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Employee  
Responsibilities

All employees must adhere to applicable laws and regulations concerning the acquisition, use, storage, labeling, disposal of hazardous materials. EHS/RMS (786-1279)  
<http://www.uaa.alaska.edu/EHSRMS/ehspersonnel.cfm>

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the listed compounds and provide procedures to assure that the compounds can be safely and securely stored on site. In addition, procedures must be developed to safely use the compound. Evidence of end process detoxification or total consumption of the listed compound must be provided prior to purchasing listed compounds. The list can be found in

<http://ehsrms.uaa.alaska.edu/CMS/Laboratory/ChemList/EPA%20PList.pdf>

## Storage

All hazardous materials must be stored in approved containers, cabinets, and storage areas. Containers, cabinets, and storage areas will have proper labeling. Materials must not be transferred to unapproved, unlabeled containers, except for actual use or limited lab work. Safe procedures will be used for transferring materials from bulk (spill protection, ventilation, grounding, etc.). The department head should verify proper storage is available prior to ordering a hazardous material.

UAA has the responsibility for complying with the reporting requirements of the Superfund Amendment and Reauthorization Act (SARA Title III). EHS/RMS will coordinate and assist with these reporting requirements and may request information from departments when completing the required reports.

Departments should keep accurate inventories of hazardous materials to assist UAA EHS/RMS for the completion of the annual CRTK (Community Right To Know) program that is submitted to the local fire department and the State of Alaska. Upon request, departments should be able to supply the location and quantities of all stored hazardous materials. The Chemical Hygiene Officer serves as the archiving agent at UAA.

## Chemical Emergencies

The University will rely on local available state, municipal, or private emergency services to contain spills or leaks which progress beyond the ability of department staff to safely control. EHS/RMS (787-9 or <http://www.uaa.alaska.edu/EHSRMS/ehspersonnel>) and or Facilities



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EHS/RMS will be notified at the Anchorage campus that waste is ready for pick up and disposal.

Extended UAA campuses must make their own arrangements for hazardous chemical and petroleum waste disposal. These arrangements must be in accordance with all federal, state, and local laws. EHS/RMS will provide advice and assistance upon request and will periodically review compliance with procedures.

**Disposal  
Guidelines**

**ALL HAZARDOUS WASTE DISPOSAL ACTIVITIES MUST BE COORDINATED THROUGH EHS (786-1279) IN ANCHORAGE.**

Departments and employees are prohibited from circumventing this procedure by falsely claiming any UAA hazardous on-hazardous waste as being generated by an individual or household.

An individual waste stream generated from a laboratory procedure should not be combined with other chemical wastes. The fewer the number of chemicals associated with a waste, the more economical the disposal.

**Flammable Solvents**—Flammable solvents will be picked up by EHS/RMS. Disposal of solvents to the sanitary sewer is permitted.

**Halogenated Solvents**—Halogenated solvents must not be combined with flammable non-halogenated solvents. Examples of halogenated solvents include methylene chloride, chloroform, and carbon tetrachloride.

**Acids and Bases**—Concentrated acids and bases are picked up by EHS/RMS. Diluted acids with a pH of greater than 5 can be discharged to the sanitary sewer.

**Oils**—Only trace quantities of oils associated with cleaning and washing operations should be released to the sanitary sewer. Oil wastes from vacuum pumps, transformers, motors, etc., should be accumulated for

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pickup and disposal by EHS/RMS

(<http://www.uaa.alaska.edu/EHSRMS/ehspeople/cfm>)

Biocides—Concentrated solutions are not to be released to the sanitary sewer. Disposal is to be limited to one gallon of "working strength" solution per laboratory per day. This applies primarily to germicides and occasional disposal of pesticides. Chemicals which persist in the environment should be released only in trace quantities.

In addition to the previously described wastes, toxic, carcinogenic,

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Some of these compounds are fairly common materials used in many laboratories, such as chloroform, carbon tetrachloride, benzene, dioxane, hydrazine, thiourea, and toluidine. There are over 2000 other chemicals for which there is allegedly some degree of evidence for carcinogenicity. Many of these also warrant careful planning and control procedures. EHS/RMS should be consulted when questions arise about the carcinogenic potential of certain chemicals handled in laboratories. Listings of known or suspected agents and detailed standards governing their use are available from EHS/RMS on request.

Principal investigators are responsible for assuring that laboratory personnel are trained in safe practices, for reporting exposures or potential exposures to chemical carcinogens, and for the submission of a safety plan for the research under their direction to EHS/RMS. The safety plan is to describe the procedures that will be used to ensure the safe handling of chemical carcinogens, an assessment of the potential risks, the need for medical surveillance, procedures for handling spills, and waste disposal methods.

Exposures of personnel to chemical carcinogens, such as concentrated contaminated aerosol through research procedures, spills, inoculation with a contaminated needle, are to be reported to EHS/RMS (2786) or <http://www.uaa.alaska.edu/EHSRMS/ehspersonnel>. Refer to EHS/RMS Statement 16, [Use of Chemical Carcinogens](#) for additional information.

#### Use of Biohazardous Agents

Biohazardous agents are infectious microorganisms, or their toxins, which cause or may cause human disease. Control practices for the prevention of laboratory acquired infections and for the protection of the general environment will be included in all research programs involving biohazardous agents.

Principal investigators are responsible for assuring that laboratory personnel are trained in safe practices; biohazardous exposures and

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potential exposures are reported, and a safety plan for research under their direction is submitted to EHS/RMS. The safety plan is to describe



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- x Flammable paints, oils, and varnishes in 1 or 5 gallon containers, used for building maintenance purposes, may be stored temporarily in closed containers outside approved storage cabinets or room if kept at the job site for less than 10 calendar days.

Every inside storage room will be provided with a continuous mechanical exhaust ventilation system. To prevent the accumulation of vapors, the location of both the makeup and exhaust air openings will be arranged to provide, as far as practical, air movement directly to the exterior of the building and if ducts are used, they will not be used for any other purpose.

All flammable storage areas are to be designated and properly signed to reflect their nature.

Flammable and combustible liquids require careful handling times. The proper storage of flammable liquids within a work area is very important in order to protect personnel from fire and other safety and health hazards.

- x Storage of Flammable liquids shall be in NFPA approved flammable storage lockers or in low value structures at least 50 feet from any other structure. Do not store other combustible materials near flammable storage areas or lockers
- x Bulk drums of flammable liquids must be grounded and bonded to containers during dispensing
- x Portable containers of gasoline or diesel are not to exceed 5 gallons
- x Safety cans used for dispensing flammable or combustible liquids shall be kept at a point of use.
- x Appropriate fire extinguishers are to be mounted within 75 feet of outside areas containing flammable liquids, and within 10 feet of any inside storage area for such materials.
- x Storage rooms for flammable and combustible liquids must have explosionproof light fixtures

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- x Bulk storage of gasoline or diesel are kept in above ground tanks. Tank areas are required to contain accidental spills. Tanks shall be labeled IAW NFPA guidelines. All tank areas shall be designated no smoking- no hot work- no open flame areas.
- x No flames -hotwork or smoking is be permitted in flammable or combustible liquid storage areas.
- x The maximum amount of flammable liquids that may be stored in a building are
  - 20 gallons of Class IA liquids in containers
  - 100 gallons of Class IB, IC, II, or III liquids in containers
  - 500 gallons of Class IB, IC, II, or III liquids in a single portable tank.
- x Flammable liquid transfer areas are to be separated from other operations by distance or by construction having proper fire resistance.
- x When not in use flammable liquids shall be kept in covered containers.
- x Class I liquids may be used only where there are no open flames or other sources of ignition within the possible path of vapor travel.
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- x Inspect valve adapter threads.
- x Inspect all fasteners, hoses & regulators prior to hooking up to cylinder.
- x Use only for approved purposes.
- x Use in up-right position.
- x Fasten cylinder to structure or cart.
- x Regulators must be of same rated pressure as cylinder
- x Keep cylinder valve shut when not in use; don't depend on regulators