

Safety Policies and Guidelines for School of Forest Resources Personnel

Revised: 18 Sept 2012

Policy statement: *The School of Forest Resources and University of Maine workplace safety and hazardous materials policies were developed to satisfy compliance with federal and state laws and regulations. By Maine law, employees are obligated to comply with all SFR and University safety regulations, policies and procedures. Failure to do so may result in disciplinary actions, including loss of privileges for the use of University research facilities.*

I. Training requirements

- a. University hazard communication and safety training on Safety and Environmental Management (SEM) website: all employees (annual):
<http://www2.umaine.edu/SEM/online.htm>
- b. Departmental safety workshop: all employees (annual)
- c. Emergency action plans: all employees (annual)
- d. Chemical hygiene plan (CHP): all employees working with chemicals in labs or field (annual)
- e. Personal Protective equipment: all employees (on issue)
- f. Fire extinguisher training: all personnel working with flammables in lab or field (every 3 yr)
- g. Field safety (web bases, one-time) <http://www2.umaine.edu/SEM/online.htm>
- h. First aid and adult CPR: all field crews (2 years)
- i. Chainsaw safety: all personnel working with chainsaws
- j. Respirators: fitting and training by SEM, and annual medical exam
- k. Pesticide training (SEM): all applicators (state license also required) and helpers
- l. Hazardous waste storage (satellite accumulation areas): for all personnel working with chemicals and/or pesticides (including with CHP training)
- m. Chemical spill (lab and field – all users of chemicals)
- n. Watercraft safety: if boats, including canoes, are to be used
- o. Fall protection for staging, boom lifts, etc.
- p. ATV safety

Please note: *Supervisors are responsible to ascertain that all employees under their supervision have met all training requirements before beginning work and with any change in work-related duties. Failure to do so is a willful violation of federal and state law and may result in substantial monetary penalties. Written records of training must be maintained by supervisors or project PI to meet this requirement.*

II. Emergency action (evacuation) plans

- a. Types of emergencies likely to occur in Nutting Hall:
 1. Fire
 2. Chemical spills (see laboratory CHP for spill guidelines and policies)
- b. If your area is involved or you discover an emergency situation:
 1. Warn others of situation
 2. If safe to do so: turn off heating devices, close windows, and shut doors

3. Follow designated evacuation route and pull alarm near building exit. *Do not sure elevator.*
 4. Call 911 (University Public Safety) from a safe position (another building – *do not use a cell phone*). Inform Public Safety of type of emergency and area (building and rooms) involved.
 5. Remain available to offer further information. Identify yourself to emergency responders when they arrive.
- c. Nutting Hall emergency evacuation signal: loud horn
1. If alarm sounds, be certain coworkers and others know there is an emergency
 2. All personnel must evacuate on signal, following designated routes. *Never use elevator!*
 3. If safe to do so: turn off heating devices, close windows, and shut doors
- d. General plan for SFR personnel
1. Each lab or other work space must have an evacuation diagram. Know and follow evacuation routes for your workspace.
 2. Assemble at NW corner of parking lot behind Nutting Hall
 3. Inclement weather assembly place is Perkins Hall
 4. Check in with an evacuation coordinator (M. Day or L. Morin) before leaving the assembly area
 5. If you think that someone in your or another workspace is still in the building inform your evacuation coordinator or an emergency responder.

III. Laboratory safety policies

- a. All labs will have the following readily available to all personnel:
 1. MSDS in binders for all chemicals;
 2. Chemical hygiene plan (CHP) and laboratory safety manual;
 3. A binder or file with standard operating procedures (SOP) on SFR departmental forms, *covering all processes used in the lab.*
- b. SOPs and MSDSs must be consulted before any lab procedures are performed. A SOP must be written for all new procedures, and must be approved by the lab supervisor. SOP's will include:
 1. Potential hazards: health, contact, reactivity, and flammability
 2. Required protective gear and special precautions
 3. Incompatible chemicals and conditions to be avoided
 4. Spill procedures
 5. Storage and disposal considerations
- c. All laboratory operations and procedures must conform to the SFR chemical hygiene plan (CHP) for the relevant lab.
- d. It is the responsibility of laboratory managers and supervisors to be certain that all employees or other laboratory users have been trained in lab specific chemical hygiene plan, emergency action plan, standard operating procedures, and waste handling protocols for any and all procedures they will be performing. *These training records should be maintained for each laboratory*
- e. As a general rule, splash-resistant goggles, gloves, and appropriate clothing are required for anyone performing or observing laboratory procedures (see section V). Consult SOP, MSDS and lab supervisor for special personal protection considerations.

- f. When chemical procedures are in progress any visitors or observers must be informed of EAP, and location and operating procedures for emergency showers and eyewash stations.
- g. Ordering and adding new chemicals
 - 1. Use a hazmat purchase order if required (generally, if NFPA or J.T. Baker ratings are > 2 in *any* hazard category).
 - 2. Be certain that a current MSDS is included in the appropriate binder.
 - 3. Store according to chemical storage policies (consult the CHP).
- h. Absolutely no foods or drinks are permitted in labs. This includes empty food or drink containers (*yes, this includes coffee cups*).
 - 1. Lab containers must not be used for food or drink.
 - 2. Any ‘consumer-type’ food containers used for research must be labeled: “Research purposes only – not for storage of food for human consumption.”
 - 3. *Do not store food or drinks in lab refrigerators.*

IV. Field safety policies¹:

- a. **Supervisors** will develop a written hazard assessment (or complete the SFR Hazard Assessment Form) for all projects. In the case of complex projects separate forms assessments should be completed for individual tasks. Forms must list all reasonably expected hazards, any PPE or engineered solutions required to mitigate those hazards, and any required general and specific safety training. Copies of hazard assessments will be maintained for at least three years beyond termination of respective projects. All personnel will be trained in the hazard assessment(s) relevant to the tasks they will perform and record of such training maintained.
- b. **Supervisors** will provide workers with any required personal protective equipment (PPE), with the exception of clothing and footwear used for normal field work, and provides training in its proper use *before* work begins.
- c. Clothing, footwear, and other personal protective equipment (PPE) must be appropriate for the conditions you will encounter and tasks to be performed (see section V).
- d. **Workers** are responsible for inspecting and using PPE—the general rule is: *if in doubt, use your PPE.*
- e. If overhead hazards will be present a hardhat must be worn. Examples include: overhead sampling, working under windy conditions, sampling dead trees, and driving nails into boles.
- f. Eye protection is required if potential hazards are present (examples: work in undergrowth or dense regeneration, tasks involving chopping or striking, and work with or near power equipment).
- g. If possible, work in pairs. *If operating powered equipment, you must have a partner with visual contact maintained at all times.*
- h. Let your supervisor or other SFR personnel know when you leave and plan to return. Contact them upon returning.
- i. Know how to contact the closet emergency responders.
- j. Be aware of and train crew for any special dangers associated with your task or equipment (examples: pruning poles used around electric transmission lines; staging, ladders and lifts (fall protection training required); motorized equipment (usually requires special training); electrical power > 24 volts (requires ground-fault-interrupt protection when used outside or in a wet indoor environment).
- k. Required safety equipment for field crews.
 - 1. First aid kit adequate for crew size and reasonable expectation of hazards.

2. Eyewash bottle that is OSHA approved for expected hazards.
 3. Fire extinguisher (DOT approved ABS, Type II unless special hazards are present).
 4. Chemical spill kit (if chemicals are used) capable of containing a reasonably expected spill size of the chemicals being transported.
 5. Communications equipment (cell phone or radio) capable of reaching outside assistance.
- l. Filing a work plan with your supervisor is required for solitary field work and recommended for group field work. These should include expected departure, travel and return times, and a list of destinations with expected arrival times.
 - m. If chemicals are used in field work:
 1. All workers *must* have SFR chemical hygiene plan training. All aspects of the CHP plan apply to field operations.
 2. SOPs must be developed for all procedures.
 3. Bring copies of SOPs and MSDSs with you.
 4. Explicitly follow instructions in SOP and MSDS for proper handling and required protective gear.
 5. The SO must include a written response plan for chemical spills and accidental poisonings All workers must be trained in these plans.
 6. All chemicals transported must have secondary confinement adequate to contain chemicals in the event of primary container breakage.
 7. Storage and secondary confinement must conform to standards in CHP.
 8. Be certain that wastes are properly handled and disposed of.
- V. Listing of required personal protective equipment² by task group
- a. Laboratory work, general:
 1. Safety goggles, splash resistant
 2. Disposable nitrile gloves (general splash protection)
 3. Heat resistant gloves (when using ovens etc.)
 4. Specialized gloves (for chemicals penetrating nitrile, highly hazardous MSDS or SEM)
 5. Closed toe footwear or protective show covers (NO SANDALS!)
 6. Clothing providing full length body and leg protection
 - b. Laboratory work, specific operations:
 1. All personal protective recommendations in SOP and MSDS
 - c. Field work, general:
 1. Hard hats, class B or better
 2. Safety glasses with side protection
 3. Appropriate foot protection for environment, generally boots with adequate ankle and lower leg protection/support (NO SANDALS!)
 4. Appropriate clothing for expected conditions (generally excludes shorts)
 - d. Field work, general sampling:
 1. Hard hats (see above)
 2. Safety glasses (see above)
 3. Abrasion resistant gloves (cotton or leather)
 4. Appropriate footwear (see above)
 - e. Field work, chainsaw:

1. Class B hard hat**
2. Face shield
3. Hearing protection**
4. Safety glasses w/ side protection**
5. Chainsaw resistant gloves
6. Safety boots (steel toe)**

*** These PPE items are also required of support personnel (plus abrasion-resistant leather gloves and appropriate clothing)*

- f. Wood sample preparation, cores and cookies (powered sanding):
 1. Safety glasses or goggles w. side protection
 2. Ear plugs or hearing protectors
 3. Environmental dust collection system or nuisance dust mask
 4. Closed toe shoes
 5. A face shield is recommended when using belt sanders

Notes:

¹ Examples of situations requiring personal protective equipment (PPE) are presented as illustrations only. These are not intended to be comprehensive lists of all instances requiring the use of PPE, nor as complete listing of all PPE required for a given task or condition. Always consult with project hazard assessments, your supervisor, safety coordinator, or the Department of Safety and Environmental Management about specific PPE requirements for your intended procedures and any associated training requirements.

² All equipment must have been manufactured to specifications of the pertinent regulatory agencies and maintaining as recommended by the manufacturer. It is the employee's responsibility to inspect all equipment and tools, including PPE, for defects prior to use. Defects must be reported to you supervisor. If potentially hazardous defects are observed, work must be suspended until they are rectified.

Important and useful telephone numbers

UM emergency fire, ambulance, chemical spill: 911 (*from campus phones*)

Emergencies at field sites: If possible know the telephone numbers for local emergency responders or others that may be able to offer assistance.

Life-flight air ambulance (direct line) 1-888-421-4228

Maine Poison Control Center: 1-800-442-6305

SFR safety coordinators: Mike Day (518-2889, daym@maine.edu)
 Louis Morin (581-2854, lmorin@maine.edu)