

## UNIVERSITY OF TOLEDO HEALTH SCIENCE CAMPUS

SUBJECT: HAZARDOUS MATERIALS AND WASTES  
MANAGEMENT PLAN

Procedure No: HM-08-000

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### PROCEDURE

The University of Toledo Health Science Campus (UT HSC) will manage the different types of hazardous materials and wastes at the UT HSC in accordance with Federal, State, and Local regulations and Joint Commission standards.

### PROCEDURE

To create a safe and healthy workplace free from the hazards associated with the hazardous materials received, handled, stored and waste disposed of throughout the campus of the UT HSC.

### SCOPE

The Hazardous Materials and Waste Management Plan describes how the organization will provide a physical environment free of hazards associated with hazardous materials and waste to manage staff activities to reduce the risk of injuries. The Management Plan applies to the UT Medical Center and all associated facilities and clinics. These facilities have inherent safety risks associated with providing services for patients, the performance of daily activities by staff, and the physical environment in which services occur. The Hazardous Materials and Wastes Management Plan has been designed to work in concert with the other Environment of Care Management Plans (i.e. Utility Systems, Safety, Medical Equipment, Security and Fire Safety Plan). The Hazardous Materials and Wastes Management Plan serves to direct the management of hazardous materials and wastes in order to establish a safe environment for compliance with TJC standards. The plans are reviewed and accessed annually to determine their effectiveness and ensure that they function as unit to allow for continued improvement and functioning within the Environment of Care.

### RESPONSIBILITY

The Hazardous Materials and Wastes Management Plan has been assigned a leader with the appropriate background and skill set to allow for continuous satisfaction for the assigned elements of performance. This individual is required to sign after reviewing the plan on an annual basis. Staff from the Environmental Health and Radiation Safety Department are assigned responsibilities to complete elements of the plan and ensure its continued implementation. Reports on the plan's implementation are reported to the Safety and Health Committee on a regular basis. A representative from hospital administration sits on the Safety and Health Committee. On an annual basis the assessment of the effectiveness of each individual management plan is presented to the Board of Trustees of the University of Toledo.

Due to the varied nature and quantities of hazardous materials and wastes at the UT HSC, they will be managed and controlled by the Environmental Health and Radiation Safety Department in the following ways:

<b>Class of Hazardous Material</b>
Hazardous chemicals and wastes Monitors chemical exposures
Infectious wastes and sharps Chemotherapeutic wastes and sharps Hazardous pharmaceuticals - Listed pharmaceuticals - Unregulated pharmaceuticals Laser devices and other hazardous energy sources
Ionizing and non-ionizing radiation sources Radioactive Wastes Monitoring of Radiation Exposures Microwaves and ultrasounds

The Environmental Health and Radiation Safety Department is responsible for establishing safe policies and procedures for the faculty, staff, students, volunteers and visitors at the UT HSC who work with or are around the listed hazardous materials and wastes.

These departments are charged with the responsibility for providing information, education, enforcement and communication of the hazards associated with these materials. The selection, handling, storage and disposal of these materials are the responsibilities of the office listed above.

The various departments at the UT HSC are directed to administratively attempt to purchase and use non-hazardous materials thus minimizing the need for management of hazardous materials throughout the institution. Efforts should also be focused on reducing the excess storage of hazardous materials at the UT HSC. All measures should be taken to isolate UT HSC patients, faculty, staff, students, volunteers and visitors from hazardous material exposures through the use of proper housekeeping and maintenance activities (i.e., proper secure storage and maintenance of control systems).

## PROCESSES AND PROCEDURES

### **The hospital manages risks related to hazardous materials and waste.**

A management plan has been developed to allow for employee recognition, evaluation and control of hazardous materials and wastes at the UT HSC. This plan/program will consist of departmental and institutional policies and procedures that are understandable and accessible to all employees on all shifts.

Specific programs, procedures or policies have been developed to address the following elements of performance:

- The UT HSC 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 who's handling, use, and storage are addressed by law and regulation. Note: A hazardous material inventory is maintained in each department via Chemwatch and audited by Environmental Health and Radiation Safety. See Procedure HM-08-018 (Hazard Communication).
- The UT HSC has written procedures, including the use of precautions and personal protective equipment, to follow in response to hazardous material and waste spills or exposures. Note: See Procedure S-08-032 (Personal Protective Equipment) and HM-08-013 (Hazardous Material Spill Procedures).



- The UT HSC implements its procedures in response to hazardous material and waste spills or exposures. Note: See Procedure HM-08-013 (Hazardous Material Spill Procedures).
- The UT HSC minimizes risks associated with selecting, handling, storing, transporting, using, and disposing of hazardous chemicals. Note: See Procedure HM-08-001 (Collection, Storage, Transport, and Disposal of Hazardous Waste) and various other Hazardous Material Management Procedures.
- The UT HSC minimizes risks associated with selecting, handling, storing, transporting, using, and disposing of radioactive materials. Note: See Procedure HM-08-010 (Radiation Safety) and various other Radiation Safety procedures as well as HM-08-001 (Collection, Storage, Transport, and Disposal of Hazardous Waste).
- The UT HSC minimizes risks associated with selecting and using hazardous energy sources. Note: Hazardous energy is produced by both ionizing equipment (for example, radiation and x-ray equipment) and nonionizing equipment (for example, lasers and MRIs). See Procedure HM-08-002 (LASER Systems), HM-08-010 (Radiation Safety), S-08-012 (Super Conducting Magnets (MRI/NMR) and S-08-014 (Control of Hazardous Energy Sources).
- The UT HSC minimizes risks associated with disposing of hazardous medications. Note: See Procedure HM-08-005 (Handling of Hazardous Drugs).
- The UT HSC minimizes risks associated with selecting, handling, storing, transporting, using, and disposing of hazardous gases and vapors. Note: Hazardous gases and vapors include, but are not limited to OPA, PAA formaldehyde, vapors generated while using cauterizing equipment and lasers, and gases such as nitrous oxide. See Procedure HM-08-016 (Environmental/Occupational Monitoring and Medical Surveillance), HM-08-018 (Hazard Communication), and HM-08-017 (Sterilant/Disinfectant Safe Work Practices).
- The UT HSC 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. See Procedure HM-08-016 (Environmental/Occupational Monitoring and Medical Surveillance).
- For managing hazardous materials and waste, the UT HSC has the permits, licenses, manifests, and safety data sheets required by law and regulation. Note: Regulatory materials are kept in Environmental Health and Radiation Safety Department and are available by request.
- The UT HSC labels hazardous materials and waste. Labels identify the contents and hazard warnings. Note: The Occupational Safety and Health Administration's (OSHA) Bloodborne Pathogens and Hazard Communications Standards, Environmental Protection Agency and the National Fire Protection Association (NFPA) provide details on labeling requirements. See Procedures HM-08-018 (Hazard Communication), Bloodborne Pathogen Plan and HM-08-001 (Collection, Storage, Transport, and Disposal of Hazardous Waste) and various other Hazardous Material Management Procedures.
- The results of staff dosimetry monitoring are reviewed at least quarterly by the radiation safety officer to assess whether staff radiation exposure levels are "as low as reasonably achievable" (ALARA) and below regulatory limits.
- Radiation workers are checked periodically, by the use of exposure meters or badge tests, for the amount of radiation exposure.
- The hospital has procedures for the proper routine storage and prompt disposal of trash (see Environmental Services Procedure #3046)

## ANNUAL REPORT

The objectives, scope, performance and effectiveness of the safety management program/plan will be evaluated in an annual report to Administration. Evaluation will include all areas of hazardous materials and waste management.

## SUPPORTING DOCUMENTATION AND PERFORMANCE MEASURES

Other written procedures that support this management plan can be found at <http://www.utoledo.edu/depts/safety/UT%20Procedures%20and%20Plans.html>. Performance measures for the hazardous materials and waste management program include the following:

- Hazardous, infectious, radioactive waste volumes
- Hazardous spills incidents
- IH Monitoring and Dosimetry

Additionally, in order to maintain a quality program for the management of hazardous wastes the Environmental Health and Radiation Safety Department performs the following tasks to ensure the continued effectiveness of the management plan and program.

1. Annual evaluation of the hazardous materials and waste-management plan's objectives, scope, performance, and effectiveness will occur.
2. Orientation and education program for personnel who manage or have contact with hazardous materials and waste that addresses:
  - a. Precautions for selecting, handling, storing, using, and disposing of hazardous materials and wastes
  - b. Emergency procedures for hazardous material and waste spills or exposure
  - c. Health hazards of mishandling hazardous materials
  - d. For all appropriate personnel, orientation and education about reporting procedures for hazardous materials and waste incidents, including spills and exposures
3. Ongoing monitoring/measuring of performance regarding actual or potential risk related to one or more of the following
  - a. Staff knowledge and skills
  - b. Level of staff participation
  - c. Monitoring and inspection activities
  - d. Emergency and incident reporting
  - e. Inspection, preventative maintenance, and testing of equipment
  - f. Monitor movement of hazardous chemical and infectious wastes through the institution
  - g. Monitor labeling of hazardous materials and wastes
  - h. Maintenance of required waste manifests

## Control and Transportation of Hazardous Materials and Wastes

The flow charts contained within Appendix "A" at the end of this plan provide a "graphical" representation of the tracking of Hazardous Materials and Wastes from receipt to final disposal. Additionally, the flow of documentation is also depicted showing the final collection point of all supporting paper work for these Hazardous Materials and Wastes.

## Contents of Appendix A:


1. Chemical Hazardous Material Flow at the UT HSC.
2. Radioactive Hazardous Material Flow at the UT HSC.
3. Infectious, Pharmaceutical and Chemotherapeutic Hazardous Material Flow at the UT HSC.



Review and Revision

Review of the Management plan will be yearly by the Environmental Health and Radiation Safety Department with assistance from the Radiation and Laser Safety Officers. The UT HSC Safety Committee will be provided the plan on an annual basis.

Attachments

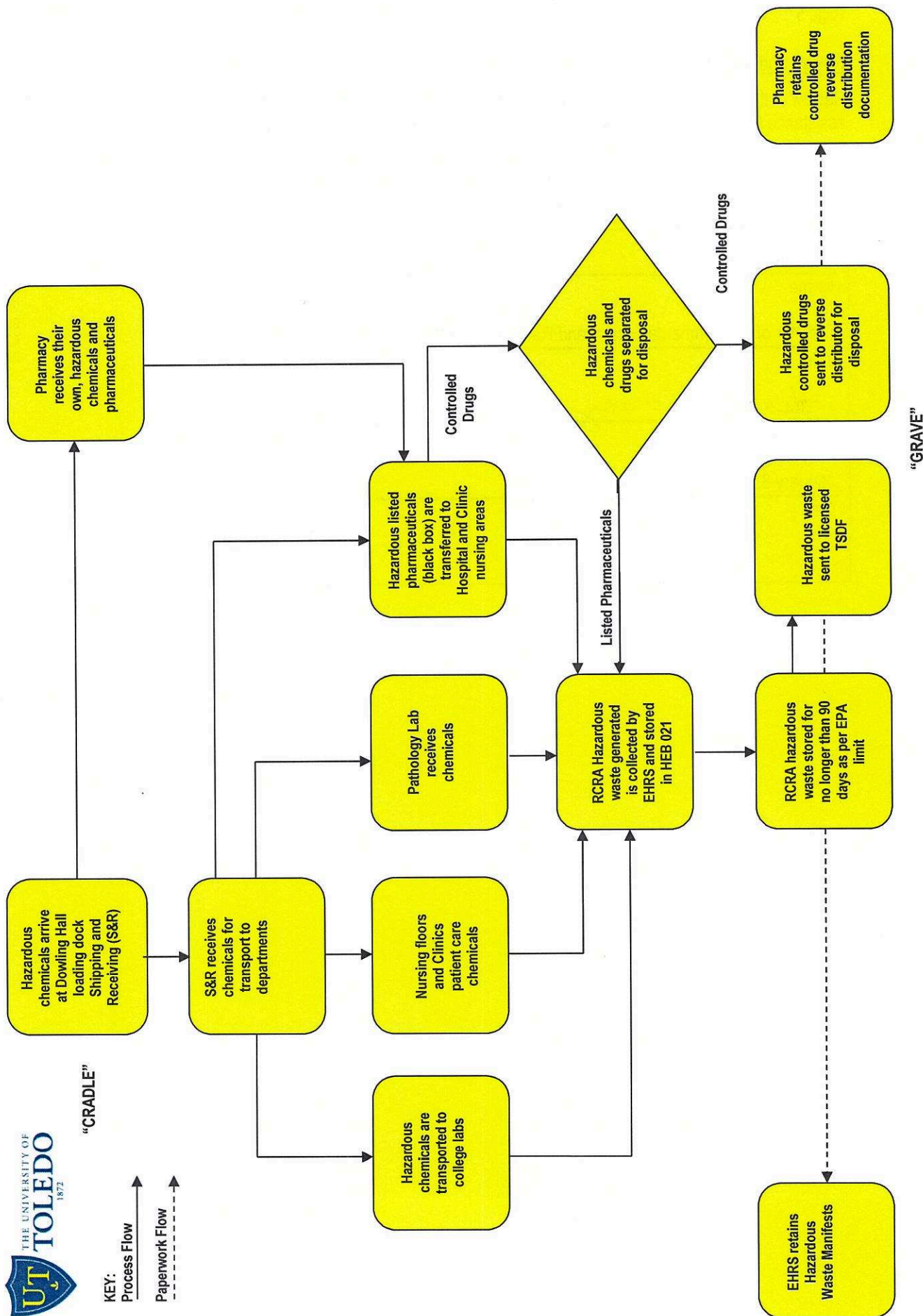
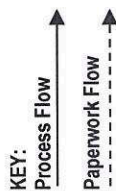
Heather Lorenz
Name
Director of Environmental Health and Radiation Safety
Title

Signature
January 8, 2025
Date

New: 01/09/96  
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# University of Toledo Health Science Campus Hazardous Chemical/Pharmaceutical Flow

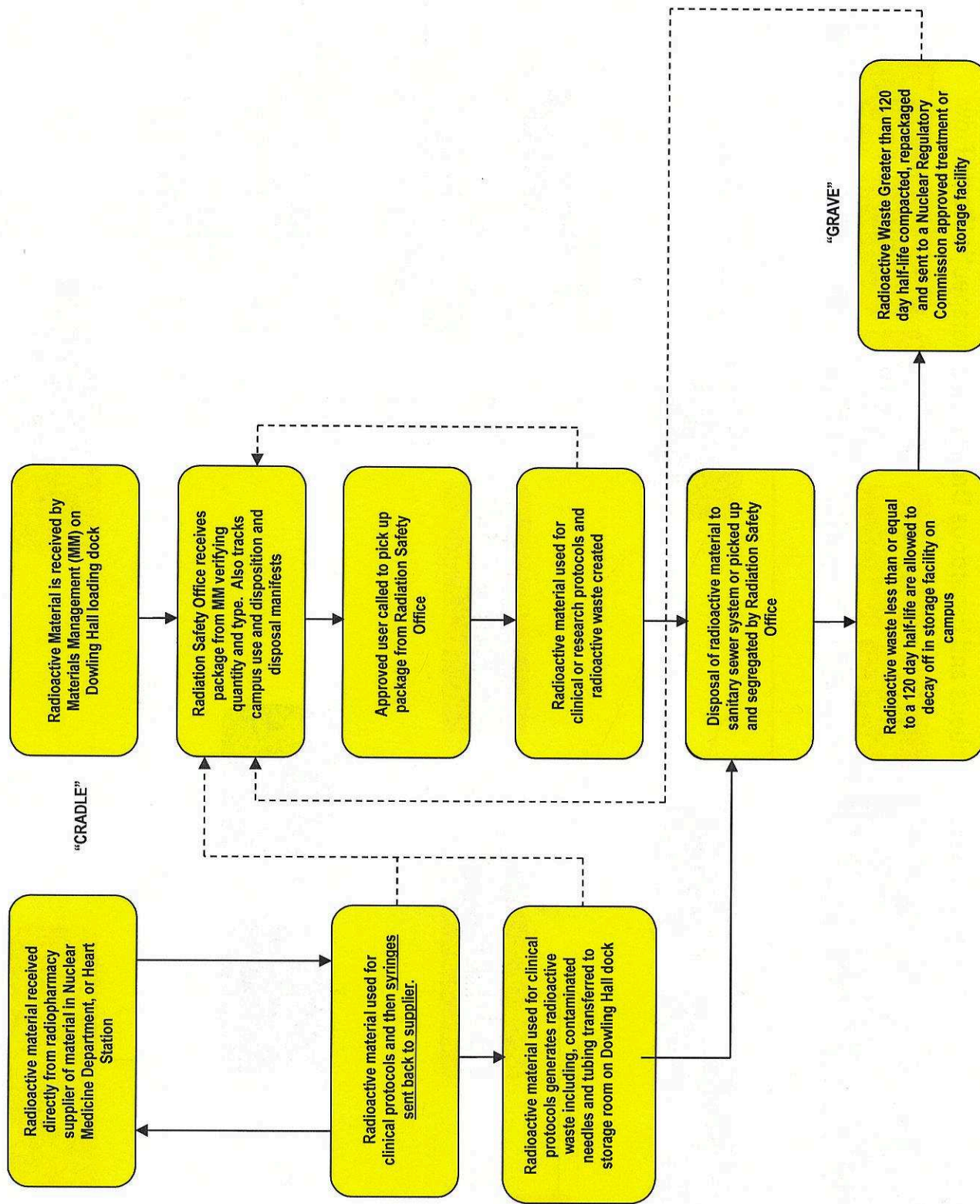


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## University of Toledo Health Science Campus Radioactive Material/Waste Flow





# University of Toledo Health Science Campus Infectious and Hazardous Drug/Chemotherapeutic Waste Flow

