

HUMBOLDT STATE UNIVERSITY

Risk Management and Safety Services

Standard Operating Procedure: EHS006-082015

Title: Hazardous Waste Storage Procedure

Policy Statement

HSU may be classified as a small quantity generator of hazardous waste or a large quantity generator, depending on how much waste is produced each year. The amount of time HSU can store waste and what facilities or management activities are required is dependent on this classification. However, due to the difficulty with keeping up with and communicating to campus generators these changing requirements, HSU follows the most stringent timeframes and management requirements in order to ensure compliance.

Accumulation Time

Hazardous wastes shall not be accumulated at the site of generation/accumulation for longer than 60 days. While the regulations allow an accumulation time of up to 90 days for most wastes generated on campus, it is the policy of RM&SS that wastes must not be accumulated by generators for longer than 60 days.

Hazardous wastes are removed from campus by our contracted hauler every 90 days, if a generator holds waste for longer than the 60 day time limit it is possible that the waste may exceed the campus limit of 90 days. The penalties for exceeding the 90 day limit are severe and it is in our best interest not to exceed this limit.

Waste Storage

Hazardous wastes must be collected and stored in containers that can be sealed, are of adequate strength to hold the waste, and constructed of a material that is compatible with the waste. The containers must be kept in a secured area that is protected from the weather and unauthorized persons. Liquid wastes greater than five gallons in volume must have a secondary containment device in place. Lids must be kept tightly secured except to add or remove waste. The waste accumulation site must be located so as to provide easy access and a quick route of escape should a spill occur. It is required that medical waste accumulation areas be designated with a sign as describe in the Medical Waste Management Act (Refer to the RM&SS Medical Waste Management Plan) and held in a secured area separate from hazardous waste.

Waste Compatibility

Hazardous wastes must be segregated according to their hazard characteristics. The U.S. Department of Transportation (DOT) utilizes a hazard categorization system that places hazardous materials into nine categories. This system can be used as a starting point to help generators segregate incompatible hazardous wastes, however, additional segregation may be necessary.

The following categories will be subdivided as necessary to allow for complete segregation of hazardous wastes according to their chemical characteristics:

- **Explosives** - All explosive materials shall be stored separately from all other chemical wastes and preferably away from places where people are normally located.
- **Gases** - Gas cylinders must be segregated from all other wastes, may not be stored in an enclosure that does not allow ventilation, in an upright position (unless designed to be stored otherwise), with the valve protection device in place, and in a manner that will prevent them from falling if they are hit or during an earthquake. Oxygen must be stored at least twenty (20) feet from combustible materials.
- **Flammable liquids** - Must be kept clear of oxidizers and all gases. Particular note should be made of possible ignition sources in the accumulation area.
- **Flammable solids** - Generally these may be stored with flammable liquids unless they are water reactive or pyrophoric (air reactive) materials.
- **Oxidizers** - Must be kept clear of flammables.
- **Toxics** - Most wastes are toxic to some degree. Toxic wastes that do not fall into any of the other categories listed here may be accumulated together.
- **Radioactive materials** - Radioactive waste materials are managed by the campus Radiation Safety Officer and must be segregated from hazardous and medical waste streams.
- **Corrosives** - Corrosives may be oxidizing, reducing (flammable) acids and/or bases. All acids must be segregated from bases. Flammable acids, such as glacial acetic acid, must be kept away from oxidizing acids such as nitric acid.
- **Universal wastes** - should be kept separate from other hazardous wastes as these can be accumulated for up to one year.

Additional segregation requirements:

- Sulfides and cyanides - Must be kept away from corrosives.
- Asbestos - May be stored with toxics.
- Others - Contact RM&SS at extension 3302