Los Angeles General
Medical Center

2023

HAZARDOUS MATERIALS & WASTE MANAGEMENT PLAN

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I MISSION

The mission of Los Angeles General Medical Center Management of the Environment of Care program is to provide an environment that is free of physical, and other health hazards, to ensure a high level of security for people and property. Consistent with this mission, the Senior Executive Council (SEC), administration, and medical staff shall provide ongoing support for the Safety Program described in this plan.

II PURPOSE

The purpose of the Hazardous Materials and Waste Management Plan is to design a program that identifies and manages materials known to have the potential to harm humans or the environment. The plan includes processes designed to minimize the risk of harm, education, procedures for safe use, storage and disposal, and management of spills or exposures.

III SCOPE

The Hazardous Materials and Waste Management plan is designed to address the risks posed by the assortment of substances used at this facility that have the potential to harm the environment, Los Angeles General Medical Center staff, patients, and visitors. It also assures compliance with relevant codes and regulations. Including EC 01.01.01 EP 5.

Los Angeles General Medical Center along with its off-site facilities develops and maintains written management plans describing the processes it utilizes to effectively manage hazardous materials and waste.

IV OBJECTIVES

A. Clearly defined processes to select, transport, store, use and dispose of hazardous materials.

B. The development of written procedures to separate, segregate, package and dispose of hazardous materials and waste.

C. Create and maintain an inventory that identifies hazardous materials and waste used, stored, or generated using criterion consistent with applicable laws and regulations.

D. The Hazardous waste program includes:

- Chemical waste
- Bio-hazardous waste, including Chemotherapeutic, Pharmaceutical, Pathological and Red Bag Waste
- Universal Waste, including Mercury containing devices, Lamps, Batteries, and Dental Amalgam
- Radioactive Waste

E. Monitoring of gases and vapors, including Ethylene Oxide, Nitrous Oxide, vapors generated by Glutaraldehyde; cauterizing equipment, such as Lasers; Waste Anesthetic Gases disposal, (WAGD), and Laboratory rooftop exhaust is performed at least annually where used, and the results reported to affected departments.

F. Inspections are conducted monthly to assure that areas used to store and handle hazardous waste have adequate space, are separated from clean goods, sterile goods and food.

G. Hazardous chemicals are stored appropriately according to their hazards.

H. Spills, releases, and exposures to hazardous chemicals and waste are reported, in aggregate, to the Environment of Care Committee.

I. Staff who handles hazardous chemical materials and/or hazardous waste is trained regarding the hazardous of the materials they handle, protective methods, and responses to spills, and exposures.

J. The performance monitor for hazardous materials and waste is evaluated and reported to the Environment of Care Committee.

K. Staff who may discover or are involved with emergency spills is provided with appropriate training to recognize spills that may exceed the response/clean up ability of the hazardous material user.

L. Annual evaluations of the scope, objectives, performance, and effectiveness of the program.

V ORGANIZATION AND RESPONSIBILITY

A. The SEC receives regular reports on the activities of the Hazardous Materials and Waste Program from the Environment of Care Committee. The SEC reviews reports and, as appropriate, communicates concerns about identified issues and regulatory compliance. The SEC provides support to facilitate the ongoing activities of the Hazardous Materials and Waste Program.

B. The COO receives regular reports of the current status of the Hazardous Materials and Waste Program through the SEC. The COO reviews the report and, as necessary, communicates concerns about key issues and regulatory compliance to the Director of Facilities Management. The Director of Facilities Management, the Safety Officer with the Hazardous Materials Coordinator establishes operating and capital budgets for the Hazardous Materials and Waste Program.

C. The Hazardous Materials Coordinator works under the general direction of the Chief Stationary Engineer. The Hazardous Materials Coordinator oversees the Hazardous Materials and Waste Program.

D. In addition to the New Employee Orientation classes arranged by Human Resources, the Department Heads are responsible for orienting new personnel to the department and as appropriate, to job and task specific uses of hazardous material or waste. When necessary, the Hazardous Materials Coordinator will provide assistance.

E. Individual personnel are responsible for learning and following job and task specific procedures for safe handling and use of hazardous materials and waste.

VI PROCESSES

STANDARD EC.01.01.01 THE HOSPITAL PLANS ACTIVITIES TO MINIMIZE RISKS IN THE ENVIRONMENT OF CARE.

EC.01.01.01 EP: 6
The hospital has a written plan for managing the following: Hazardous materials and waste

STANDARD EC.02.02.01 THE HOSPITAL MANAGES RISKS RELATED TO HAZARDOUS MATERIALS AND WASTE.

EC.02.02.01 EP: 1

The hospital maintains a written, current inventory of hazardous materials and waste that it uses, stores, or generates. The only materials that need to be included on the inventory are those whose handling, use, and storage are addressed by law and regulation. (See also lC.02.01.01, EP 6; MM.01.01.03 EP 3)

The supervisor of each hazardous materials user area maintains an inventory of the hazardous materials they manage. The department leadership assures their safe selection, storage, handling, use, and disposal.

EC.02.02.01 EP: 3

The hospital has written procedures, including the use of precautions and personal protective equipment, to follow in response to hazardous material and waste spills or exposures.

The Hazardous Materials Coordinator develops and maintains emergency procedures for the Hazardous Materials and Waste Program.

The hospital requires all employees who work in with hazardous materials be trained in the safe handling of such materials and be provided Personal Protective Equipment (PPE) along with training in the use such equipment.
Los Angeles General Policy 610

EC.02.02.01 EP: 4

The hospital implements its procedures in response to hazardous material and waste spills or exposures. (See also lC.02.01.01, EP 2)

The Los Angeles General Medical Center has organized a spill procedure to address spills. The emergency operator will contact the Hazardous Materials Coordinator, who will evaluate the initial information made available to decide as to whether the incident should be handled by the in-house responders or whether a spill clean-up contractor will be utilized. All staff is trained to recognize the potential for a spill that is not safe to handle, and to contact the emergency operator when situations occur. Staff is cautioned to ensure safety of life and not to handle chemical spills that exceed their training, or the personal protection they have available.

EC.02.02.01 EP: 5

The hospital minimizes risks associated with selecting, handling, storing, transporting, using and disposing hazardous chemicals.

The Los Angeles General Medical Center maintains appropriate handling and storage areas for hazardous wastes. The waste is segregated to minimize the possibility of contaminating food, clean, and sterile goods, or contact with staff, visitors or patients.

Hazardous wastes are moved in covered or closed containers, from holding areas to the storage space designated for processing and handling those wastes. Those spaces are inspected weekly, to assure that they are adequate for their intended use, that appropriate personal protective equipment is available, and that it is always clean and orderly.

Routing of materials during transport is determined to minimize contact with patients and visitors, and to protect staff and the facility from contamination. Where food, clean sterile materials, and staff are moved on the same transportation vehicles as wastes (e.g., elevators), scheduling and other practices minimize the potential for cross contamination.

Regular inspections of the storage areas and of behaviors in transport are included as part of environmental tours and problems are identified and documented as part of the environmental tours program.

The fixed treatment unit (FTU), located in the lower hazardous materials yard is used for batch neutralization of accumulated Ortho-phthaladehyde (OPD) that was used in the instrument sterilization processes. The accumulation rate for Metricide has drastically decreased and no longer requires neutralization and is disposed of by hazardous waste hauling contractor. This operation is monitored and is to be phased out with a lesser hazardous means of sterilization. *Los Angeles General Policy 639,605,219,229*

EC.02.02.01 EP: 6

The hospital minimizes risks associated with selecting, handling, storing, transporting, using and disposing radioactive materials.

The Los Angeles General Medical Center meets these goals and its regulatory obligation by establishing a Radiation Safety Committee and a Radiation Safety Officer. The Los Angeles General Medical Center administrative responsibility for compliance with the California Radiation Control Regulations (CRCR) Title 17, is delegated by the Executive Director of Los Angeles General Medical Center to the Radiation safety Officer (RSO).

In order to ensure that radiation-producing machines and radioactive materials are managed correctly, safely, and efficiently, the Executive Director and the Chief of Staff of the Medical Center have established a radiation safety program with responsibilities distributed to several components as follows:

a. Radiation Safety Committee (RSC)
b. Radiation Safety Officer (RSO)
    1.) Radiation Safety Officer
    2.) Health Physicist
c. Department Chair persons
d. Authorized Users and Principal Investigators.

The appointments of a Radiation Safety Committee and a Radiation Safety Officer are required by State regulations. The Radiation Safety Officer and Chairperson of the committee are subject to the approval of the state and are specifically named on the Radioactive Material License issued by the State Department of Health Services. Authorized users are those qualified physicians or scientists who are approved and named by the state in the Medical Center's Radioactive Materials License (RAML) to perform specific diagnostic, therapeutic, or scientific procedures. Principle investigators are physicians or scientists specifically approved by the Radiation Safety Committee to perform certain investigational projects.
Los Angeles General Policy 605

EC.02.02.01 EP: 7

The hospital minimizes risks associated with selecting and using hazardous energy sources. Note 1: Hazardous energy is produced by both ionizing equipment (for example, radiation and xray equipment) and nonionizing equipment (for example, lasers and MRIs).
(Not needed, redundant)

Each approved user must maintain an inventory of radioactive materials purchased, used, and disposal under his control.

a. The inventory record contains the following information:

- The purchase order number (or transfer number)
- The approval number
- The date of receipt of shipment
- The name of the radioactive material, its chemical form or trade name and activity received
- A running log indicates the date and activity used or disposed and the total amount remaining on hand at time at the time of the notation.

b. The stock of radioactive material is stored in a safe, locked place. The inventory log must be available for inspection when necessary.

c. A running inventory is maintained for each item received. When the user permit for a radioactive material is renewed, an inventory of all radioactive materials held under that permit must be submitted to the Radiation Safety Office. (we do not issue user permits that would be part of a broad scope license, which we do not have. I think you could delete c.

EC.02.02.01 EP: 8

The hospital minimizes risks associated with disposing hazardous medications.
(See also MM.01.01.03, EPs 1-3)

Excess pharmaceutical (non-RCRA) which includes overstock, partially used excess pharmaceuticals, manufacturer recall, expired, deteriorated, discontinued, or deleted from formulary, are to be removed from all areas (wards, clinics, pharmacy satellites, ancillary areas) and returned to the Pharmacy Service Building, Salvaged Unit. These drugs shall be accompanied by a properly completed **U-Form** (a pharmacy request form). The salvage Unit will coordinate the disposal of these products with a licensed waste vendor.

Pharmaceutical waste (exclude RCRA) generated in the Clinical Pharmacy is deposited in a pharmaceutical waste container, labeled "**Pharmaceutical Waste, Incinerate Only."**

RCRA pharmaceutical waste (hazardous waste) which is returned to Pharmacy Services for disposal must be accompanied by a U-Form.

EC.02.02.01 EP: 9

The hospital minimizes, risks associated with selecting, handling, storing, transporting, using, and disposing hazardous gases and vapors. Note: Hazardous gases and vapors include, but are not limited to, ethylene oxide and nitrous oxide gases; vapors generated by glutaraldehyde; cauterizing equipment, such as lasers; waste anesthetic gas disposal (WAGD); and laboratory rooftop exhaust. (For text, refer to NFPA 99-2012: 9.3.8; 9.3.9)

Department heads are responsible for managing the program and monitoring gases and vapors. Los Angeles General Medical Center hazardous gases include, but are not limited to Ethylene Oxide, Nitrous Oxide gases. Results of current monitoring indicate that exposure levels are below the regulatory action level. If a monitor result were above the action level, corrective action and additional testing should be done to demonstrate a safe working environment.
(Refer to NFPA 99-2012 9.3.8; 9.3.9) Los Angeles General Policy SP 117

EC.02.02.01 EP: 10

The hospital monitors levels of hazardous gases and vapors to determine that they are in safe range.
Note: Law and regulation determine the frequency of monitoring hazardous gases and vapors as well as acceptable ranges.

The Los Angeles General Medical Center ensures that all piped medical gas and vacuum systems are tested and certified including cross-connections, piping purity, and pressure tested by a qualified licensed contractor prior to being placed into service, after installation, modification or repair. These systems are also inspected and re-certified annually. These systems include master alarm panels, local alarm panels, automatic pressure switches, shut off valves, flexible connectors, outlets and labels. Major components of these systems have more frequent testing/inspections as determined by the risk evaluation process.
Los Angeles General Policy SP 116, SP 117

EC.02.02.01 EP: 11

For managing hazardous materials and waste, the hospital has the permits, licenses, manifests, and safety data sheets required by law and regulation.

The Los Angeles General Medical Center has obtained and maintains permits and licenses for handling and disposal of hazardous wastes, including chemical wastes, radioactive materials, and bio- hazardous (potentially infectious medical wastes) from the appropriate federal, state, and municipal agencies.

Performance of Regulatory Compliance is monitored on a continuous basis. The worksheet calendar will be updated as licenses and permits are updated.

EC.02.02.01 EP: 12

The hospital labels hazardous materials and waste. Labels identify the contents and hazard warnings. * (See also lC.02.01.01, EP 6) Footnote *: The Occupational Safety and Health Administration's (OSHA) Bloodborne Pathogens and Hazard Communications Standards and the National Fire Protection Association (NFPA) provide details on labeling requirements.

All hazardous wastes:

Are labeled from generation to removal. Some wastes, such as bio-hazardous wastes (Potentially Infectious Medical Waste-PIMW) are labeled by placement in a red bag: other wastes are labeled with specific signs or with text labels.

Bio-hazardous Waste, including sharps and expired/partially used pharmaceuticals:

Bio-hazardous wastes are placed into red cans with lids that are lined with red bags that have bio-hazardous labeling. The red bags (liners) are then placed into transport carts with external labeling containing the words bio-hazardous wastes. The carts are taken to the closest biohazardous waste yard and the contents transferred to the plastic transport containers provided by the disposal contractor. These containers are also labeled with the biohazardous labeling. The

red bags are not to be used for any other purpose, and any material in a red bag or can is treated as biohazardous.

Ebola contaminated waste/materials shall be deposited into a red bag labeled with the words "Biohazardous Waste."

The bag(s) shall be tied off and wiped with bleach, then placed into a second bag labeled with the words “Biohazardous Waste.” The second bag shall also be tied off, wiped with bleach, and placed inside container labeled with the words “Incinerate only” (Category A waste) labeled container(s) provided by the disposal contractor. Any waste contaminated by Ebola or Ebola patient(s) is to be disposed into these designated “Incinerate only” containers. All Ebola waste is to be sent out for incineration.

Sharps:

Shall be placed into designated red sharps containers. Since these containers will be subject to the same treatment process as the red bags, they will be picked up, sealed and transported to the closest bio-hazardous waste yard or treatment area as part of the red bag collection process.

Expired/partially used pharmaceuticals.

Shall be placed into the designated blue and white pharmaceutical containers. Since these wastes require treatment by incineration, they are labeled with incinerate only. The disposal contractor segregates these containers from the other bio-hazardous waste while in the storage yards, and during transport.

Pharmaceuticals and Sharps:

The hospital has taken the recommendation of CDPH and replaced all sharps and pharmaceutical containers in the operating rooms with one approved container for both sharps and pharmaceuticals. (See MWMA. Ch. 9 Section 118275 Paragraph (7).)

Chemotherapeutic Waste:

Chemo wastes are placed into yellow container that read, “Chemotherapy Waste”. Since these wastes require treatment by incineration, the containers are also labeled with “incinerate only”. The disposal contractor segregates these containers from the other bio-hazardous wastes while in the storage yards and during transport. Bulk quantities are handled as chemical waste (treated as hazardous waste).

Chemical Materials and Waste: Chemical materials are labeled throughout their use and handling in the facility. The label is on the container prior to receipt or is placed on containers filled or mixed within the hospital. Labeling is evaluated during environmental tours, to assure the labels are maintained and legible.

Chemical wastes are labeled on the containers. In many cases the waste is labeled by the original chemical name, in other cases, where collection cans or containers are used, the container is labeled. These labels are required by the vendors of chemical disposal services to maintain the identity of the materials, and if the identity is lost, the materials are tested and analyzed to identify them for proper handling and disposal.

Radioactive Materials and Waste: Radioactive materials are labeled with the magenta and yellow symbols, defined by OSHA and international use. These materials are handled and stored in accordance with the NRC regulations and license provisions. Wastes are held to decay to background, when the labels are removed or covered, and wastes handled as the other hazards they may reflect. (Not sure how detailed this needs to be, however you can refer to 8.1 in the Radiation Safety Manual, which goes into maybe more detail than needed here) FYI we are only allowed to hold materials with less than 120-day T1/2 to decay in storage.

Universal waste: Universal wastes are placed in the appropriate labeled accumulation Containers when taken to the universal waste yard.

EC.02.02.01 EP: 17

For hospitals that provide computed tomography (CT), positron emission tomography (PET), or nuclear medicine (NM) services: The results of staff dosimeter monitoring are reviewed monthly by the radiation safety officer, health physicist, or their designee to assess whether staff radiation exposure levels are as low as reasonably achievable" (ALARA) and below regulatory limits.
Note 1: For definition of ALARA please refer to US Nuclear Regulatory Commission federal regulation 10 CFR 20. 1003.
Note 2: This element of performance does not apply to dental cone beam CT radiographic imaging studies performed for diagnosis of conditions affecting the maxillofacial region or to obtain guidance for the treatment of such conditions.

The hospital requires radiation exposure monitoring for all employees working in areas with potential for radiation exposure greater than 10% of annual permissible dose limits. Occupational Radiation Exposure Reports are reviewed monthly and are maintained for a minimum of 30 years. The Radiation Safety Office is directly involved in the monitoring and safe keeping of these reports.
Los Angeles General Personnel Dosimeter Policy

EC.02.02.01 EP: 18

For hospitals that use Joint Commission accreditation for deemed status purposes: radiation workers are monitored monthly, by the use of dosimeter badges, for the amount of radiation exposure.

The hospital monitors and limits radiation doses to the employees in accordance with Title 17 in the California Code of Regulations and in title 10, Part 20 of the Code of Federal Regulations. The hospital requires monthly radiation exposure monitoring for all employees working in areas with potential for radiation exposure.

The Health Physicist (or designee) reviews the exposure reports monthly. Any readings over 1.25 mSv (125 mrem), which constitutes a level I notification, on any dosimeter within a calendar quarter will be reported to the individual user. Any excessive exposure readings over 3.75 mSv (375 mrem), which constitutes a level II notification, on any dosimeter within a calendar quarter will be investigated

Personnel Dosimetry Policies and Procedures

EC.02.02.01 EP: 19

For hospitals that use Joint Commission accreditation for deemed status purposes: The hospital has procedures for the proper routine storage and prompt disposal of trash.

The hospital has a policy for the proper removal and disposal of trash. Environmental Services staff collects trash at least once a day throughout the facility using the following procedures:

- Collect trash from individual receptacles. Damp wipe containers in patient care areas with germicidal detergent and replace liners.
- Tie off trash bag and place them into the mobile barrel for transport to the AGVS room for disposal.
- Always hold bag away from body.
- Do not overfill trash carts. When AGVS carts are full they must be programed for delivery to the loading dock area for proper disposal.
- Clean trash barrels with germicidal detergent before storing.

The trash is sent out through an approved vendor (Current contract vendor: South Land Disposal) for proper
Disposal *Policy 0185.*

EC.03.01.01

Staff and licensed independent practitioners are familiar with their roles and responsibilities

relative to the Environment of Care

All new staff must attend New Employee Safety Orientation as part of the New Employee Orientation. The New Employee Safety Orientation addresses key issues and objectives of various areas in the Environment of Care. In addition, all staff participates in periodic safety training.

Staff members licensed independent practitioners, students, and volunteers are instructed on the everyday precautions to minimize environmental safety risks via New Employee Safety Orientation, Reorientation (Orientation Review), in-services, training, or other activities. During the environmental tours, unsafe practices are identified.

The Medical Center departments provide ongoing in-services, training, or other activities emphasize specific job-related aspects of safety. The Safety Officer, along with Human Resources, assists the departments by providing educational materials and/or training.

STANDARD EC.03.01.01 STAFF ARE FAMILIAR WITH THEIR ROLES AND RESPONSIBILITIES RELATIVE TO THE ENVIROMENT OF CARE.

EC.03.01.01 EP: 1

Staff responsible for the maintenance, inspection, testing, and use of medical equipment, utility systems and equipment, fire safety systems and equipment, and safe handling of hazardous materials and waste are competent and receive continuing education and training.

STANDARD EC.04.01.01 THE HOSPITAL COLLECTS INFORMATION TO MONITOR CONDITIONS IN THE ENVIRONMENT.

EC.04.01.01 EP: 8

Based on its process(es) the hospital reports and investigates the following: Hazardous materials and waste spills and exposures.

The hospital establishes a process(es) for continually monitoring, internally reporting, and investigating hazardous materials, waste spills and exposures, using intercom reporting of a code orange. Los Angeles General Medical Center Facilities Management hazmat materials section / Safety Office emergency response for hazardous materials spill or gas release. Los Angeles General Medical Center Facilities Management incident report. Los Angeles General Medical Center chemical / hazard materials / gas leak report and the spill prevention control countermeasure (SPCC) Plan (Used in all spills or releases other than incidental)