

ST. CLOUD TECHNICAL AND COMMUNITY COLLEGE HAZARDOUS WASTE PROCEDURE

APPLICABILITY

This procedure is applicable to all St. Cloud Technical & Community College faculty, staff and students.

GENERAL

Federal, state and local governments impose strict regulations concerning the management, storage, and disposal of hazardous materials. Compliance with these laws, good safety practices, and the necessity to avoid future liabilities dictate that the college take a conservative approach to handling this material.

The term "hazardous waste" as used in this policy means any substance no longer of use to the possessor whose chemical or biological properties have the potential to endanger personnel, material or the environment if handled improperly. Hazardous waste includes, but is not limited to the items specifically identified as "hazardous waste" under federal and state statutes.

With the exception of radiological material, the Safety Department is charged with ensuring that all hazardous waste generated at St. Cloud Technical and Community College is handled properly. Within specific activities, the Safety Department will provide advice and technical assistance. However, it is the responsibility of each individual to know the possible dangers associated with any material being used or generated, and know how the material should be handled and disposed of BEFORE A PROJECT HAS BEGUN.

Departments will not arrange for off or on site disposal of hazardous materials or use the College's EPA ID number without prior coordination with the Department of Safety and Security.

TYPES OF WASTE:

Materials for which the Safety Department is Responsible:

- Chemical waste to include Highly Toxic Material.
- Highly Toxic Material is any chemical which is either specifically identified by the Environmental Protection Agency (EPA) as an "acute hazard" or has a Lethal Dose 50 (LD50) or 50 mg/kg or less oral-rat. Samples include inorganic cyanides, many pesticides, arsenic compounds, etc. A listing of EPA listed "acute hazards" may be obtained from the Safety Department.
- Used oil (handled the same as chemical waste)
- Biological/Infectious Waste
- Pharmaceutical Waste
- Fluorescent Bulbs and Ballasts.
- Batteries
- Asbestos
- Lead-based paint.
- Computers (through MIS)

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Materials for which the Safety Department is NOT responsible:

- Broken glass, whose only danger comes from its ability to inflict wounds, is not considered hazardous waste. Departments which anticipate generating broken glass should obtain puncture proof containers and dispose of the material appropriately.

CHEMICAL WASTE

Waste Minimization

Government regulations and cost effectiveness require that as little hazardous waste as possible be generated. The following guidelines are a checklist to accomplish waste minimization - they are not intended to restrict activities:

- Before beginning a project, determine the hazards associated with the material. Where possible, substitute less hazardous substances.
- Use only small batches or micro-level reactions where possible.
- Order and maintain minimum quantities of each chemical.
- Certain chemicals are difficult and/or costly to dispose of and should be given special consideration. Some types are:
 1. Any heavy metal, e.g., mercury, barium, cadmium, chromium, beryllium, silver, selenium, tellurium, either elemental or in compounds.
 2. Chlorophenols, dioxins, and cyanides.
 3. Compressed gases or containers with liquids under pressure (especially if the substance is poisonous). Where possible arrange with the supplier to accept return of used containers.
 4. Manufacturers' samples. Either arrange for the manufacturer to accept return of unused material or ensure the provide an ample description of the product and its characteristics.

Disposal of Material by Users

Plumbing systems whether or not they are "chemically resistant" and whether or not they are equipped with "dilution tanks" are capable of handling only incidental quantities of waste - they are NOT designed for use as a primary disposal method.

Containers that have been emptied using normal practices (e.g., pouring) are generally not considered hazardous and can be discarded in normal trash. (Containers that held Highly Toxic Materials are considered hazardous even when empty and shall be handled as such).

Although legally empty the following procedures are recommended to preclude possible incidents arising from residual material:

- For solvent based material open the container in a fume hood and allow residue to evaporate overnight - discard the container opened.

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- For aqueous based material (acids and bases) triple rinse with water and discard the container opened.

Accumulation

Excess amounts of waste and/or unneeded material are not to accumulate.

In no case, will an activity allow more than 50 gallons of an Highly Toxic Waste nor will any waste container be retained for longer than one year.

At the end of any project or prior to the departure of an individual, all material shall be clearly identified and disposed of.

In addition:

Each laboratory will conduct at least an annual physical survey of their area and dispose of unneeded/expired material. Special attention will be given to the following:

- Refrigerators and freezers.
- Ethers and other peroxide forming substances
- Materials that become more dangerous due to evaporation such as sodium, organo-metallic compounds in solvents, or picric acid.

Segregation of Waste

To the extent feasible, waste should be segregated and not combined. Mixing of different type waste poses dangers.

Containers

It is the responsibility of the generating department to provide suitable waste containers for waste accumulation prior to pick-up.

Waste containers must be compatible with the waste collected, kept closed unless material is being added, capable of being transported, and appropriately labeled. Do not use containers over 5 gallons without prior approval from the Safety Department.

Labeling

The Safety Department will supply labels or departments may use their own. Waste collection containers must be clearly labeled with:

1. The word "WASTE" in a conspicuous location.
2. The type of waste being accumulated in the container, e.g., "halogenated solvent, hydrochloric acid." Generic terms that give no indication of the hazard associated with the waste, e.g., "aqueous waste", are not acceptable.
3. Approximate amount or percentage of each constituent.

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4. The date the first waste was added to the container.
5. Containers of excess or spent oil will be labeled "USED OIL".

Before the material is picked-up the following must be on the label:

1. The name and telephone number of an individual who certifies the waste container contents.
2. The actual contents of the container - provide chemical names not abbreviations.

Containers of excess materials, with the manufacturers' original label, need not be re-labeled - unless, the manufactures' label does not identify the contents by chemical name. In such case the department must appropriately label the container or provide a Material Safety Data Sheet for the material.

BIOLOGICAL/INFECTIOUS WASTE

Used sharps and/or needles that have been contaminated with potentially pathogenic or infectious materials will be collected in puncture proof containers (i.e., sharps containers). Sharps containers need to be sealed before they can be disposed of.

All biological/infectious waste (excluding sharps containers) will be placed in approved "RED" biohazardous bags; the bag will be sealed with tape and placed in an approved biohazard box which will also be sealed.

The Safety Department will provide bags and boxes.

Specific procedures for segregating and packaging biological/infectious waste may be obtained from the safety Department.

PHARMACEUTICAL WASTE

Used pharmaceutical waste and/or needles that need to be disposed of, will be collected in puncture proof containers. All pharmaceutical waste will be placed in approved "BLACK" containers.

Departments will provide the containers.

All of the waste pharmaceuticals that are dispensed into the "BLACK" containers need to be recorded on a waste log. You can contact the Safety Department and/or the Dental Lab Assistant for an electronic version of the form.

FLUORESCENT BULBS

Producers of this material are responsible for packaging of bulbs. Bulbs may be packaged in original containers (use the box the bulbs were supplied it with packing material removed). If appropriate packaging is not available, contact the Safety Department.

Any broken bulbs will be immediately cleaned up with residue placed in a suitable container, marked as to its contents and disposed of with spent bulbs.

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BATTERIES

Lead-Acid batteries, automotive type or sealed, are disposed of by the Automotive Lab Assistant.

Standard alkaline batteries, such as those used in flashlights, do not normally require handling as hazardous material and can usually be disposed of as normal trash.

Non alkaline, rechargeable batteries, e.g., Nickel-Cadmium Metal (Nickel, Lithium, et al) Hydride, Lithium Ion, etc., used in cell phones, pagers, hand-held radios, computers and powered hand-tools are potentially hazardous and should be properly disposed of - not placed in normal trash. Even when discarded, these batteries should be handled carefully, by placing the batteries in individual plastic bags or taping over the electrodes. These batteries will be collected and recycled by the Safety Department.

COMPUTERS

Computers and related equipment (monitors, keyboards, scanners, etc) and parts (cards, cords etc) are an environmental concern. Most components contain metals such as lead, which are regulated by the Environmental Protection Agency, and hence, cannot be disposed of as normal trash. St. Cloud Technical and Community College's MIS Department stores and disposed of our computers and related equipment.

SPILLS/INCIDENTS

Each department should expect and be prepared to deal with "routine" spills of materials. Departments are encouraged to purchase and position appropriate pre-packaged "spill kits".

Absorbents and/or contaminated material from such incidents will be collected in an appropriate container and disposed of in the same manner as other hazardous chemical waste.

Request assistance if required. Generally, conditions requiring assistance include, but are not limited to:

- Clean-up cannot be accomplished without harm to yourself or others.
- Questionable levels of respiratory exposure.
- Significant amounts of highly hazardous material.
- Unidentified spilled material.
- Medical assistance is required.

If assistance is required:

- Contact the Safety Department or Campus Security at 308-3333.
- Arrange to meet responder and remain in area until released.

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COLLECTION

The Department of Safety and Security is responsible for picking up hazardous waste from individual activities. Safety and Security will respond only to requests made via the online Waste Disposal Request at https://webapps.sctcc.edu/maintenance/cgi-bin/safety/haz_waste.pl. You can find this link off of the Campus Safety and Security page. In most instances, Safety and Security will respond to requests within three working days.

CONTACTS

Address any questions to Director of Safety and Security at 320-308-6158.