

## Department Resources – Health & Safety: General

SAFETY MANUAL: The following subsections discuss safety precautions unique to the Department of Chemistry. For more information, contact Sharon Minton (3-1612) or Tracy Harvey (3-8183).

SAFETY ORIENTATION: Each new faculty, staff, and graduate student is required to attend a safety orientation. See Tracy Harvey (Bagley 195A) for more information.

EMERGENCY SERVICES: UW Police Dept. (9-911), Environmental Health and Safety (3-7262)

TELEPHONE PROCEDURES: Be familiar with the location of the nearest telephone. Yellow and black emergency phones are located in building hallways.

1. Dial 9-911 to be connected with the operator at University Police.
2. Tell him/her your NAME, the NATURE of the emergency and its specific LOCATION
3. Do not leave the phone until:
  - (1) Your call has been acknowledged,
  - (2) You have answered all questions posed by the operator
  - (3) You have received all instructions he/she may have for you

SAFE HANDLING OF MAIL: If you have concerns about a suspicious piece of mail or package, call University Police at (206) 543-9331.

- DO NOT try to open the mail/package
- Isolate the mail/package
- If you have touched the mail/package, wash hands vigorously with soap and water
- Wait to hear from University Police
- Latex gloves are available in the Chemistry Stockroom (BAG 32) and in the Main Office (Bagley 109)
- For more information:
  - U.S. Postal Service: <http://usps.com>
  - Centers for Disease Control: <http://www.bt.cdc.gov/>
  - Seattle-King County Public Health: <http://www.metrokc.gov/health>

### EMERGENCY PROCEDURES

#### REPORTING NON-FIRE EMERGENCIES

- Use the phone to dial 9-911
- Tell the operator that you are about to sound the fire alarm for a non-fire emergency
- Wait until the operator has had a chance to ask for further information.
- Locate regular fire alarm and pull alarm lever.

EVACUATION: *Emergency Evacuation and Operations Plan (EEOP) is available in Bagley 109 from Department Administrator, Sharon Minton.*

University Emergency Resources and Contacts (EEOP, Section E)

Emergency Communications (EEOP, Section F)

Expectations for departments and staff (EEOP, Section G)

Emergency Procedures (EEOP, Section H)

Employee Orientation (EEOP, Section I)

Fire Exit Drills (EEOP, Section J)

CHILDREN IN CHEMISTRY FACILITIES: The Chemistry Department as a matter of policy does not allow infants or children in any of the Chemistry Department buildings for extended periods of time. In particular, children should never enter any of the laboratory or shop areas. Additionally, children may not be left unattended by the parent (or other responsible person) at any time in any area of Bagley Hall, CHB, or the Chemistry Library Building. There are many childcare providers within the University district to meet the needs of the faculty, staff, and students who require daycare facilities.

EMERGENCY EVACUATION PERSONNEL: See Duties of the Floor Warden (EEOP Section G.5)

CHEMISTRY DEPARTMENT EVACUATION MANAGER: Sharon Minton BAG 109F 3-1612  
CHEMISTRY DEPARTMENT HEALTH/SAFETY OFFICER: Tracy Harvey BAG 294 3-8183

FLOOR WARDENS:

Bagley Hall Doors (Control Entrance to the Building)

Front Entrance: John Heutink 82B 3-1616  
Brian Holm 82B 3-1616  
Rear Entrance: Jim Gladden 98 5-2081  
Roy Olund 74 3-6195

Bagley Hall

Ground Floor W: Jim Roe 77 3-1652  
Martin Sadilek 60 3-4749  
Ground Floor E: Lon Buck 74 3-6195  
Rajan Paranj 65 5-2581  
1st Floor W: Marianne Cavelti 171 3-1606  
Tom Leach 133D 3-3791  
1st Floor E: Steffan Henderson 109 3-9509  
2nd Floor W: Bill Cusworth 292 6-9180  
Catherine Keil 271 3-1607  
2nd Floor E: Mack Carter 203A 6-9320  
Sheila Parker 229 3-2906  
3rd Floor E: Richard Ketcham 363 5-2438  
John Peterson 363 3-1699  
Louis Scampavia 318 5-8444  
4th Floor E/W: UWEB 6-8646

CHEMISTRY BUILDING

Ground Floor Bryant Fujimoto G004 6-2908  
1st Floor Scott Clary 108 6-4220  
2nd Floor Niels Andersen 204D 3-7099  
Bart Kahr 204F 6-8195  
Tomikazu Sasaki 204H 3-6590  
3rd Floor Karen Goldberg 304H 6-2973  
Mike Heinekey 304F 3-7522  
Dave Hrovat 304K 6-4208  
Julie Kovacs 304B 3-0713  
Jim Mayer 304D 3-2083  
4th Floor Forest Michael 404K 3-1656  
Mike Gelb 404B 3-7142

CHEMISTRY LIBRARY

Ground Floor Susan Redalje 60 3-1603  
1st Floor Nan Holmes 136 5-4323  
Mel Koch 141 6-4869  
2nd Floor Laura Little 116 6-2340

BUILDING SECURITY DURING EVACUATION: Floor wardens and their alternates should go to their assigned exit doors when the general evacuation (fire) alarm sounds. They should admit only authorized emergency personnel into the building.

EVACUATION OF THE HANDICAPPED: Classroom instructors and laboratory teaching assistants must designate two or more students as guides to assist handicapped individuals out of the building when the evacuation alarm sounds. He/she must instruct the students not to use the elevator, which may fail during the emergency. Instead, take students in wheelchairs to the nearest fire-protected stairwell and seek help in getting him/her down and out of the building. Wheelchair handicapped students on the ground floor may exit via the ramp at the loading dock exit or out the rear exit of the building (down a few steps). Those on the first floor may be wheeled out the main entrance and down the handicapped access ramp. If such level exits are blocked, the student may be wheeled into a fire-protected stairwell until help arrives.

EMERGENCY EXITS are provided in at least two directions for most offices and laboratories. Plan routes so you can find them quickly through smoke or blacked-out corridors.

FIRE EXTINGUISHERS are provided at various points throughout the buildings. They can be used to put out a small fire. If there is the slightest doubt, turn in an alarm as instructed Reporting Non-Fire Emergencies above. Keep the following points in mind when selecting a fire extinguisher:

- Water is the best for paper or wood fires.
- CO2 is the best for flammable liquids.
- Dry-chemical IS EFFECTIVE ON CHEMICAL FIRES.
- Read the instructions before you need to use them!

If a liquid is on fire in an open container, the output of the extinguisher should be directed at the upper inside surface of the container rather than into the liquid itself.

As soon as you have used a fire extinguisher you must phone Physical Plant at 5-1411 and Building Coordinator, Sharon Minton at 3-1612 to report the incident to ensure the fire extinguisher is refilled and that the site is inspected for further dangers.

EMERGENCY HALL LIGHTING is provided in case of an area-wide power failure.

EARTHQUAKE PROCEDURES: See Emergency Evacuation and Operations Plan (Section H.4)

#### DURING AN EARTHQUAKE

Do not attempt to leave the building while the earth is in motion.

If you are in a laboratory, get on the floor next to a lab bench and cover your head with your arms. Stay away from windows and hazardous chemicals that may fall off your bench.

If you are in a classroom, get on the floor as close to the chairs as possible or next to the lab bench, if there is one. Cover your head with your arms.

#### IF YOU ARE TEACHING DURING AN EARTHQUAKE

Do not attempt to leave or allow student to leave the building while the earth is in motion

If you are in a laboratory, instruct your students to get on the floor next to a lab bench and cover their heads, then do the same.

If you are in a classroom, instruct your students to get on the floor as close to the chairs as possible and cover their heads with their arms, then do the same.

Once the earth has stopped moving the building will be evacuated. Instruct your class to turn off any electrical equipment. Designate a meeting place at a specific area outside of the building. Do a head count before you leave the room and assess the condition of any students who will need medical assistance.

Meet with your class outside and take roll. Have the students stay together.

Report to the department administrator if there are any students trapped in the building or missing. You will be notified when the students can leave or re-enter the building.

#### BOMB THREAT PROCEDURES:

NOTIFY UNIVERSITY POLICE immediately by calling the emergency number 9-911. Always be sure to give the name of the building, room number, your name and telephone extension number. Also, inform the building coordinator (3-1612) or department head at once.

### EMERGENCY PROCEDURES AND ORGANIZATION FOR ASHFALL

VOLCANIC DANGERS: Seattle may experience volcanic ashfall from Mount St. Helens or other eruptions. We can expect a one to three hour warning. UW plans call for shut down of all ventilation and hood exhaust systems by Physical Plant personnel; in addition, electrical power may be lost. Once the building is shut down and remains shut down for an extended period, re-entry may present hazards from accumulated toxic or flammable gases. As safety comes first, no departmentally organized efforts will be made to protect experiments, notebooks, valuable chemicals, etc., unless the material may present hazards.

### SUMMARY OF GENERAL PROCEDURES IF ASHFALL IN SEATTLE OCCURS

<u>Responsible Party</u>	<u>Action</u>
Physical Plant	All ventilation systems, supply, exhaust, and fume hoods may be shut down to prevent clogging.
Physical Plant	Shut down building supply of natural gas.
Room Occupants	Windows and doors must be closed and locked before leaving. Lighting and electrical equipment must be shut down to reduce heat gain. Cover all apparatus with plastic sheeting.
Physical Plant	All elevators are to be shut down.
University Police	All buildings will be locked from the <u>outside</u> to reduce ash infiltration.
University Police	<u>If</u> the University is closed, only "emergency personnel" will be allowed in buildings until the entire campus is reopened.

### GENERAL ASHFALL PROCEDURES

1. Make certain all windows are closed.
2. Shut down, as appropriate, any equipment, experiments, etc., that cannot be left unattended.
3. Lock and secure all doors.
4. Wear a protective mask.

### PREPAREDNESS RULES FOR NORMAL OPERATIONS

All laboratories and offices should maintain an adequate supply of protective masks (these can be purchased in the stockroom, Bagley 36).

Chemicals stored in refrigerators must be clearly labeled and identified on the outside of the refrigerators if such material could cause the formation of toxic, flammable, or otherwise hazardous gases upon extended loss of cooling. No material shall be left unattended in dry-ice or liquid nitrogen cold traps, etc., where loss of coolant would present hazard from toxic, flammable, or explosive gases.

All windows are to be closed tightly when rooms are unoccupied or when leaving for the day.

Laboratories containing costly instrumentation, equipment, computers, etc., are advised to maintain an adequate and easily located supply of plastic sheeting and tape in the lab.

Equipment that should be shut down in an orderly manner must have adequate labeling of switches, valves, etc., to permit a person not familiar with the apparatus to safely shut down by following posted instructions.

Instructions are posted

## FIRST AID

FIRST AID TEXTS: The Chemistry Library has an excellent reference section on Emergency Procedures, which contains up-to-date information on first aid, identification of hazardous wastes, etc.

FIRST AID CERTIFICATION: Teaching Assistants, Research Assistants, undergraduate students with Teaching Assistant duties in the laboratory, and staff employees working in shops or laboratories ARE REQUIRED to hold a current certification card indicating successful completion of a standard or basic first aid course. (Red Cross or Washington Industrial First Aid courses meet this requirement.) Graduate students must complete a basic first aid course not later than the end of Fall Quarter of their first year in order to maintain their eligibility for reappointment. Graduate students not possessing a valid certification card at the end of Fall quarter will not be reappointed Winter Quarter. Graduate students have individual responsibility to maintain first aid certification (cards are issued for 2 years), and hence their eligibility for financial support. The University of Washington's Department of Environmental Health and Safety (EH&S) offers courses for first aid certification each quarter. Talk to the Graduate Program Coordinator (3-4787) about registering for this course.

First aid certification is required for all persons in direct charge of academic, service, and research labs and shops. Staff supervisors will assure that subordinates are retrained on a timely basis. If the duties of the person in charge require an absence from the shop, another person holding valid first aid certification must be present. This latter requirement will generally mean that every person in a shop must be certified.

FIRST AID KITS are available in Bagley 82 (student shop), 171, 271, and in every research laboratory. First aid supplies may be purchased in the stockroom (Bagley 36). Many of the staff and all graduate students have received first aid training and can be called upon for assistance in case of emergency. **NOTE THAT STAFF ARE NOT ALLOWED TO DISPENSE ANY FORM OF MEDICATION TO STUDENTS.** The University Police are highly trained in first aid procedures and can be reached by the Emergency Phones or by dialing 9-911.

ACCIDENT / INCIDENT REPORTS: Accident Reports must be submitted if anyone is, or may have been, injured. Obtain a report form from the receptionist in Bagley 109. For accidents in undergraduate labs, the Teaching Assistant in charge will prepare the report (available in Bagley 271). Complete, sign, and return the form to the Department Administrator (Bagley 109) who will prepare a report for Environmental Health and Safety.

ELECTRICAL GROUNDING: All electrical apparatus must be properly grounded before use. Use of 3-prong adapters is forbidden. If you find an older plug that has not been converted to the grounded type, take the equipment to the electronics shop (Bagley 74) and fill out a work order to have the plug replaced.

## OCCUPATIONAL SAFETY AND HEALTH REGULATIONS:

- 1.) U.S. Department of Labor: <http://www.dol.gov/>
- 2.) The Federal Occupational Safety and Health Administration: <http://www.osha.gov/>
- 3.) Washington Department of Labor and Industries: <http://www.ni.wa.gov/wisha/>
- 4.) UW Environmental Health and Safety (3-7262): <http://www.ehs.washington.edu/>

Employees are encouraged to discuss concerns about health and safety conditions at their work place with their supervisor or unit manager, or if preferable, with the Environmental Health and Safety Department on an anonymous basis before contacting the Department of Labor and Industries.

HAZARD COMMUNICATION ACT: The Employee Right to Know Act, WAC 296-62-054 defines the requirements for employers to communicate hazard information to their employees. This regulation applies to any chemical which is known to be present in the work place in such a manner that employees may be exposed under normal conditions of use or in an unforeseeable emergency.

Refer to: <http://slc.leg.wa.gov/wacbytitle.htm>

Employers will ensure that all incoming chemicals are properly packaged and labeled. Employees will be instructed in proper labeling procedures when chemicals are transferred from original containers.

Material Safety Data sheets are available from the University-supported on-line Laboratory Safety System (currently on CURIE, Username: LSSMSDS). If you have a chemical for which an MSDS is not available, please contact EH&S at 3-7262 to request one.

All employees will receive instructions and training in the hazard communications program.

**SAFETY INFORMATION AND TRAINING:** University departments must provide employees with information and training to ensure that they are apprised of the hazards of chemicals present in their work areas. Such information and training shall be provided at the time of an employee's initial assignment to a work area where hazardous chemicals are present and prior to assignments involving new exposure situations.

**EMPLOYEE ACCIDENTS & WORKMAN'S COMPENSATION:** If an employee becomes injured or ill due to an on-the-job condition, two reports must be completed. The Environmental Health and Safety Supervisor Incident/ Accident Report (SIAR) must be completed by the supervisor within 24 hours. If the injured or ill employee needs medical attention, he or she is protected by the Workman's Compensation Act, an insurance program which pays medical and disability benefits for work-related injuries and illnesses. It should not be confused with unemployment compensation, Social Security, or health insurance such as Group Health, Uniform Medical Plan, etc. In Washington State, both employers and workers share in the cost of the program, with employers paying the larger percentage of the total premiums.

Workman's Compensation protects both employees and employers. Each covered employee has a right to benefits if injured on the job. In return, he or she forfeits the right to sue the employer for job injury benefits. A civil suit for a job injury may be filed against any third party (other than the injured worker's own employer or fellow employee) whose actions may have contributed to causing the injury. A third worker may assign rights of suit to the Department of Labor and Industries for recovery of its costs. Refer to:  
<http://www.ehs.washington.edu/services/accinc.htm>

**How Benefits Are Obtained.** An injured employee must do three things:

1. Make sure the injury is immediately reported to the employer or supervisor. Immediate reporting by the employee or someone on his/her behalf is required by law.
2. Tell the doctor how the injury is work-related and ask him/her to file an accident report form with the Department of Labor and Industries. This form becomes the official injury claim for benefits. It must be completed in full and signed by the employee and the physician.
3. Complete all information on the accident report form. The employee's normal gross wages, name of spouse (if married), and the names and ages of any children must be provided before benefits can be calculated.

**What are the Benefits?**

**Unlimited medical coverage:** All medical costs arising from a job injury are paid in full.

**Time loss compensation:** Employees whose injuries temporarily prevent them from working are paid a percentage of their normal gross wages (not including overtime pay). This percentage varies depending on the employee's marital status and number of dependents at the time of the injury. Injured employees off work for three days or less immediately following an injury, do not receive Labor and Industries time loss compensation for those days, but may choose to use accrued sick or annual leave or to go on leave without pay.

**Other benefits** under this program include pensions equivalent to time loss payments for employees permanently disabled due to a work-related injury and vocational rehabilitation services.

The Department of Risk Management represents University employees as the "employer" in all matters concerning worker's compensation.