance awareness of environmental problems related to medical waste.

## 3. SCOPE

Applicable to all the members of healthcare waste committee.

## 4. POLICY

- **4.1**. Hospital waste is disposed by specialized company and includes all types of medical waste.
- **4.2.** Hospital waste containers must be cleaned and maintained regularly.
- **4.3.** Hazard signs must be fixed in all medical waste containers.
- **4.4.** All hospital employees share responsibility in proper waste management and segregation.
- **4.5.** All employees are required to dispose waste on the right waste bin. Staff not following policies and procedures on health care waste management will be reprimanded, warned and subjected to disciplinary action of repeatedly committing the same violation.
- **4.6.** Staff who fail to follow health care waste management rules and procedures will be reprimanded, cautioned, and subjected to disciplinary action for repeating the same infraction.
- **4.7.** Healthcare facilities must follow regulations (DOH, DENR, and other recommendations) to guarantee proper waste classification, segregation, containment, treatment, and disposal.

## 5. CONTIGENCY AND EMERGENCY PLAN

# A. USED OIL (HW NO.I101):

# Responding to Releases of Used Oil:

The following procedures should be followed by the workers to manage spills of used oil and provide any necessary equipment:

- 1. Stop the release. If the spill occurs because a 200 liters drums has been knocked over, the drum should be righted to stop more used oil from being released.
- 2. If the spill occurs because a valve on a storage device has been left open, the valve should be closed. If a leak is a result of a puncture in the tank or drum, rags or similar materials should be used to plug the leak.
- 3. Contain the release. A sorbent, such as kitty litter or sawdust /fine sand, should be spread over the spilled used oil. Clean up the release.



4. Properly manage the solid materials generated during the cleanup. Place solid materials used to clean up a spill of used oil into a leak proof storage device. Materials contaminated with used oil are managed in the same manner as hazardous waste.

# **Spill Procedures:**

The following procedures should be followed in the event of a hazardous materials spill:

- 1. If possible, shut off any sources of ignition and/ or the source of the spill without endangering oneself.
- 2. Evacuate the immediate area and closed the doors.
- 3. If building evacuation is necessary, pull the fire alarm.
- 4. Call the National Emergency Telephone Number,911 or the Local Disaster Risk Reduction Management Council (LDRMMC), local Philippines National Police (PNP), local Environmental Management Bureau (EMB) hotline numbers.

# Procedures in the event of a fire or explosion:

- 1. Pull fire alarm.
- 2. Call the National Emergency Telephone Number,911 or the LDRMMC, local PNP hotline no.
- 3. Proceed to the nearest available exit by following exit signs.
- 4. Close doors (unless there is a natural gas leak).
- 5. Do not smoke or use elevators while exiting.
- 6. Do not return for any reason once cleared of the building.
- 7. Assemble with other building occupants at the designated area.
- 8. Once the building or area is considered safe, the LDRRMC Incident Commander will announce that re-entry is permitted.

## **Emergency Coordinator Duties:**

The following is a list of emergency coordinator's duties during a fire, explosion or chemical spill involving hazardous waste:

- 1. Available 24 hours a day to respond to an emergency within a short period of time.
- 2. Responsible for coordinating all emergency response measures.
- 3. Familiar with:
  - All aspects of the facility's contingency plans.
  - All aspects of the facility operation and activities.
  - Location of all hazardous waste records within the facility.
  - Authority to commit the resources needed to carry out the contingency plan.

# Emergency procedures with the Emergency/ Safety Coordinator will follow in the event of fire, explosion, or chemical spill:

- 1. Activate internal facility alarms and communications systems.
- 2. If needed, notify LDRMMC, local PNP, local EMB offices.
- 3. If a release has occurred, identify the source, character, amount and extent of any released materials by record review or chemical analysis.
- 4. Asses the hazards to human health and the environment, considering all direct and indirect effects.
- 5. If it is determined that the facility has had a fire, explosion or release which could be threaten human health or the environment outside the facility:
  - a. Determine if local evacuation may be necessary, and if so, notify the appropriate local authorities and be available to assist local authorities with evacuation measures;
  - b. Notify LDRMMC, local PNP, local EMB offices with the following information:



- Emergency/Safety Coordinator's name and contact number;
- Facility name and Address;
- Time and type of Incident;
- Quantity of materials involved to the extent known;
- Extent of any Injuries;
- Possible hazards to human health and the environment outside the facility.
- 6. Take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures will include, where applicable, stopping processes and operations, collecting and containing release waste, and removing or isolating containers;
- 7. If the facility stops operations in response to a fire, explosion, or chemical release, the emergency coordinator will monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, wherever this is appropriate;
- 8. Immediately after the emergency, the emergency coordinator will provide for treating, storing, or disposing of recovered waste, contaminated soils, or surface water, or any other material that results from a release, fire, or explosion at the facility' and
- 9. Ensure that in the affected areas of the facility, no waste that may be incompatible with the released material is stored until cleanup procedures are completed and all emergency equipment is cleaned and restored to a usable condition.

# B. BROKEN/BUSTED LED LAMPS AND BULBS (HW NO. D402 and HW NO. D407): Contingency plan for Broken/Busted LED, Fluorescent Lamps, FCL and Bulbs:

- Isolate the scene and deny entry (establish zone)
- Identify the product and product characteristics (if identification cab be done safely, e.g., from a distance).
- Asses the incident and request appropriate measures.
- Ensure notification of appropriate government agencies.
- If warranted, establish a command post in the support zone using the Incident Command System (ICS).
- Provide emergency medical care, including decontamination of exposed persons.
- Determined the need for protective action (e.g., evacuation or sheltering in place).
- Conduct evacuation, if appropriate.

# Emergency Plan: Responding to clean-up and disposal to Broken/Busted LED, Fluorescent Lamps, FCL and Bulbs:

The most important steps to reduce exposure to Broken/Busted LED, Fluorescent Lamps, FCL and Bulbs are:

# 1. Before Clean-up

- a. Have people and pets leave the room, and avoid the breakage area on the way-out.
- b. Open window or door to the outdoors and leave the room for 5-10min.
- c. Shut off the air conditioning system, if applicable.
- d. Prepare the needed materials for the cleanup of the Broken/Busted LED, Fluorescent Lamps, FCL and Bulbs, such as:
  - Stiff paper or cardboard
  - Sticky tape (e.g., duct tape).
  - Damp Paper towels or disposable wet wipes (for hard surface).
  - Glass jar with metal lid (such as canning jar) or a sealable plastic bag.



# 2. During Cleanup

- a. Cleanup steps for hard surface. Carefully scoop up the glass fragments and powder using the stiff paper or cardboard and place debris and the stiff paper/cardboard in the glass jar with lid. If glass jar is not available, use a sealable plastic bag.
- b. Use sticky paper, such as duct tape, to pick up any remaining small glass fragments and powder. Place the used tape in the glass or plastic bag.
- c. Vacuuming of hard surfaces during cleanup is not recommended unless broken glass remains after all other cleanup steps have been taken.
- d. If vacuuming is need to ensure removal of all broken glass, keep the following:
  - Keep a window or door to the outdoor open.
  - Vacuum the area where the lam[ was broken using the vacuum hose, if available;
     and
  - Remove the vacuum bag (or empty and wipe the canister) and seal the bag/vacuum debris and any materials used to clean the vacuum, in plastic bag.
- 3. Promptly place all bulb debris and cleanup materials, including vacuum cleaner bags, outdoors in a trash container or protected area until materials can be disposed of. Avoid leaving any lamp fragments or cleanup materials indoors.
- 4. Placed the collected waste in the designated area that act as containment with roof cover and door locks to isolate materials from unauthorized persons. The collected waste materials temporarily stored in the hazardous waste containment area of the facility will be collected and transported by a DENR Accredited Third Party Private Entity for final treatment/Disposal.
- 5. Wash hands with soap and water after disposing of the jars of plastic bags containing the Broken/Busted LED, Fluorescent Lamps, FCL and Bulbs debris and cleanup materials.
- 6. Continue to air out the room where the Broken/Busted LED lamps and Bulbs was broken a leave the air conditioning system shut off, as practical for several hours.

# C. PATHOLOGICAL OR INFECTIOUS WASTE (HW NO. M501):

# **Contingency Plan: Spillage of potentially pathological or infectious waste substances:**

- Assesses health risks to staff, patients and visitors from climate-related hazards of concerns including assessments of the effectiveness of existing control measures.
- Establishes plan specifying how the facility will manage staff-related issues during an emergency (e.g., when staff are affected while at work, when staff are unable to come to work).
- Secures access to critical back-up supplies and resources (medical equipment, treatments supplies, required experts, alternative energy supplies).
- Ensures sufficient emergency room surge capacity to manage emergency situation effectively.
- Ensures that coordination and communication mechanisms are in place with external agencies and stakeholders.
- As part of the emergency plan, adopts an incident management system from Infection Prevention and Control Committee (IPCC), rapid needs assessments and implementation of incident response plans that are robust in the face of spillage of pathological or infectious waste emergency situation.
- Raises awareness of the staff, patients, visitors and the community of risks to health from spillage of pathological and infectious waste and effective health protection measures.



# Emergency Plan: Special Precautions for clearing up spillage of potentially Pathological or infectious waste substances:

- The place to be cleared must be secured or cordoned. Only authorized personnel or the PCO, Safety Officer and ICN should be allowed in the area.
- In clearing-up spillage of body fluids or other potentially hazardous substances, particularly if there is a risk of splashing, eye protectors and facemasks should be worn, in addition to gloves and overalls. The need for respirators/gas mask is also necessary if an activity is particularly dangerous, for examples, if it involves toxic dust, chemical reagents, the cleaning of contaminated equipment. Residues should be recovered as completely as possible using hand tools (shovel), and then packed safely. It is especially important also to recover spilled droplets of metallic mercury. If a leakage or spillage involves infectious material, the floor should be cleaned and disinfected after most of the waste had been recovered.

# Emergency Plan: Response to injury and exposure to pathological or infectious waste:

- All staff that handles pathological or infectious waste must be trained to deal with injuries and exposures. Health care establishments should develop a program that would prescribe the actions taken in the event of injury or exposure to a hazardous substance. Essential elements of the program should include the following:
  - a. Immediate first-aid measures, such as cleansing of wounds and skin and irrigation (splashing) of eyes with clean water.
  - b. Immediately reports the incident to a designated responsible person.
  - c. Retention, if possible, of the item involved in the incident; details of its source for identification of possible infection.
  - d. Additional medical attention in an accident and emergency or occupational health department, as soon as possible.
  - e. Medical surveillance.
  - f. Blood or another test if indicated.
  - g. Recording of the incident.
  - h. Investigation of the incident, and identification and implementation of remedial action to prevent similar incident in the future.

In case of needle stick Injury, bleeding of the wound should be encouraged and the area should be washed under running water. The remaining elements of the accident's response plan should then be followed. The purpose of the incident reporting should not be seen as punitive; active support by managers should encouraged prompt and accurate reporting.

# Emergency Plan: General guidance for spill control of pathological or infectious waste:

- Vacate and secure the area to prevent further exposure of other individual.
- Provide first aid and medical care to injured individual.
- Inform the designated person (usually the WMO and ICN) who should coordinate the necessary actions.
- Determine the nature of the spill.
- Provide adequate protective clothing to personnel involved in cleaning up.
- Limit the spread of spill.
- Vacate all people not involved in cleaning up if the spillage involves particularly hazardous waste substance.
- Neutralize or disinfect the spilled or contaminated material if indicated.



- Collect all spilled and contaminated material (sharps should never be picked up by hand; brushes and pans or other suitable tools should be used). Spilled material and disposable contaminated items for cleaning should be placed in the appropriate waste bags or containers.
- Decontaminate or disinfect any tools that were used.
- Seek medical attention if exposure to hazardous material has occurred during the operation.

# **Emergency Plan: Reporting accidents and incidents;**

- Health care employees should be encouraged to report any spillage. They should be educated on what hazardous wastes are so that spill can be properly reported. Accidents or Incidents, including near-misses, spillage, damaged containers, inappropriate segregation, and any incidents involving sharps should be reported to the Waste Management Committee and Infection Prevention and Control Committee (if waste is involve).
- The report should include the details of :
  - The nature of the accidents or incident
  - The place and time of the accident or incident
  - The staff who are directly involved.
  - Any other relevant circumstances.

•

Note: Please refer to the "Blood & Body Fluid Exposure Form" with policy no. PMCZ-IPC-PP-34 from Infection Prevention and Control Division. The record of the investigation and subsequent remedial measures should be kept.

# 6. CONSTITUTION/COMPOSITION OF COMMITTEE

# **HEALTHCARE WASTE MANAGEMENT COMMITTEE**

Chairman: PCO Managing Head - Dr. Giovanni Gimena

Co - Chairman: Facility Manager - Engr. Carlos T. Santiago

Secretary: Pollution Control Officer / - Ms. Diana Rose Y. Landero

Waste Management Officer

Members:

All Department/Section Heads

Safety Officer - Mr. Al- Raffy Jumaani

Admin Coordinator - Ms. Mae-Ann Pallar

Nursing Director - Ms. Fatima Dulin, RN, MN

Nurse Senior Manager - Mr. Cesar Jay Ramos, RN



ICU - Ms. Abigail Tabunag, RN

WARD - Ms. Jocelyn Sahirin, RN

Infection Control Nurse - Ms. Fatima Dulin, RN, MN

Dialysis Nurse Manager - Ms. Lani Espiritusanto, RN

Chief Pharmacist - Ms. Fatiha Bugtong, RPh

Chief Radiologic Technologist- Mark Jeffrey Mabalot, RRT

Chief Medical Technologist - Ms. Luzette Halili, RMT

Supply Officer/Procurement - Mr. Rico Enriquez

#### 7. REFERENCE

- 1. MODULE 5: HCWM Planning in a Healthcare Facility <a href="https://cdn.who.int/media/docs/default-source/wash-documents/wash-in-hcf/training-modules-in-health-care-waste-management/module-5---hcwm-planning-in-a-health-care-facility.pdf?sfvrsn=9761e19a 4</a>
- 2. RA 6969: Toxic Substances and Hazardous Waste Management Act (DENR Administrative Order No. 29 Series 1992)
- 3. RA 9003 or the Ecological Solid Waste Management Act of 2000
- 4. DOH Health Care Waste Management (4th Edition)