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Satellite Accumulation Area (SAA) Procedure

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Satellite Accumulation Area (SAA) Procedure

General

A Hazardous Waste Satellite Accumulation Area (SAA) is a location within a Large Quantity Generator (LQG) Site where hazardous wastes are initially generated and tend to accumulate. These areas are regulated by the Maine Department of Environmental Protection (DEP) and must be managed accordingly. A Satellite Accumulation Area may be located within a laboratory, shop, central storage area, or other secure location, provided that the SAA is at or near the point of waste generation and is under the control of the person or persons generating the waste.

SAA regulations are designed to ensure that hazardous wastes are handled and stored in a manner that minimizes the hazards to human health or the environment from fires, explosions, or releases of hazardous waste. In order to prevent hazardous wastes from being inadvertently discarded with the regular trash or to the sewer system, all hazardous materials must be evaluated before disposal by UMS Safety Management (SM).

Waste Determinations

All hazardous materials must be considered hazardous wastes unless determined otherwise. To make a hazard determination you may take the following steps:

Consult the Safety Data Sheets for your waste chemicals. Hazards are described in detail with pictograms in section 2.

For Spent Waste you should complete a "Chemical Hazardous (Spent Waste) Determination Form.

For stock chemicals you no longer want, you should complete a "Chemical Waste Pickup and Disposal Request Form.

Either form is available on the SM web page.

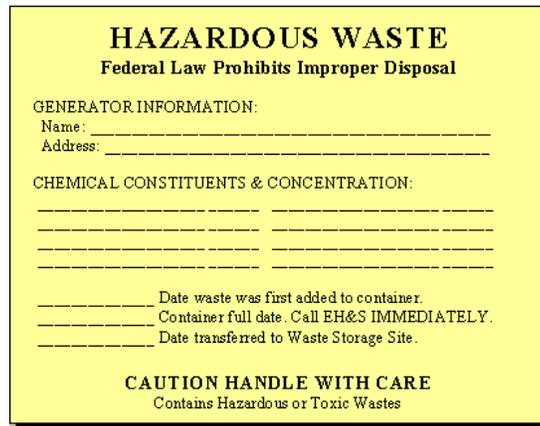
You may Contact Safety Management (via e-mail at SEM@maine.edu or call us at 581-4055) if you require assistance.

Labeling Requirements

All hazardous wastes must be collected in compatible containers that are clearly labeled with a "HAZARDOUS WASTE" label.

Fill in all information that applies, being sure to include all hazardous chemical constituents and the approximate concentration of each.

Adhesive labels are available from SM and can also be printed off in paper form (4 labels on 1 page) from SM's web page.



The image shows a yellow rectangular label with a black border. At the top, it reads "HAZARDOUS WASTE" in bold, followed by "Federal Law Prohibits Improper Disposal". Below this, there are sections for "GENERATOR INFORMATION:" with fields for "Name:" and "Address:". The next section is "CHEMICAL CONSTITUENTS & CONCENTRATION:" with several blank lines for text. At the bottom of this section, there are three lines for dates: "Date waste was first added to container.", "Container full date. Call EH&S IMMEDIATELY.", and "Date transferred to Waste Storage Site.". The label concludes with "CAUTION HANDLE WITH CARE" and "Contains Hazardous or Toxic Wastes".

Sample Label (available from SM)

Containers and Compatibility

Waste chemicals must be stored in containers that are chemically compatible with the contents.

Incompatible wastes must not be mixed together.

Containers must be kept tightly closed when waste is not being added to or removed from the container. The only exception to this is when it is unsafe to seal the container: as when a reaction is not yet complete and evolving gasses would cause a pressure buildup and explosion.

Accumulation Limits

Only one container of each type of waste may be stored in a SAA.

Full containers must not be stored in accumulation areas because SAA's are not designed to meet the alarm and containment requirements for Waste Storage Areas. **Once a container is full, it must be removed from the area and transferred to a Waste Storage Area within 72 hours.**

Each Acutely Hazardous Waste may be accumulated in any size container of up to 1-quart in volume. Wastes other than Acutely Hazardous Wastes may be accumulated in any size container of up to 55 gallons.

Inspection Requirements

All SAA's must be inspected weekly. A *Satellite Accumulation Area Inspection Log* must be maintained weekly and must be readily accessible for inspection within the area. Copies of the weekly inspection log should be sent to SM on the last working day of every month.

Disposal Procedures

Complete a *Request for Chemical Pickup Form* OR a *Chemical Hazardous (Spent Waste) Determination Form* and contact SM (581-4055) or fax the form to (581-4085) or email umhazwaste@maine.edu before

the container is filled. This will prevent having more than one container of a single type of waste in a SAA and will allow for timely removal of the wastes.

Training

Employees working in SAA's must be trained and must not work unsupervised until training is received. Training must be updated annually to ensure that employees are familiar with waste handling procedures, storage requirements, and emergency procedures.

Standard Satellite Accumulation Area Training may be included with the employees Laboratory-Specific Hazard Communication Training and must include:

- Containers and Compatibility;
- Accumulation Limits;
- Labeling and Inspection Requirements;
- Disposal Procedures; and
- Spill response procedures

Responsibilities

UMS Safety Management is responsible for the collection, and disposal of hazardous wastes; periodic inspections of SAA's; maintaining copies of monthly SAA inspection records for one year from the inspection date; and assisting with hazard determinations upon request by SAA users.

Principal Investigators and **Supervisors** are responsible for notifying SM upon establishment of a Satellite Accumulation Area; ensuring that training is received by SAA workers; ensuring that daily inspections of designated satellite accumulation areas are conducted and forwarded to SM monthly; and maintaining records and information on waste being generated in their areas (including quantities generated, type/concentration of constituents, and inspection records).

Each employee is responsible for attending training and notifying their supervisor prior to commencing operations that may generate hazardous waste.

Definitions

Acutely Hazardous Wastes: Waste chemicals, off-spec products, or spill residues specifically listed by name in the EPA and DEP regulations P Lists.

Corrosive: Aqueous solutions with a pH less than or equal to 2, or greater than or equal to 12.5; liquids that corrode steel or aluminum at a rate greater than 0.250" per year; and chemicals which cause visible destruction or irreversible alteration of human tissue.

Hazardous Material: A material that has been determined by the Secretary of Transportation to pose an unreasonable risk of harm, in transportation, to health or the environment. Hazardous Materials are listed in 49 CFR 172.101.

Hazardous Waste: Wastes which display the characteristics of ignitability, corrosivity, reactivity, or toxicity; or are listed as hazardous wastes by the EPA or DEP for displaying either a hazardous waste characteristics or for possessing a high potential to harm human health or the environment if improperly disposed.

Ignitable: Liquids, other than aqueous solutions containing less than 24% alcohol by volume, with a flash point less than 60° C (140° F) or solids capable of causing fire through friction, absorption of moisture, or spontaneous chemical changes.

Large Quantity Generator (LQG): A LQG is a single geographic location where more than 100 kilograms (220.46 lbs.) of hazardous waste or one kilogram of Acutely Hazardous Waste is generated in a calendar month.

Reactive: A substance which is normally unstable and readily undergoes violent change without detonating; reacts violently with water; forms potentially explosive mixtures with water; or forms toxic vapors, gases, or fumes when mixed with water in a quantity sufficient to present a danger.

Toxicity: Chemicals specifically listed by name in EPA and DEP regulations including: characteristic of toxicity as defined in 40 CFR 261.24; wastes from non-specific sources (F List); wastes from specific sources (K List); Commercial products, off-spec products, spill residues (U & P Lists); PCB-containing waste oils, transformers, and ballasts containing or possibly containing PCB oils (M List).

Waste Generator: The person whose work or instruction with a hazardous chemical first caused the material to become a hazardous waste (Usually a laboratory technician or researcher).

Satellite Accumulation Area: A demarcated area set aside for the temporary storage of hazardous waste at or near the point of generation. Wastes in a Satellite Accumulation Area (SAA) are under the control of the Waste Generator. SAA's should not be located near doorways, floor drains, or any other place where wastes could escape to the environment if spilled.

For Additional Information

- Contact your Department Safety Coordinator or UMS Safety Management at (207) 581-4055
- Satellite Accumulation Area Inspection Log