

Hazardous Materials Spill Program

Intent:

The purpose of this program is intended to guide the user in preparing for and responding to chemical spills, to minimize the severity of such incidents and maintain priority for life safety, preservation of property, and timely restoration of academic programs and services. To provide the protocol for reporting and safe handling of minor or major hazardous materials spills, releases, and exposures and to prevent reoccurrences.

Scope:

This policy establishes the parameters within which hazardous materials and wastes are handled, stored, and disposed of at the University of Wisconsin-Eau Claire. To address administrative issues such as maintaining chemical inventories, storage, handling and use of hazardous materials, exposure monitoring, reporting requirements, specific responsibilities, and employee education programs.

Definitions:

Containment: Control of the material to prevent spread until proper cleanup can be undertaken.

Disposal: The proper disposition of the hazardous material after its use or cleanup. Only the university (EH&S) office is authorized to dispose of hazardous material.

Environment: Air, water, or land about us, including means of introduction such as sink and floor drains, sewers, ditches, gutters, and storm drains.

Hazardous Material: Any substance in any form (solid, liquid, gaseous) that is identified as hazardous by label or SDS knowledge. Materials suspected of being hazardous must be treated as hazardous until evidence to the contrary is presented and verified.

SDS: *Safety Data Sheet* provided by the manufacturer or distributor for each hazardous material.

Major Spill: The unplanned release of a hazardous material to the environment that poses potential harm.

Minor Spill: The unplanned release of a hazardous material to the environment that is readily contained, easily cleaned up for proper disposal, and poses no threat.

Hazardous Materials Spill Program

Table of Contents:

1. [Responsibilities](#)
2. [Spill Hazard Severity](#)
3. [Spill Types](#)
4. [Minor Spill Response Procedures](#)
5. [Major Spill Response Procedures](#)
6. [General Spill Kit Contents](#)
7. [Damage Packages](#)
8. [Mercury Containing Lamp](#)
9. [In House Transport Lead Acid Batteries](#)
10. [Lead Acid Battery Spills](#)
11. [Training Program](#)
12. [Appendices](#)
13. [Related Information](#)

Procedures

This procedure shall be followed to allow for proper clean-up and protection of the UW-Eau Claire faculty, staff, and students in the event of a hazardous material spill (incident) occurring on any property owned or leased by the University.

Responsibilities

Risk Management, Safety and Sustainability (RMSS)

Step	Responsibilities
1	Be responsible for ensuring the development & implementation of this policy.
2	Provide necessary resources as available to carry out the program.
3	Develop, maintain, and manage this Hazardous Materials Spill Program
4	Provide information, guidance or assistance to University employees concerning hazardous waste determination, storage, disposal, or training issues.
5	Provide training on hazardous material handling and cleanup for minor spills (spill kits) annually.
6	Assist employee(s) in minor spills if they request assistance.
7	Work cooperatively with hazardous waste generators to address hazardous waste concerns that require corrective action(s).
8	Conduct inspections of Hazardous Waste Storage Areas at the University.
9	Pick up hazardous waste when requested and arrange for off-campus disposal.
10	Maintain appropriate records required by this program.
11	Periodically audits facility for Hazardous Waste Management Compliance.

Hazardous Materials Spill Program

Supervisors

Step	Responsibilities
1	Ensure employee(s) is trained in proper handling of hazardous wastes and materials including: <ol style="list-style-type: none"> Minor spill clean-up procedures indicated in this policy. Proper emergency contact numbers and proper (PPE) to handle the chemical. Ensure employees are familiar with these procedures and revive any necessary training.
2	Ensure that (SDS) are accessible for all hazardous chemicals in the department.
3	Make an initial hazardous waste determination at the time waste is generated.
4	Conduct weekly Satellite Accumulation Area inspections and maintain records.
5	Notify (RMSS) if generating undetermined hazardous waste.

Employees

Understand the policy and procedure requirement of this document and any relevant chemical specific spill response procedures:

Step	Responsibilities
1	Promptly and appropriately respond to chemical spills.
2	Do not use chemicals if not adequately trained.
3	Conform to good standard practices and procedures for the materials they work with by reviewing current available Safety Data Sheets and applicable department policies.
4	Wear appropriate personal protective equipment.
5	Participate in all required training programs.
6	Report to the appropriate supervisor all facts pertaining to incidents resulting in releases of oil, and any action or condition that may cause an incident with oil and/or chemical.
7	Generators will be responsible for the proper storage, control, use & disposal of all hazardous chemicals in their respective areas in accordance with this policy.

Hazardous Materials Spill Program

Spill Hazard Severity

There are two possible spill conditions that have been identified as **Minor** and **Major** spills. Three factors primarily determine if a hazardous materials spill is minor and major, which are characterized by the following:

Step	Action
1	<p>How much was spilled? If the amount of the material spilled is more than 100ml/10 grams of an OSHA regulated chemical carcinogen, it is considered a major spill.</p>
2	<p>What are the hazards of the material spilled? If the spill is below the above identified thresholds, but, in any way, presents an immediate danger to health, safety or the environment, is unknown, or is an immediate fire hazard, it is considered a major spill. All mercury spills are considered major spills and require the implementation of the major spill response procedures.</p>
3	<p>Where is the spill? If the spill is outside of the laboratory or outside of the area where the material is normally used, and/or there is no trained person available to clean up the spill, it is considered a major spill.</p>

Spill Types

Step	Action
1	<p>Minor Spills (< 1 gallon)</p> <ol style="list-style-type: none"> A minor spill is one that does not spread rapidly, does not endanger people or property except by direct contact, does not endanger the environment, and the workers in the area are capable of handling safely without the assistance of safety and emergency personnel. A relatively small area is affected and only a relatively small number of personnel may need to leave the area until the spill is cleaned up. Does not have the potential to become a significant emergency (no risk of fire, explosion, chemical reaction, or chemical exposure hazard).

Hazardous Materials Spill Program

2	<p>Major Spills (> 1 gallon)</p> <ol style="list-style-type: none"> a. A large spill will be defined as more than 1 gallon and/or toxic fumes/vapors. b. An unmanageable spill is a situation in which an individual is not competent, untrained, or simply unable to safely contain, clean-up and dispose of the spill without risk to themselves or others. c. Spill is beyond the expertise of personnel and the necessary materials required for safe cleanup are unavailable. d. Involves injury/contamination to personnel. e. Poses a significant chemical exposure hazard. f. Has the potential to become a serious emergency requiring area or building evacuation.
---	--

Minor Spill Response Procedures

In the event of a **minor spill** the following steps should be taken:

Step	Action
1	Notify fellow workers in the vicinity of the spill. Secure area by restricting access and posting signs.
2	Assess the size of the spill, type of chemical, and availability of spill clean-up materials.
3	Gather and review safety information on spilled chemicals. Review chemical's SDS for a hazard assessment and other pertinent safety information.
4	If the spilled chemical is flammable, turn off or extinguish any potential sources of ignition. Do not turn off laboratory ventilation systems.
5	Locate an appropriate spill kit, if available. Wear appropriate PPE which usually includes chemical splash goggles, gloves, apron, or lab coat.
6	Put absorbent from the spill kit on the material if the material spilled is in liquid form (and if this can be done safely).
7	Take appropriate action to remove the hazard. Clean-up spill using a scoop or other suitable item and place material in appropriate disposal container.
8	Decontaminate spill surface with mild detergent and water, as appropriate. Carefully remove PPE, place non-reusable items in disposal container and thoroughly wash hands with soap and water.
9	RMSS will not be supplying spill kit items. It is up to the department to replenish the contents of their spill kit.

Hazardous Materials Spill Program

Major Spill Response Procedures

In the event of a **major spill** the following steps should be taken:

Step	Action
1	Staff in the affected area shall notify and evacuate fellow workers to a safe area. Post signs. Note: DO NOT attempt to clean a major spill.
2	Contact RMSS at (715)836-3999 and/or call University Police at (715-836-2222) and provide details of spill including specific location, chemical, quantity, and if anyone is injured.
3	In case of an injury or chemical contamination: <ol style="list-style-type: none"> Wear PPE and move victim from spill area. Locate the nearest emergency safety shower or eyewash. If hazardous materials are splashed in the eyes, flush the eyes immediately with water, using an eyewash station for at least 15 minutes. If the skin becomes contaminated with hazardous materials, wash the affected area thoroughly with copious amounts of water. If available, use an emergency shower for at least 15 minutes. Place contaminated clothing in a plastic bag and contact (RM&S) at (715)836-3999 for disposal.

General Spill Kit Contents

The following is a list of recommended items that should be contained in a chemical spill kit.

Step	Action
1	<ol style="list-style-type: none"> Bucket Nitrile Gloves Activated Charcoal Sodium Bicarbonate Oil Dri Citric Acid Biohazard Kit (Bloodborne Pathogens) Propylene Bag
2	Storage <ol style="list-style-type: none"> Spill Kits should be stored in an easy to access location, away from other chemicals and preferably not below sinks. All spill kit supplies should be assembled in one area and clearly marked to restrict their use for spill responses only.

Hazardous Materials Spill Program

Damaged Packages

The following steps should be taken when handling damage or a leaking package:

Step	Action
1	Put on gloves to prevent hand contamination.
2	Visually inspect package for any sign of damage (e.g., wetness, crushed).
4	If damage is noted, surround package with absorbent, get SDS for that specific chemical, and notify the immediate supervisor.
5	Place leaking package in another box and seal.
6	Place sealed box in plastic bag and seal bag.
7	Place entire package in an outer carton for return to sender or for proper disposal.
8	Safe clean up procedures for each chemical leaks or spills accordingly to the following sections: a. If it is a minor spill, use the Minor Spill Response procedures. b. If it is a major spill, use the Major Spill Response procedures.
9	If an employee has been exposed to the leaking material, wash the affected area for 15 minutes, and then contact immediate supervisor for additional medical follow-up.

Mercury Containing Lamp

Requirement - Once mercury-containing lamps have been removed from service proceed with the following:

Step	Action
1	Place all mercury-containing lamps in the designated storage areas.
2	Storage area must be identified with an easily readable sign stating, "WASTE MERCURY-CONTAINING LAMP STORAGE".
3	Label each box as "Universal Waste-Lamps". Labels can be obtained from the Office of Custodial Services Department (715-836-5246).
4	Label each box with the accumulation start date (the date the first waste lamp is placed into the box).
5	Contain any lamp that shows evidence of leakage, spillage, or damage. The container must be closed, structurally sound and compatible with the contents of the lamps.
6	Stack boxes of lamp waste no more than five feet in height.
7	Conduct a monthly inspection of the lamp storage area and document on the inspection log (See Appendix A). The inspection log should contain check marks by the items listed, inspector's name, date, and time of inspection. The inspection logs should remain at the storage location.
	Waste Lamp Management - If a mercury-containing lamp breaks, the material must be treated as hazardous waste.

Hazardous Materials Spill Program

8	<p>a. Waste lamps should be placed in the designated drum/seal container in the lamp storage area.</p> <p>b. Label the container as “Universal Waste-Lamp(s)”.</p> <p>c. Store waste-lamp for no longer than one (1) year from the date waste is first placed in a container.</p> <p>d. Ensure the container is “closed” except when adding waste.</p> <p>e. Ensure communication equipment and emergency equipment is available where hazardous waste is managed.</p>
---	--

In house Transport Lead Acid Batteries

Step	Action
1	<p>Inspection</p> <p>a. Upon arrival, check the battery for visible damage such as cracks, dents, deformation, and other visible abnormalities.</p> <p>b. Verify connections, assure that they are clean. If the battery is dirty, or if any minor amount of acid has spilled onto the case, check with Vehicle Maintenance to see if it is necessary to remove it.</p> <p>c. Any fluid on or around the battery could indicate damage or improperly sealed case.</p> <p>d. In the event of leak or damage please contact Vehicle Maintenance or return it to the retailer.</p>
2	<p>Precaution for safe transporting</p> <p>a. Employees should not transport any leaking or damaged lead acid battery into a different work area, such as Vehicle Maintenance.</p> <p>b. Employees shall only transport new batteries with a properly sealed case, no visible leak, or fluids on it. When transporting lead acid battery to Vehicle Maintenance, employee should follow the safe procedures below:</p> <ul style="list-style-type: none"> • Place the battery on the flat cart and keep it in an upright position. • Lead acid batteries are extremely heavy and proper lifting procedure must be used to avoid personal INJURY. It is recommended steel-toed shoes be worn when transporting or working around a battery. • Hand hygiene - always practice good hygiene and wash your hands after handling a battery. • All employees who will transport the lead acid battery should receive the Hazard Communication with GHS training.

Hazardous Materials Spill Program

3	<p>Precaution for safe handling and storage</p> <ol style="list-style-type: none"> a. Keep containers tightly closed when not in use. b. If the battery case is broken, avoid contact with internal components. c. Protect containers from physical damage to avoid leaks and spills. d. Do not allow conductive material to touch the battery terminals. A dangerous short-circuit may occur causing battery failure and fire. e. Never lean over a battery while boosting, testing, or charging it. f. Freezing temperatures may cause spent batteries' cases to crack. g. Storage areas should be sealed with an acid-resistant material and have a containment berm. Lead-acid batteries that are being stored on pallets should not be stacked higher than three feet, and the piles should be covered and stored in an enclosed area. h. At a minimum, wear safety glasses and wear gloves that are acid-resistant and follow the proper spill clean-up procedures.
---	--

Lead Acid Battery Spills

Use proper Personal Protective Equipment when handling a small spill or a leaking battery (for more information, contact RMSS at (715)836-3999.

Step	Action
1	<p>If battery acid leaks into a secondary containment:</p> <ol style="list-style-type: none"> a. Double-bag the leaking battery in six-millimeter polyethylene plastic bags. b. Clean the spilled battery acid with rags or disposable wipes and appropriate absorbent donning on proper PPE. c. Manage the clean-up material as hazardous waste by placing it in an acid debris waste accumulation container provided by the department of RMSS. d. If the work area does not have an acid debris hazardous waste accumulation container: <ul style="list-style-type: none"> • Place the battery acid clean-up materials in a small pail or polyethylene plastic bag. • Label the pail or plastic bag as hazardous waste. • Call the RMSS to remove the spilled clean-up material as soon as possible. e. Clean-up debris might also contain lead and would have to be managed as such, not just as an acidic waste.
2	<p>Wear appropriate Personal Protective Equipment (PPE)</p> <ol style="list-style-type: none"> a. Safety glasses (non-fogging) with side shields, goggles, or face shields. b. Chemical protective gloves (Provide protection against chemical splashes, and resist nicks, cuts, and abrasions). c. Face mask approved for light sanding (N95/NIOSH approved). d. Safety Shoes and Aprons - acid resistant.

Hazardous Materials Spill Program

Training Program

This training only allows employees to respond to incidental release of hazardous substances in their work areas which do not pose a significant safety or health hazard to employees in the immediate vicinity or to the employee cleaning it up.

Step	Actions
1	The spill(s) may be cleaned up by employee(s) who are familiar with the hazards of the chemicals with which they work with.
2	This training should cover the site-specific spill prevention and response plan during their annual refresher training. Training will cover the following: <ol style="list-style-type: none"> a. To ensure safe handling procedures are both known and understood by all involved. b. To ensure workers learn how to read the (SDS), understand the information provided in the SDS and chemical labels, where to find important information, understand the risks of exposure and ways to protect them. c. To ensure workers know how to get help if a spill is encountered. d. To ensure workers know the size of the spill they can clean up under this plan. e. To ensure workers know the locations of spill cleanup materials and PPE. f. To ensure workers know how to store waste and properly dispose of it.

Appendixes

A. [Monthly Inspection Checklist](#)

Related Information:

29 CFR 1910.1450, [Occupational Exposure to Hazardous Chemical in Laboratories](#)

40 CFR Part 260, [Hazardous Waste Management System](#)

[Chs. NR 600-699; Hazardous Waste Management \(wisconsin.gov\)](#)

Hazardous Materials Spill Program

Administration:

Approval Details

Approval Authority:	29 CFR 1910.1450, Occupational Exposure to Hazardous Chemical in Laboratories 40 CFR Part 260, Hazardous Waste Management System
Approved By:	<i>Brian N. Drollinger</i>
Approval Date:	04/06/2023
Version no:	V2.0
Date of next Review:	The practice directive and procedure review should be scheduled annually from the approval date.

Revision History

Version	Revision Date	Description of changes	Author
1.0	12/26/2017	Procedure Established	Chaizong Lor
2.0	03/16/2023	Procedure Established	Chaizong Lor

Contact Person/Department

Contact Person:	Brian Drollinger, Director of Risk Management, Safety & Sustainability
Keywords:	Hazardous Materials Spill Program