RIVERSIDE UNIVERSITY HEALTH SYSTEM - MEDICAL CENTER

Environmental Services Department

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Title: Waste Management Plan	**Effective Date:** 11/23/2023	☒ **Organization-Wide** ☐ **Hospital-Wide** ☐ **Departmental**	
Approved By and Date Approved: Wilfredo Melendez EVS Manager		☐ **Policy** ☐ **Procedure** ☒ **Guideline**	

SCOPE

The Hazardous Materials and Waste Management Program is designed to address risks that the variety of substances addressed in this plan pose to the environment of Riverside University Health System – Medical Center and Behavioral Health (RUHS) and to the patients, staff, and visitors of the organization. The program is designed to assure compliance with applicable codes and regulations.

This Hazardous Materials and Waste Management Plan apply to following locations:

A. RIVERSIDE UNIVERSITY HEALTH SYSTEM – Moreno Valley Campus
B. RIVERSIDE UNIVERSITY HEALTH SYSTEM – Arlington Campus

FUNDAMENTALS

1. The scope of the Hazardous Materials and Waste Management Program is determined by the materials in use and the waste generated by RUHS.

2. To insure the proper managing of hazardous materials and provide instruction of hazards associated with materials and wastes for employees Safety Data Sheets (SDS) or similar documents provided by suppliers and manufacturers are maintained and available as required by law and regulations.

3. Protection from hazards requires all staff that use or are exposed to hazardous materials and waste to be educated as to the nature of the hazards and to use equipment provided for safe use and handling when working with or around hazardous materials and waste.

4. Rapid effective response is required in the event of a chemical spill, release, or exposure to hazardous materials or waste.

5. Segregation of hazardous waste at the point of generation is an effective means of controlling the potential for exposures or spills during collection, transport, storage, and disposal.
6. Special monitoring processes or systems may be required to manage certain hazardous gases, vapors, or radiation undetectable by humans.

Goals and Objectives

To insure the proper managing of hazardous materials and provide instruction of hazards associated with materials and wastes for employees, Safety Data Sheets (SDS) or similar documents provided by suppliers and manufacturers are maintained and available as required by law and regulations

1. An EVS specific SDS book will be created and stored in the EVS office and an electronic version will be stored in the hospital intranet for employees' easy access to it from any terminal throughout the facilities according to the new OSHA Globally Harmonizing System (GHS), which changes all chemicals labeling, classification and SDS sheets to reflect a 16 section format.

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

1. An inventory of hazardous chemical materials, defined by written criteria, is used as part of the process to evaluate and define hazardous materials storage practices and hazardous wastes storage and waste handling practices. The Hazardous Waste Program includes the following:
    - chemical waste
    - pharmaceutical waste
    - chemotherapeutic waste, where present
    - radioactive waste, where present
    - bio-hazardous waste, sharps, and other physical hazards

2. Inspections are conducted at least annually to assure that areas used to store hazardous waste have adequate space, are separated from clean and sterile goods and food items, and hazardous chemicals are stored appropriately.

3. Spills, releases, and exposures to hazardous chemicals and waste are reported to the EOC.

4. EVS, Plant Operations, and specified Emergency Department Personnel who respond to hazardous spills are trained about the hazards of the materials they handle, protective methods, and responses to spills and exposures.

5. The performance indicator (percentage of returned manifests) for hazardous materials and waste is evaluated and reported to the EOC and the Performance Improvement Committee.

6. Hospital staff are trained upon hire how to respond to hazardous material spills through "Code Yellow" training.

7. Monitoring of gasses and vapors is performed on an as needed basis

PROCESS FOR HAZARDOUS MATERIALS AND WASTE PROGRAM

RUHS minimizes the risk associated with the selection, handling, storing, transporting, using and disposing of hazardous chemicals. RUHS minimizes the risk associated with the selection, handling, storing, transporting, using and disposing of hazardous gases and vapors. Examples of hazardous gases and vapors include but are not limited to glutaradehyde, ethylene oxide, and vapors generated when using cauterizing equipment and lasers, and gases which include nitrous oxide.

RUHS has developed and maintains this written management plan describing the processes it implements to effectively manage hazardous materials and waste. The plan includes

processes to protect the facility, patients, visitors, volunteers, and staff from these materials to minimize the risk of harm and impact from exposure. The processes include education, procedures for safe use, storage and disposal, and management of spills or exposures. This plan is evaluated annually and changed as necessary, based on changes in conditions, regulations, standards, and identified needs.

A. Inventory of Hazardous Materials and Waste

RUHS maintains a written, current inventory of hazardous materials and wastes used, stored and generated. This inventory is only inclusive to materials whose handling, use and storage are addressed by law and regulation.

Each department where hazardous materials are handled and/or stored maintains an inventory of hazardous materials and waste in the department. The department manager or designee is responsible for evaluating SDS for hazards before purchase to assure that the materials are appropriate. The department managers work with the Manager of Environmental Services and the Safety Officer to develop procedures for handling of hazardous materials.

The Manager of each department has an inventory of hazardous or regulated waste and is responsible for managing safe storage and handling. Each manager is responsible for reviewing SDS and other information to identify and dispose of waste appropriately. Licensed contractors transport chemical, chemotherapeutic, and medical waste to and from the medical center as needed. Radioactive waste is allowed to decay below background radiation and then is disposed of as ordinary waste.

B. Management of Hazardous Materials and Waste

RUHS has established and maintains processes for identifying, selecting, handling, storing, transporting, using, disposing of hazardous materials and waste from receipt or generation through use and/or final disposal, including managing the following:

- Chemicals: Chemicals are identified and ordered by the department manager or designee. Appropriate storage space is maintained by each department, and reviewed as part of environmental rounds in that area. Chemical materials are maintained in labeled containers. Staff is trained in understanding SDS and safe handling of the chemicals they use.

  Chemical waste is held in a locked container on hospital property until a licensed contractor picks up the chemical waste from the Medical Center. The contractor packs the chemicals, completes the manifests, and removes the packaged waste. A disposal copy of the manifest is returned to verify legal disposal of the waste.

- Chemotherapeutic materials: Chemotherapeutic (antineoplastic) medications and the materials used to prepare, administer, and control these materials are collected for special disposal. Staff using these materials are trained in the safe handling of and emergency response to spills or leaks.

  Chemotherapeutic residual waste is handled as part of the regulated medical waste stream, with additional labeling to assure appropriate incineration as final destruction. Larger than residual volumes of chemotherapeutic waste (liquids) are handled as chemical waste, if not recyclable.

- Pharmaceutical waste: RUHS minimizes the risk associated with disposing of hazardous medications and pharmaceutical waste which may also be classified as Resource

Conservation Recovery Act Waste. These types of waste are identified and collected in specific containers and collected for removal and incineration by an approved waste disposal vendor.

- Radioactive materials: These are handled subject to the Medical Center's license, and their safety is managed by the Radiation Safety Officer. The risks associated with selecting, handling, storing transporting using and disposing of radioactive materials is reviewed by the Radiation Safety Officer. Materials are handled in accordance with the requirements of the Medical Center's license, state and federal regulations.

  Radioactive waste is held until decayed to background, and then handled as the underlying hazard of the materials for disposal. The Radiation Safety Officer or designee monitors the waste and determines when it is no longer considered a radioactive hazard, in accordance with regulatory guidelines.

- Ionizing or non-ionizing radiation equipment: RUHS minimizes the risks associated with selecting and using hazardous energy sources which may not be limited to those generated while using ionizing or non-ionizing radiation equipment and lasers.

- Infectious and regulated medical wastes, including sharps: These materials are found throughout the Medical Center. The program is designed to identify, separate, control potentially bio-hazardous materials, and to collect them for licensed disposal. Staff is trained regarding proper handling of these types of waste materials in the regulated medical waste program. Labeled, specialized containers are used to collect and transport these wastes.

  Regulated Medical Waste is picked up by housekeeping in patient care areas and transported to the handling room in dedicated carts. The waste is packaged for disposal, and held for a licensed waste contractor pickup. The contractor assists in completing the manifests, and removes the waste, returning the disposal copy of the manifest to Environmental Services after final disposal. A contracted vendor removes sharps containers twice a week. If sharps containers become full before scheduled pick up dates, Environmental Services staff will remove upon request.

C. Management of Hazardous Materials and Waste Storage Space

The Safety Officer and / or the Manager of Environmental Services assess the appropriateness of space for handling and storage of hazardous materials and waste as part of environmental rounds. Handling and storage is assessed during environmental rounds and determines if current conditions and practices support the expectation of the plan.

Department Managers are responsible for initiating corrective actions on findings related to the appropriate use of handling and storage spaces in their areas of responsibility.

D. Gas and Vapor Monitoring

RUHS monitors the level of hazardous gases and vapors to determine if they are in a safe range. Department Managers are responsible for managing the program for monitoring gases and vapors in accordance with the Hazardous Vapor Monitoring Policy. Air contaminants found during normal use include, but are not limited to, formaldehyde, Xylene, ethylene oxide, and waste anesthetic gases. Results of current monitoring indicate that exposure levels are below the regulatory action level. If the results were above the action level, corrective action and additional testing will be done to ensure a safe working environment.

E. Emergency Procedures

RUHS implements procedures for response to hazardous material or waste spills. The Manager of Environmental Services and the Safety Officer develop and maintain emergency procedures for the Hazardous Materials and Waste Program.

RUHS has an organized spill procedure that evaluates spills to determine if outside assistance is necessary. A minor (incidental) spill that can be cleaned up by the staff involved, with their training and personal protective equipment does not require additional response.

Spill kits are kept in the following locations:

Location	Room
2500	C2085
3500	C3085
4500	C4085
Pediatric Clinic Office Area	C1072
Clinical Laboratory	E0111
EVS General Storage Area	F0031
Plant Operations Generator Room	P0020
Hazardous Waste Container	Outside/Entrance
Behavioral Health	AM-8
Behavioral Health	Disaster Trailer

A spill that exceeds the capability of the immediate staff to neutralize and clean up requires a response from outside the facility. In these cases, the immediate area is evacuated, ventilation controlled, and the City of Moreno Valley Fire Department is called. Riverside County Fire Department (Moreno Valley) shall take control of the situation and spill cleanup in coordination with RUHS. Riverside County Fire Department (Moreno Valley) may arrange for the spill to be cleaned up by a qualified outside agency. If appropriate, trained hospital staff shall provide the cleanup and recovery. Staff including Environmental Services employees, are trained to recognize the potential for a spill that is not safe to handle, and to initiate a Code Yellow. Staff is cautioned to err on the side of safety, and not to handle chemical spills that exceed their training or the personal protective equipment they have available.

Incidents involving spill kits, or a response from any outside agency are documented in the online Incident Reporting system for documentation.

F. Documentation of Permits, Licenses, and Manifests

For the purpose of managing hazardous materials and waste, RUHS has obtained and maintains permits and licenses for the handling and disposal of hazardous waste, including chemical waste, radioactive materials, and bio-hazardous (potentially infectious medical waste) from the appropriate federal, state, and municipal agencies.

G. Manifests

For managing hazardous materials and waste every shipment of hazardous waste removed from the facility is documented by a manifest, as mandated by state and federal regulations. The manifests have multiple copies:

1. One copy is left when the hazardous waste is removed from the facility.
2. Another copy travels with the waste and is returned to the Medical Center once the waste

has been legally disposed of to document the completion of the activity.

These copies are matched, to assure that no load has been lost or misplaced, and kept for the documentation purposes.

H. Waste Labeling

All hazardous wastes are labeled from generation to removal. Some wastes, such as bio-hazardous wastes (Potentially Infectious Medical Waste) are identified by placement in a red bag; other wastes are labeled with specific signs or with text labels. Labels identify the contents and warnings as appropriate to the product. Specific labeling requirements may be obtained through the California Occupational Safety and Health, Blood Borne Pathogens and Hazard Communications and National Fire Protection Association.

- Bio-hazardous Waste: These are placed in red bio-hazardous waste bags, and then placed into hard plastic bins with external labeling as bio-hazardous waste, or in a labeled rollaway container provided by the vendor. The red bio-hazardous waste bags are labeled as bio-hazardous waste and any material in a red bag is treated as bio-hazardous.

- Chemotherapeutic Waste: Chemotherapeutic waste is placed into labeled containers (labeled with the OSHA and international symbols for carcinogenic wastes). These waste streams are handled by the same contracted company that handles the red bag waste. Bulk quantities are handled 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 Medical Center. Labeling is evaluated during environmental rounds to assure the labels are maintained and legible.

  Chemical wastes must be labeled on the containers. In many cases the waste is identified by the original manufacture's label. These labels are required by the vendors of chemical disposal services to maintain the identity of the materials, and if the label 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 regulations and license provisions. Radioactive waste is held to decay below background and then disposed of as regular waste.

I. Separation of Waste Handling Areas

RUHS maintains appropriate handling and storage areas for hazardous wastes that are separated and maintained to minimize the possibility of contamination of food, clean and sterile goods, or contact with staff, patients, visitors, or volunteers.

Hazardous waste is moved in covered or closed containers, from holding areas to the storage space designated for processing and handling of that type of waste. Those spaces are inspected periodically, to assure they are adequate for the intended use, that appropriate equipment and personal protection is available, and that they remain clean and orderly.

Regular inspections of the storage areas and of behaviors in transport are included as part of

environmental inspections and problems are identified and documented as part of said inspections.

Document History:

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Date Reviewed	**Reviewed By:**	**Revisions Made?**	**Revision Description**
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