Recycling or Disposal of Chemical Wastes

**POLICY**

University personnel must manage chemical waste in accordance with local, state, and federal regulatory requirements. Compliance is necessary to protect the health and safety of University employees, students, and visitors and to meet local, state, and federal regulatory requirements.

**Legal Requirements**

The University must comply with federal, state, and local hazardous waste laws and regulations.

- The U.S. Environmental Protection Agency (USEPA), the Washington State Department of Ecology (WDOE), and the U.S. Drug Enforcement Agency issue regulations implementing federal and state laws.

- Local governments regulate discharges to the sanitary sewer systems.

**Violations**

Violations of federal, state, or local law may result in fines and/or imprisonment for University personnel, supervisors, and administrative officers.

**Related Procedures**

Section SPPM 5.68 provides procedures for identification and storage of chemical wastes.

**Applicability**

Chemical Wastes

Policies and procedures in SPPM 5.66 and 5.68 apply only to the management of chemical wastes which are regulated by the United States Environmental Protection Agency (EPA), the Washington State Department of Ecology, and the United States Drug Enforcement Agency (DEA).

Radioactive Wastes

These procedures do not apply to radioactive wastes. The Radiation Safety Office (RSO) manages radioactive substances. Telephone 509-335-8916 for assistance or refer to SPPM 9.70.

Biohazardous Wastes

These procedures do not apply to biohazardous wastes. Refer to SPPM 4.24 regarding options for biohazardous waste treatment and disposal. Contact the WSU Biosafety Officer; telephone 509-335-1585; or Facilities Services, Operations; telephone 509-335-4530 for questions regarding biohazards.

**EH&S Responsibilities**

Environmental Health and Safety (EH&S) assists departments by collecting, designating, recycling, and disposing of hazardous chemical wastes.
Recycling or Disposal of Chemical Wastes

**EH&S Responsibilities**

**cont.**

Environmental Health and Safety provides departments with information about waste minimization and with directions for preparing hazardous chemical wastes for recycling or disposal.

Contact applicable EH&S support personnel for assistance in managing chemical wastes:

- WSU Pullman EH&S; telephone 509-335-3041
- WSU Spokane EH&S; telephone 509-368-6699
- WSU Tri-Cities EH&S; telephone 509-372-7163
- WSU Vancouver EH&S; telephone 360-546-9706
- Environmental Health and Safety Research and Extension Center (REC) Support; telephone 509-335-3041

**Generator Responsibilities**

**Waste Generator**

A waste generator is a person who creates chemical wastes.

**Waste Identification**

The waste generator is responsible for determining whether chemical wastes meet federal, state, and/or local government definitions of dangerous wastes.

Identify which wastes must be managed as dangerous waste (see **Applicability**). Wastes defined as dangerous wastes must be packaged, accumulated, transported, and disposed of in a safe and legal manner.

Examples of dangerous wastes include laboratory chemicals, photographic processing chemicals, leftover paint, automobile fluids, and other maintenance materials.

**Identification Alternative**

As an alternative, report all wastes by submitting a Chemical Collection Request to EH&S (see **Reporting Wastes**). Environmental Health and Safety determines the proper management method.

**WSU Spokane, WSU Tri-Cities, and WSU Vancouver Departments**

For identification and management guidance, WSU Spokane, WSU Tri-Cities, and WSU Vancouver departments use the applicable campus chemical collection or chemical reporting form to report wastes to the campus EH&S office (see **Chemical Collection Request**).
Recycling or Disposal of Chemical Wastes

Aerosol Containers, Batteries, and Light Bulbs
Pressurized aerosol containers, even when empty, all batteries, and all light bulbs are considered to be regulated hazardous waste and must not be disposed of in trash cans, dumpsters, or any other uncontrolled waste receptacle.

Environmental Health and Safety provides labeled containers for pressurized containers, batteries, and light bulbs in waste accumulation areas at various campus locations. Contact the applicable EH&S support personnel for the locations of the waste accumulation areas or to arrange waste pickup.

Electronic Waste
Electronic waste, including monitors, televisions, CPUs, printers, and keyboards, is regulated waste and must not be disposed of in trash cans, dumpsters, or any other uncontrolled waste receptacle.

Departments are to dispose of electronic waste by submitting an online Surplus Disposal Request (SDR) to Facilities Services—Surplus Stores. (See BPPM 20.76.) Surplus Stores collects unwanted electronics upon receipt of the SDR.

Controlled Substances
Chemicals identified by the Drug Enforcement Administration (DEA) as controlled substances must be handled in accordance with the requirements of BPPM 45.75.

Accumulation
Each department is responsible for properly labeling, preparing, and safely accumulating all chemical wastes generated. Refer to SPPM 5.68 for chemical waste storage procedures.

Minimizing Waste
Each generator is responsible for minimizing chemical waste generation through prudent purchasing practices, product substitution, recycling, or reducing the amount of chemicals used by the department.

Providing Hazard Data
To facilitate safe and legal management of hazardous materials, each department is responsible for providing hazard information (i.e., a Safety Data Sheet) to EH&S upon request (see also SPPM 5.10).

PACKAGING REQUIREMENTS
The waste generator is responsible for properly collecting chemical wastes, in the following manner:

- Place each chemical waste in a separate, leak-proof container that does not react with the substance. Usually this is the original container. The generator is responsible for supplying the waste containers.
Recycling or Disposal of Chemical Wastes

PACKAGING REQUIREMENTS (cont.)

- Securely attach a proper lid on each container when not adding waste.
- Do not combine different waste streams in the same container without permission from EH&S.

Segregate containers of potentially reactive chemicals (e.g., acids/bases or oxidizers/flammables) in order to prevent reactions prior to or during accumulation or collection. See SPPM 5.68 for chemical waste storage procedures.

- Provide secondary containment, e.g., a plastic tub, for any primary container that may leak or rupture. See SPPM 5.62 for chemical spill procedures.

LABELING REQUIREMENTS

The waste generator is responsible for properly labeling chemical waste containers.

Place a dangerous waste label on each container when waste is first added (Figure 1).

Obtain a dangerous waste label using one of the following methods:

- Print a Dangerous Waste Label from the EH&S website:
  ehs.wsu.edu/
- Order a Dangerous Waste Label from EH&S; telephone 509-335-3041.
Recycling or Disposal of Chemical Wastes

LABELING REQUIREMENTS (cont.)

- Print a Dangerous Waste Label for use by waste generators at WSU Spokane from the Hazardous Waste area of the WSU Spokane EH&S website at:
  spokane.wsu.edu/facilities/environmental-health-and-safety/hazardous-waste/

- Print a Dangerous Waste Label for use by waste generators at WSU Tri-Cities from the WSU Tri-Cities EH&S Hazardous Waste Accumulation, Storage, and Labeling webpage at:
  tricities.wsu.edu/campus-safety-parking/hazwaste/disposal/

- Obtain a Dangerous Waste Label for use by waste generators at WSU Vancouver from the campus EH&S Coordinator.

- Obtain a Dangerous Waste Label for use by waste generators at research and extension centers (RECs) from the REC EH&S Coordinator.

- Create a label. See below for information required on the label.

Required Information

Each self-created label must contain all of the following information:

- Name of each constituent. Do not use chemical formulae or abbreviations.

- Percentages/amounts of each constituent. Account for 100% of the waste constituents on the container label, including water.

- Hazards the waste presents (e.g., flammable, corrosive, toxic).

- The words "DANGEROUS WASTE."

- Chemical Collection Request (CCR) number (see Chemical Collection Request).

REPORTING WASTES

University personnel who generate surplus hazardous chemicals or chemical waste are responsible for reporting those chemicals to EH&S for subsequent recycling or disposal.
Recycling or Disposal of Chemical Wastes

Chemical Collection Request  Use a Chemical Collection Request (CCR) form to report chemicals for disposal or recycling. The CCR form may be obtained using one of the following methods:

- Complete an online CCR from the EH&S website:
  
  ehs.wsu.edu/

  Refer to the website for step-by-step instructions.

- Order paper copies of the CCR from EH&S; telephone 509-335-3041.

  Refer to the back of the paper form for detailed instructions for filling out and submitting the completed CCR.

- Print a Chemical Substance Report form (CSRF) for use by waste generators at WSU Spokane from the Hazardous Waste area of the WSU Spokane EH&S website at:

  spokane.wsu.edu/facilities/environmental-health-and-safety/hazardous-waste/

- Complete an online Chemical Collection Request (CCR) for use by waste generators at WSU Tri-Cities from the WSU Tri-Cities EH&S Hazardous Waste Disposal webpage at:

  tricities.wsu.edu/campus-safety-parking/hazwaste/disposal/

- Print a Chemical Substance Report form (CSRF) for use by waste generators at WSU Vancouver from the WSU Accident Prevention Program--Hazardous Waste Management Program link on the WSU Vancouver EH&S website at:

  admin.vancouver.wsu.edu/ehs/environmental-health-safety

After completing the CCR, enter the CCR number onto the Dangerous Waste label attached to the waste container (see Labeling Requirements).

COLLECTION  After receiving the completed Chemical Collection Request form, EH&S personnel determine the appropriate management method and assign all applicable waste designation codes.

Environmental Health and Safety collects the chemicals and coordinates and contracts for transportation, recycling, or disposal of waste chemicals.
Recycling or Disposal of Chemical Wastes

COLLECTION (cont.)

NOTE: EH&S may not respond to departmental requests for disposal of certain chemicals until a disposal facility is found to accept the wastes.

Recycling

Environmental Health and Safety reviews all wastes for recycling alternatives.

Environmental Health and Safety maintains a stock of unused chemicals at the Pullman campus only, which are available for recycling to University personnel. The list of chemicals appears on the EH&S website:

ehs.wsu.edu

To request free delivery of a chemical on the recycling database, WSU Pullman departments e-mail EH&S from the website or call 509-335-3041.

To recycle surplus chemicals from a lab or work area, submit the chemicals to EH&S using the waste reporting procedure described above. Environmental Health and Safety determines whether the chemicals are acceptable for recycling.

INAPPROPRIATE DISPOSAL METHODS

Drains, Trash, Evaporation

Disposal of dangerous chemical wastes in drains, by evaporation, or by placement in the regular trash system is a serious violation of local, state, and federal law, punishable by fines and imprisonment.

When a generator of dangerous wastes illegally or inappropriately dumps such waste in the trash contaminating common refuse (trash, paper, etc.), the entire mixture may become a dangerous waste. This practice may result in costly disposal.

The University may require generators who create such disposal problems to pay for disposal.

IMPORTANT: Do not dispose of chemicals in drains, trash, or by evaporation without prior EH&S approval.

Dilution

A hazardous chemical waste cannot be rendered nonhazardous by dilution with water or solvent.
Recycling or Disposal of Chemical Wastes

Exceptions

Under unusual circumstances, and with prior EH&S approval, disposal by one of the above methods may be legal and appropriate. Contact EH&S for more information; telephone 509-335-3041.

CHEMICAL SPILLS

Laboratory Spills

If a chemical spill occurs in a laboratory, refer to the following resources:

- *The WSU Laboratory Safety Manual*
- The lab's spill response and emergency plan
- *SPPM 5.62* for chemical spill management procedures

Nonlaboratory Spills

Refer to *SPPM 5.62* for chemical spill management procedures.

Assistance

Call 911 if involved personnel are uncertain about the nature of the spill or require assistance with spill management procedures.