

University of Virginia

WRITTEN HAZARD COMMUNICATION PROGRAM

Most Recent Revision Date: December 4, 2023

Next Review Date: December 31, 2024

Introduction

The federal Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS) was promulgated to ensure that all chemicals would be evaluated and that information regarding the hazards would be communicated to employers and employees. The goal of this standard is to reduce the number of chemically related occupational illnesses and injuries.

In compliance with the Hazard Communication Standard ("Right-to-Know") (29 CFR 1910.1200), the scope of this written program applies to University of Virginia employees and students who may be exposed to hazardous chemicals under the normal conditions of use, or in a foreseeable emergency. In this document, the University of Virginia (UVA) is defined as:

- UVA Academic Division (UVA-AD)
- UVA Medical Center (UVA-MC)
- UVA College at Wise (UVA-Wise)

UVA Facilities Management (UVA-FM) maintains a separate written plan for their employees.

Copies of this written program are readily available for review by any UVA employee or student, and can be obtained from the following locations:

Office of Environmental Health & Safety web site: (ehs.virginia.edu)

Office of Environmental Health & Safety (EHS, 982-4911)

Medical Center Knowledgelink in UVA Manuals

Components of this program include:

- Roles and Responsibilities
- Definition of a Hazardous Chemical
- Hazardous Chemical Inventory List
- Safety Data Sheets
- Labels and Hazard Communication Signs
- Employee Information and Training
- Non-Routine Tasks
- On-site Contractors
- Medical Information in the Event of an Exposure
- Hazardous Waste Disposal
- Shipping Hazardous Materials
- Program Review
- Appendix A – Chemical Inventory
- Appendix B – Definitions

Roles and Responsibilities

Each employee who may be exposed to hazardous chemicals under the normal conditions of use, or in a foreseeable emergency, is responsible for following the guidance provided within this document. All employees are expected to adhere to information provided during *Chemical Safety Training*, information provided in Safety Data Sheets, or other safety information readily available and related to the hazardous chemical use. The following entities have specific responsibilities for implementing the Hazard Communication Program:

Office of Environmental Health and Safety (EHS)

EHS is responsible for designing, implementing, overseeing and updating the Hazard Communication Program. EHS works collaboratively with MC Safety and Compliance personnel to implement and maintain an applicable program. EHS responsibilities are to:

- Annually review and revise the Hazard Communication Program as necessary
- Maintain the written program on the EHS website
- In conjunction with Supervisors and Faculty, identify areas where hazardous chemicals are used.
 - Laboratories, shops, studios and makerspace areas using hazardous chemicals are indicated by Hazard Communication Signs (see below). Patient areas are not posted.
- Inspect areas that use hazardous chemicals to evaluate compliance with the Hazard Communication Program
- Provide access to Safety Data Sheets through an online database
- Provide Chemical Safety Training or content for Chemical Safety Training (see training section)
- Provide guidance on compliance with the Hazard Communication Program
- Serve as point of contact with local, state and federal officials with regard to the Hazard Communication Program

Supervisors/Faculty

Supervisors and Faculty who oversee the daily operations/work/research and safety of personnel have specific responsibilities under the Hazard Communication Program. For the work area(s) and personnel for whom they are responsible, supervisor and faculty responsibilities are to:

- Identify all hazardous chemicals within the work area that they oversee
- Identify employees and students under their supervision that work with hazardous chemicals
- Ensure all employees and students that work with hazardous chemicals receive Chemical Safety Training and
- Provide chemical specific hazard information for materials used in their work area(s) upon initial employment, and any new chemical hazards introduced thereafter.
- Ensure that employees minimize any potential exposure with available engineering controls, safe work practices and necessary or assigned personal protective equipment.

Employees and Students










People who may be exposed to hazardous chemicals under the normal conditions of use, or in a foreseeable emergency are expected to comply with the University's Hazard Communication Program. Their responsibilities are to:

- Complete Chemical Safety Training
- Use proper engineering controls and personal protective equipment
- Report unsafe conditions or accidents to your supervisor or instructor
- Follow the guidance in the Hazard Communication Program.

Definition of a Hazardous Chemical

OSHA defines a hazardous chemical as a substance for which there is statistically significant evidence, based on at least one scientific study, showing that acute or chronic harm may result from exposure to that chemical. A hazardous chemical is one which is classified as a physical or a health hazard, which includes a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified. Any product or chemical, which could meet this definition, will have a Safety Data Sheet (SDS), which provides details on the hazards. The HCS Globally Harmonized System (GHS) hazard pictograms, and related hazard classes are shown below.

HCS Pictograms and Hazards

Health Hazard  <ul style="list-style-type: none"> ■ Carcinogen ■ Mutagenicity ■ Reproductive Toxicity ■ Respiratory Sensitizer ■ Target Organ Toxicity ■ Aspiration Toxicity 	Flame  <ul style="list-style-type: none"> ■ Flammables ■ Pyrophorics ■ Self-Heating ■ Emits Flammable Gas ■ Self-Reactives ■ Organic Peroxides 	Exclamation Mark  <ul style="list-style-type: none"> ■ Irritant (skin and eye) ■ Skin Sensitizer ■ Acute Toxicity ■ Narcotic Effects ■ Respiratory Tract Irritant ■ Hazardous to Ozone Layer (Non-Mandatory)
Gas Cylinder  <ul style="list-style-type: none"> ■ Gases Under Pressure 	Corrosion  <ul style="list-style-type: none"> ■ Skin Corrosion/Burns ■ Eye Damage ■ Corrosive to Metals 	Exploding Bomb  <ul style="list-style-type: none"> ■ Explosives ■ Self-Reactives ■ Organic Peroxides
Flame Over Circle  <ul style="list-style-type: none"> ■ Oxidizers 	Environment (Non-Mandatory)  <ul style="list-style-type: none"> ■ Aquatic Toxicity 	Skull and Crossbones  <ul style="list-style-type: none"> ■ Acute Toxicity (fatal or toxic)

Hazardous Chemical Inventory List

The Hazard Communication Standard (HCS) requires employers to maintain a list of hazardous chemicals present in the workplace. Personnel responsible for areas where hazardous chemicals are stored are required to maintain a chemical inventory. Examples include but are not limited to: Principal Investigators who oversee a laboratory, supervisors who oversee shops or makerspaces, and managers of storerooms and storage facilities. Chemical inventories should be maintained in a way that can be easily accessed, updated, and shared with area personnel, and with EHS and regulating agencies upon request. An institutional-wide program for inventory management does not currently exist, and a variety of approaches to inventory requirements exist across schools, units, departments, and investigators, to include Quartzly, Chematix™, and word processing software.

UVA-MC employees shall maintain their chemical inventory list in the Unit Red Book.

EHS maintains a list of chemicals and chemical products known to be utilized at UVA available at: ehs.virginia.edu

Safety Data Sheets (SDS)

The Hazard Communication Standard (HCS) requires that employees be provided information about the physical and health hazards of the chemicals they use or are potentially exposed to in their work area. Safety Data Sheets (SDS) are the primary communication tool that provides the most basic, essential information about a hazardous substance or mixture. Under the HCS, manufacturers are required to author an SDS for any hazardous chemical or product.

Federal law requires that an SDS for all of the hazardous chemicals used at a location must be readily accessible to employees. Electronic access is permitted as an alternative to paper copies as long as no barriers to immediate employee access are created (i.e. an employee asking a supervisor for access to an SDS constitutes a barrier. If electronic access is not provided for an employee, accessible paper copies are required.)

Those responsible (supervisor, researcher, instructor) for a given work or research area must ensure that the needed SDSs are available to employees, that employees understand how to access their SDSs, and that access to the SDSs is barrier-free.

Always read an SDS prior to working with that material. The SDS contains invaluable information on how to work safely with hazardous materials: the hazards (health and physical), how to protect yourself from exposure (controls and PPE), signs and symptoms of exposure, proper handling and storage, and more. Familiarize yourself with the format; a standardized 16-section format was a result of the 2012 HCS revision that adopted the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

This format is required of all chemical manufacturers in the United States and many countries worldwide. A short description of each section can be [found here](#).

SDS for the hazardous chemicals and chemical products used at UVA are available online: ehs.virginia.edu/MSDS. All UVA-MC owned computers have an ‘SDS’ icon on their desktop that links to the SDS database from EHS’s website. If you require assistance locating an SDS, please contact EHS (434-982-4911).

If an outside contractor needs access to a UVA-AD space with a Hazard Communication Sign (see below), either:

1. The space shall be decommissioned by EHS and designated by an official sign, ensuring that no hazardous materials are present, or
2. Facilities Management or occupants must provide access to SDSs upon request (via either the EHS website, or a printed version if the contractor prefers a physical document).

Labels and Hazard Communication Signs


Labels

The HCS requires manufacturers to label original containers of hazardous chemicals with the following 6 elements

1. Chemical or Product Identity
2. Hazard statement(s)
3. Precautionary statement(s)
4. Signal word
5. Pictogram(s)
6. Supplier identification

Below is a sample label.

SAMPLE LABEL

CODE _____ Product Name _____	} Product Identifier	Hazard Pictograms 
Company Name _____ Street Address _____ City _____ State _____ Postal Code _____ Country _____ Emergency Phone Number _____		
Precautionary Statements Keep container tightly closed. Store in a cool, well-ventilated place that is locked. Keep away from heat/sparks/open flame. No smoking. Only use non-sparking tools. Use explosion-proof electrical equipment. Take precautionary measures against static discharge. Ground and bond container and receiving equipment. Do not breathe vapors. Wear protective gloves. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Dispose of in accordance with local, regional, national, international regulations as specified.	Signal Word Danger	Hazard Statements Highly flammable liquid and vapor. May cause liver and kidney damage.
In Case of Fire: use dry chemical (BC) or Carbon Dioxide (CO ₂) fire extinguisher to extinguish. First Aid If exposed call Poison Center. If on skin (or hair): Take off immediately any contaminated clothing. Rinse skin with water.	Supplemental Information Directions for Use _____ _____ _____ Fill weight: _____ Lot Number: _____ Gross weight: _____ Fill Date: _____ Expiration Date: _____	

Distributors may not ship containers labeled by manufactures or importers unless it contains the GHS label. Those receiving hazardous chemicals or products shall ensure they bear a GHS label specifying the 6 required elements. Labels may not be removed or defaced on incoming containers unless immediately replaced by an appropriate label or the container is empty. Staff shall remove or deface the label of empty containers.

When transferring chemicals or labelling newly synthesized chemicals, UVA employees, must ensure that the container bears a label or labeling system that provides personnel with the:

1. Identification of the chemical in the container.*
2. Appropriate hazard warnings (i.e., pictures, symbols, words, or any combination thereof, which convey the hazard(s) of the chemical(s)).

**In laboratories where new compounds are synthesized in small quantities, the faculty member, area supervisor (or their designees) shall maintain a labelling system to identify the compounds.*

There are different ways to communicate the appropriate hazards. First, described above, the GHS hazard pictograms may be used. Alternatively, the NFPA 704 fire diamond may be used to communicate the health, flammability and reactivity hazard of a material, which uses a 0-4 severity ranking. A description of each number ranking is below. The NFPA ranking information is widely reported in SDSs.

Health	Hazard (Blue)	Fire	Hazard (Red)	Reactivity	Hazard (Yellow)
4	Lethal	4	Flashpoint below 73 F	4	May detonate
3	Serious or Permanent Injury	3	Flashpoint between 73F and 100F	3	Shock and heat may detonate
2	Temporary Incapacitation/Residual Injury	2	Flashpoint between 101F and 200F	2	Violent chemical change
1	Significant Irritation	1	Flashpoint over 200F	1	Unstable if heated
0	No Health Hazard	0	Will not burn	0	Stable

Labeling is not required for hazardous chemicals transferred from a labeled container into a portable container, provided the person who performs the transfer during the work shift intends the chemical for immediate use, and the container is not left unattended.

Hazard Communication Signs

For the benefit of UVA employees, outside contractors, emergency personnel, or other visitors to an area, UVA provides Hazard Communication signs. These signs (see below) are posted on a laboratory, shop, studio or makerspace corridor entrance to designate rooms/areas where hazardous materials are stored or used, and provide hazard (see Symbol Hazard Warnings) and emergency contact information. The sign clearly indicates admission to authorized personnel only. **Note:** Signs are primarily used for research and instructional laboratories, shops, studios and makerspaces within UVA-AD and UVA-Wise. Signs are utilized only in select medical laboratory locations within UVA-MC.

**LYNCH,
CLARISSA**

Room(s): DEMO



CAUTION!

ADMISSION TO AUTHORIZED
PERSONNEL ONLY!

When occupants are present, enter **ONLY** as instructed.
No Eating or Drinking except where posted by EHS.



Caution



Radioactive
Materials

FIRE



HEALTH
SPECIAL
NFPA
REACTIVITY

BIOHAZARD



BSL-2

Additional Room Information & Special Entry Requirements

- Safety glasses must be worn inside the lab (LYNCH, CLARISSA)

EMERGENCY CONTACTS

1. 434-982-4911 (M-F) 8AM - 5PM (LYNCH, CLARISSA)
2. 434-982-4911 (After Hours) (LYNCH, CLARISSA)
3. Environmental Health & Safety: 434-982-4911
4. Emergency Operator: 434-924-2012

This "Hazard Communication Sign" was created on: 04/06/2018.
 If you need a new sign or a copy of this "Hazard Communication Sign" call Environmental Health & Safety (434-982-4911). [Spec Mat Handling Fac /EHS - DEMO]



The numbers in the NFPA Fire diamond do not represent an individual chemical, but represent the highest hazard of any particular chemical present in a space.

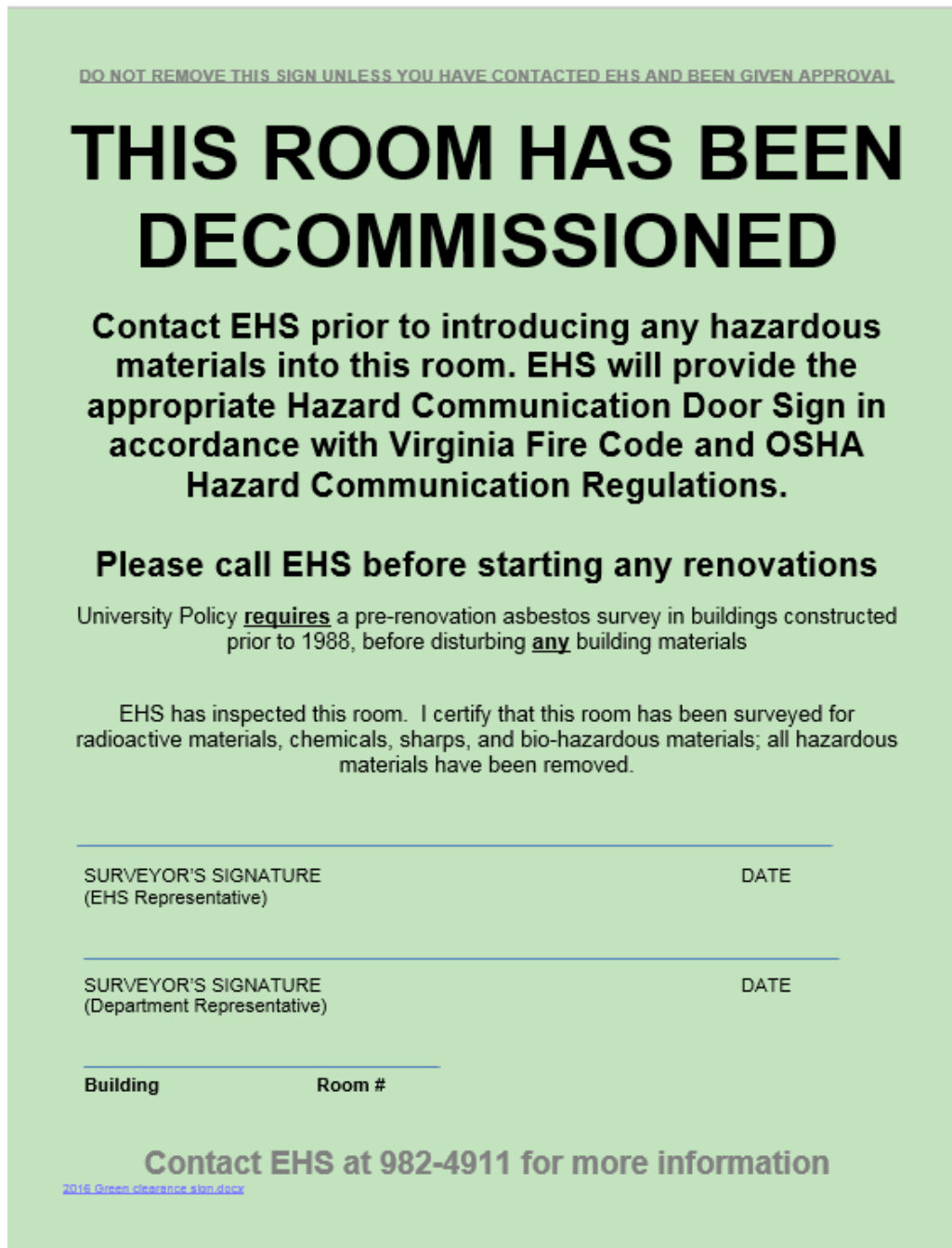
The sign also indicates which rooms contain radioactive material or x-ray producing equipment, high magnetic fields, lasers, and/or biohazardous materials. The biohazardous rooms are ranked according to their severity, with a Biosafety Level 1 (e.g. BSL1 lab) being less severe than a BSL3 lab.

Emergency contact information for each room is provided on the bottom of the sign. Use those contacts and/or EHS if you have questions about entering that area.

Visitors to any room with a Hazard Communication Sign should enter as instructed by the occupant familiar with the hazards and entry procedures for that area.

For renovations of UVA-AD spaces with these signs, prior to UVA personnel and outside contractors working in the area, the room must be decommissioned and cleared by EHS staff of hazardous materials (with the possible exception of asbestos and lead paint).

The following sign will represent clearance:



Unless this sign is present, with a signature(s), UVA personnel and contractors may not enter the room to begin work.

In addition to renovations, anytime a UVA-AD space with hazardous materials is vacated due to relocation, retirement or other circumstances, the room shall also be decommissioned and cleared by EHS and a department representative. Prior to new personnel occupying space, EHS must be contacted for a Hazard Communication Door Sign and any other applicable approval, such as protocol submission for biological or radioactive material activities. Once a Hazard Communication Door Sign can be posted, the green sign will be removed.

Employee Information and Training

UVA-AD and UVA-Wise

Prior to working in an area with hazardous materials, individuals shall receive Hazard Communication training online from EHS—titled Chemical Safety Training (or through classroom upon request). Individuals at the University working with chemicals and generating Hazardous (chemical) Waste are required to take the Chemical Safety and Waste Training. All EHS provided training (online and in person) is electronically recorded upon full completion, and access to personal training records is readily available on the EHS website.

Supervisors shall also provide any specialized training for using particular hazardous chemicals or chemical products, and where appropriate, how to use personal protective equipment, and maintain a record of this training. If you have any questions about a material or about your personal protective equipment, contact EHS (982-4911).

The Safety Training and Record-keeping (STAR) online application, found on the EHS webpage, is a tool to record completion of specialized training given by supervisors, or in teaching labs.

UVA-MC

Prior to starting work, new employees working with chemicals/chemical products and/or generating Hazardous (chemical) Waste are required to take the 'Chemical Safety Training (Hazard Communication)' module.

Records will be kept within the Learning Management System.

Employee training will include orientation to the contents and location of the Red Book. The Red Book includes the site-specific chemical inventory in locations where chemical products are maintained. Employees will be trained in how to access SDS for the chemicals listed on the inventory, and in procedures for emergency response.

Non-Routine Tasks

Periodically, employees may be required to perform hazardous non-routine tasks. Prior to starting work on such projects, affected employees must report to their immediate supervisor to determine the hazards they may be exposed to during such activity and receive training regarding those hazards.

Contractors

Outside contractors, including those involved in renovations, installations, moving, landscaping, etc., regularly work on-site at UVA. Facilities Management (FM) Project Management Team, or the supervisor of the work area can request EHS to decommission and remove hazardous materials from an area, in which case clearance will be posted (see green sign above) and contractors can work in the area unless asbestos is present. The supervisor of the area shall contact EHS to determine if asbestos is present. If asbestos is the only hazard present they shall contact EHS to provide training/supervision to the contractor. The FM Project Management Team or the supervisor of the work area shall provide the on-site contractors with the following information prior to work beginning:

- Inform contractors of the presence of hazardous chemicals in the work area.
- Communicate precautions necessary to protect the on-site contractors from the known hazards during normal working conditions and foreseeable emergencies, which include:
 - Emergency contact information, method for obtaining SDSs, location of emergency equipment (eyewashes and safety showers), and labelling practices used by the University.
- Any outside contractors responsible for moving hazardous materials or shipping hazardous materials commercially are notified of the potential hazards and directed to follow US Department of Transportation (DOT) regulations.
- Require the contractor to maintain on-site a list of hazardous materials and Safety Data Sheets (SDS) for the hazardous materials that will be brought onto the work site, to be available upon request.

UVA FM maintains a separate Hazard Communication Program. Contractors hired through FM shall also consult with their program.

Laboratories shall provide outside contractors with precautionary measures to be taken when working in an occupied laboratory. This may be accomplished by escorting the contractors and being present to answer all questions.

It is the responsibility of the escort to:

- Accompany the visitor or outside contractor through the space, at all times if deemed necessary by occupant
- Secure hazardous materials as needed prior to the visitor or outside contractor entering the space (this includes hazardous waste)
- Notify the visitor or outside contractor of potential hazards in the space
- Be available to answer any questions
- Stay in the immediate area while the visitor or outside contractor is working

Facilities Management Project/Construction Managers, supervisors of the work area, and/or contractors may receive assistance by contacting the Office of Environmental Health & Safety regarding hazardous materials and SDS.

Resources for Information

If there are any questions regarding the implementation of this Written Hazard Communication Program, or if any personnel would like further Chemical Safety information or assistance, the Office of Environmental Health and Safety will provide assistance. FM employees shall consult with their own Hazard Communication Program, found here:

<https://www.fm.virginia.edu/depts/ohs/programs.html>

Medical Information in the Event of an Exposure

When working with hazardous chemicals, appropriate engineering and administrative controls, and personal protective equipment shall always be utilized to prevent injury.

In the event of a chemical exposure, the injured person must seek medical attention in one of the following places (depending on the severity of the exposure and your physical location):

- UVA WorkMed (1910 Arlington Blvd, Charlottesville) for University employees, UVA-AD
- UVA Employee Health (First Floor, 1222 Jefferson Park Ave., Charlottesville) UVA-MC
- UVA Student Health and Wellness (550 Brandon Ave., Charlottesville) for students, UVA-AD
- UVA Student and Employee Health Wise Clinic (Cantrell Hall, Wise), UVA-Wise
- UVA or closest Emergency Room, or Urgent Care facility (*if after hours or high degree of injury*)
- 911 (*if injured person cannot move or be moved*)

Chemical exposure incidents must be reported to the faculty or supervisor in charge of the lab/area, followed up with a notification to EHS.

Hazardous Waste Disposal

In Virginia, hazardous chemical waste is regulated by the Department of Environmental Quality, following rules established by the U.S. Environmental Protection Agency. Everyone who generates hazardous waste at UVA shares responsibilities for its proper management and disposal. Hazardous waste management rules are complex and carry significant penalties for violation. EHS manages the overall UVA hazardous waste program, including performing periodic waste inspections and providing information, containers, special labels, and waste collection and disposal services.

Hazardous (chemical) Waste and Radioactive Waste MUST be labeled at all times, and MUST be kept closed at all times, except when filling*. Details of how to properly label and collect waste for disposal can be found on the EHS website.

<http://ehs.virginia.edu>

To request a chemical waste pickup visit: <https://researchcompliance.web.virginia.edu/wpr/> or call 434-982-4911.**

**The Virginia Department of Environmental Quality and the U.S. Environmental Protection Agency have cited facilities (including UVA) when open Hazardous (chemical) Waste and/or Radioactive Waste containers have been observed. The citation most often given is for “improperly disposing of Hazardous Waste” and/or for the “operating of a Treatment, Storage and Disposal Facility without the required permits”.*

***For locations that are not on UVA’s main Grounds in Charlottesville, follow your location’s procedure for waste disposal and pickup.*

Shipping Hazardous Materials

Anyone who ships hazardous materials (also termed dangerous goods) must have documented training regarding DOT (US Department of Transportation) and/or international agency (IATA/ICAO) shipping regulations. Requirements vary depending upon the material, the mode of transportation, the commercial carrier, and the destination.

To comply with shipping regulations, these materials must be properly classified, packaged, documented, and handled by trained employees. Anyone who ships HazMat can be subject to inspection by federal enforcement officers (e.g., FAA or PHMSA/DOT). Failure to meet regulatory requirements may result in citations, fines, and/or imprisonment. Fines can range from \$250 to \$250,000 per violation.

EHS can provide guidance and support services for the proper shipping of these materials. Please contact EHS at 434-982-4911 for more information and assistance.

Researchers must also be cognizant of relevant import, export, permit, licensing or transfer requirements that involve their research materials. If you plan to ship hazardous research materials to another country or receive from another country, consult with the UVA Office of Export Controls to ensure all regulatory requirements are met. For more information regarding the transfer of research materials between institutions for use in research, known as a Material Transfer Agreement (MTA), consult with the UVA Office of Sponsored Programs.

Program Review

The Chemical Safety Training program for UVA will be reviewed as new regulations dictate and as deemed necessary by the Office of Environmental Health & Safety.

Supervisors who provide training through the use of any materials not provided by the Office of Environmental Health & Safety are responsible for the documentation of the training. Please refer to the EHS website for the online application called STAR- Safety, Training and Record-keeping. This application helps faculty and staff manage documentation of federally required training, in addition to training given directly by supervisors.

This Written Hazard Communication Program will be reviewed by the Office of Environmental Health & Safety annually, and updated as necessary.

Attached:
Appendix A: Chemical Inventory List Form (for UVA-MC use only)
Appendix B: Definitions

Appendix A

Chemical Inventory List Form

Upon completion place copy in Unit Red Book

DEPARTMENT: _____
LOCATION OF DEPARTMENT: _____
SUPERVISOR: _____
NAME OF PERSON FILLING OUT INVENTORY: _____
DATE OF COMPLETED INVENTORY: _____

NAME OF CHEMICAL OR CHEMICAL PRODUCT	MANUFACTURER	DATE PURCHASED	QUANTITY	STORAGE LOCATION

Appendix B

Definitions

Chemical: Any substance, or mixture of substances

Chemical name: The scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name that will clearly identify the chemical for the purpose of conducting a hazard classification.

Classification: To identify the relevant data regarding the hazards of a chemical; review those data to ascertain the hazards associated with the chemical; and decide whether the chemical will be classified as hazardous according to the definition of hazardous chemical in this section. In addition, classification for health and physical hazards includes the determination of the degree of hazard, where appropriate, by comparing the data with the criteria for health and physical hazards.

Common name: Any designation or identification such as code name, code number, trade name, brand name, or generic name used to identify a chemical other than by its chemical name.

Container: Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purposes of this section, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

Employee: A person who works for UVA full-time or part-time and is paid through the university's payroll system or receives compensation in any form from UVA; A person who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Persons such as administrative staff who encounter hazardous chemicals only in non-routine, isolated instances are not covered (e.g. occasionally switching out toner cartridges).

Employer: A person engaged in a business where chemicals are either used, distributed, or are produced for use or distribution, including a contractor or subcontractor.

Exposure or exposed: Means that an employee is subjected in the course of employment to a chemical that is a physical or health hazard, and includes potential (e.g. accidental or possible) exposure. "Subjected" in terms of health hazards includes any route of entry (e.g. inhalation, ingestion, skin contact or absorption.)

Faculty: the teaching staff of the University of Virginia

Hazard category: The division of criteria within each hazard class, e.g., oral acute toxicity and flammable liquids include four hazard categories. These categories compare hazard severity within a hazard class and should not be taken as a comparison of hazard categories more generally.

Hazard not otherwise classified (HNOC): An adverse physical or health effect identified through evaluation of scientific evidence during the classification process that does not meet the specified criteria for the physical and health hazard classes addressed in this section. This does not extend coverage to adverse physical and health effects for which there is a hazard class addressed in this section, but the effect either falls below the cut-off value/concentration limit of the hazard class or is under a GHS hazard category that has not been adopted by OSHA (e.g., acute toxicity Category 5).

Hazardous chemical: Any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified.

Hazard class: The nature of the physical or health hazards, e.g., flammable solid, carcinogen, oral acute toxicity.

Hazard statement: A statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.

Hazard warning: Any words, pictures, symbols, or combination thereof appearing on a label or other appropriate form of warning which convey the specific physical and health hazard(s), including target organ effects, of the chemical(s) in the container(s). (See the definitions for "physical hazard" and "health hazard" to determine the hazards which must be covered.)

Health hazard: A chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A to §1910.1200 – Health Hazard Criteria.

Immediate use: The hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

Label: An appropriate group of written, printed or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.

Label elements: The specified pictogram, hazard statement, signal word and precautionary statement for each hazard class and category.

Mixture: A combination or a solution composed of two or more substances in which they do not react.

Non-routine work task: A task that the employee does not normally perform and for which the employee has not previously been trained. Examples of non-routine work tasks are confined space entry and removing chemical residue from floors after a spill.

Physical hazard: A chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid, or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas. See Appendix B to §1910.1200 – Physical Hazard Criteria.

Pictogram: A composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical. Eight pictograms are designated under this standard for application to a hazard category.

Precautionary statement: A phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling.

Product identifier: The name or number used for a hazardous chemical on a label or in the SDS. It provides a unique means by which the user can identify the chemical. The product identifier used must permit cross-references to be made among the list of hazardous chemicals required in the written hazard communication program, the label and the SDS.

Pyrophoric gas: A chemical in a gaseous state that will ignite spontaneously in air at a temperature of 130 degrees F (54.4 degrees C) or below.

Safety data sheet: Written or printed material concerning a hazardous chemical that is prepared in accordance with §1910.1200 paragraph (g) of the HCS.

Signal word: A word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used in this section are “danger” and “warning.” “Danger” is used for the more severe hazards, while “warning” is used for the less severe.

Simple asphyxiant: A substance or mixture that displaces oxygen in the ambient atmosphere, and can thus cause oxygen deprivation in those who are exposed, leading to unconsciousness and death.

Substance: Chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurities deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.

Supervisor: The individual responsible for managing, directing, and evaluating the work of another.

Use: To package, handle, react, emit, extract, generate as a by-product, or transfer.

Unit: An organizational entity (e.g., office, department, college, center, institute, school, or affiliate organization) at the University of Virginia.

Work area: A room or defined space in a work area where hazardous chemicals are produced or used, and where employees are present. This term also includes the OSHA definition of “Work area” which means an establishment, job site, or project, at one geographical location containing one or more work areas.