This handbook is intended to be a quick reference to requirements for departments within the University of Idaho, to help ensure compliance with existing codes, regulations and procedures and to assist in the prevention of injury and property damage from accidental fires.
Fire Safety Handbook

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I. Introduction

Fire Safety is essential in protecting the campus community from injuries, deaths, business interruption, and property damage resulting from fires. The Fire Safety Program is intended to ensure reasonable and consistent protection for persons and property in or on University of Idaho properties, including all structures and housing units, agricultural operations, and special events. Fire prevention guidelines are established in this document as a quick reference to assist in reducing and eliminating the incidence of fires and injuries. Adherence to fire safety codes and guidelines is essential to ensure a fire-safe working and learning environment. For additional information on topics not covered in this document or if you have any question, do not hesitate to contact Environmental Health and Safety.

The International Fire Code, as adopted by the State of Idaho, is the primary legal source for fire safety requirements at the UI. Many of the standards of The National Fire Protection Association, the Idaho General Health and Safety Standards, the Compressed Gas Association, and others are also applicable.

II. Responsibilities

Administrators

College and departmental administrators are responsible for enforcing fire safety program requirements in areas under their control and provide direction and assistance to employees and students to achieve a fire safe environment, and implement and maintain fire prevention and evacuation policies.

Supervisors

Supervisors must instruct employees on the specific hazards of their work area, required procedures and/or requirements regarding safety in their workplace, and on fire reporting and departmental emergency plans.

Employees

Employees should become familiar with safety requirements of their position and their workplace, and follow all fire safety policies and guidelines.

III. General Precautions

A. Self-inspections

1. It is recommended that every supervisor perform an evaluation of the work areas under their control on a monthly basis, and record findings and
corrective actions taken. Inspection forms should signed by the individual who performed the inspection, and be retained for documentation.
2. The recommended inspection form is attached at the end of this handbook.

B. Interiors

1. **Housekeeping should be a priority in all work spaces.** Keeping combustible material to a minimum is essential to preventing accidental ignition.
2. **Decorations and displays should be of fire-resistive materials** and be placed only in common/public areas of the building (break rooms, lounges, reception areas, etc.)
3. **Never place any objects in the exit path** or block access to exit doors.
4. Coffee makers should always be placed on a noncombustible surface, and should incorporate an auto-shutoff timer device.
5. Cooking equipment such as hotplates and toaster ovens, or any device that utilizes hot elements should not be used in the workplace unless in a specifically designated area.
6. Materials stored on shelves or cabinets must be at least 18 inches below any fire sprinkler.
7. **Never block access** to emergency equipment such as fire extinguishers, fire alarms, or eye washes.
8. Readily combustible materials such as paper, cardboard or packing should not be allowed to accumulate, and should be removed from the building as often as necessary to avoid being a fire hazard.
9. **Smoking is not allowed** in any University building.
10. Posters, banners or other combustible items cannot exceed 20% of any wall area within a room.

C. Exteriors

1. Trees, shrubs, grasses and other combustible landscaping should not be allowed to contact building exterior walls.
2. Shrubs and vines need to be trimmed to avoid blocking fire department sprinkler and standpipe connections from view.
3. Entrances and areas around them should always be clear of obstructions. Never place materials in these areas.

D. Portable Heaters

1. The only portable heaters allowed in UI buildings are radiant panel heaters. Heaters utilizing hot elements should not be used.
2. Radiant panels should be either mounted on a wall surface or placed on a stand supplied by the manufacturer. Never lean panels against other objects.
3. Always allow sufficient air space around the panel for circulation.

E. Electrical Safety

1. Extension Cords
   a. Never use extension cords in lieu of permanent wiring. Extension cords are only to be used for temporary service, and are to be unplugged at the end of each day.
   b. Never run cords through doorways, over or under partitions, above ceiling panels or through walls.
   c. Never place objects over cords, such as rugs or mats.
   d. Do not “daisy-chain” cords together to extend their length. Cords are required to be plugged directly into a wall receptacle.
   e. Do not attempt to make or use “home-made” extension cords.

2. Multi-plug devices
   a. Do not use multi-plug devices on receptacles.
   b. The use of fuse protected power strips with multiple outlets are approved for use where multiple items require power
   c. Do not connect power strips together

3. Electrical Panels
   a. Electrical panels require sufficient space around them to allow maintenance and emergency access. Never place items in front of electrical panels. A minimum of 3 feet is required in front of, and next to panels. If in doubt consult the Facilities Electrical Foreman at 885-6249.
   b. Electrical panels should be secured (locked) at all times.

4. Ground fault interrupting circuits
   a. Any electrical outlet within six feet of a water source (sinks, water fountains, showers etc.) must be a GFCI circuit.
   b. All outlets on the exterior of buildings must be GFCI
   c. Extension cords used outside or in the vicinity of any surface that is potentially damp or wet must incorporate a GFCI device.

5. Electrical appliances
   a. All electrical devices should be inspected routinely for frayed cords or damaged plugs. Any device with damaged cords/plugs should be removed from service until such time as the cords can be repaired/replaced. Do not attempt to make repairs on electrical appliances – contact Facilities for repair or replacement.
IV. Storage

A. General

1. All storage rooms must be maintained in an orderly manner. Stored combustible materials should be kept to a minimum. This means the following good housekeeping practices must be employed:

   a. Loose storage (paper, books, or files) must be kept off floors and either put into boxes or stacked in an organized manner on shelves.

   b. Aisles, at least 29" wide, must be maintained to access storage and must be clear and free of tripping hazards at all times. These aisles will also act a route of escape in an emergency.

   c. Storage may not be stacked within 18" of a sprinkler head in areas that are protected by an automatic sprinkler system. In areas not protected by sprinklers storage must be at least 24 inches from the ceiling.

   d. Stored materials must be kept at least thirty-six inches from any heat source.

   e. Storage cannot block fire extinguishers, fire alarm pull stations, emergency or exit lighting, access to evacuation routes or the exit door, emergency equipment or prevent entry of emergency personnel.

   f. Storage under stairs is not permitted unless the area is enclosed and protected with a one-hour fire rated enclosure and a detection and/or suppression system.

   g. Smoking is not permitted in any storage area under any conditions.

   h. Storage of any kind is prohibited in corridors, stairwells or the access areas to exits.

B. Flammable Liquids

   See VII a. Flammable Liquids storage.
C. Attics/Basements

1. Storage in unfinished attics, eave or crawl spaces or other areas where exposed, unprotected structural members are present is prohibited.

2. Only approved and designated spaces are allowed for storage.

3. Flammable liquids, gases or hazardous materials are not to be stored with combustible items storage containing paper, wood, plastics, cardboard, etc. Flammable liquids are required to be stored in specific, designated spaces.

V. Corridors and Exits

A. General
Corridors, stairwells and exit doors are intended to accommodate large numbers of people who may need to exit the building quickly and safely. Therefore nothing should be placed in corridors or stairwells that might become an obstruction or cause delay in exiting.

1. No storage of any kind is allowed in corridors or stairwells.
2. Waste materials, recycling materials or surplus equipment or furniture awaiting pickup or disposal should not be placed in corridors, no matter how temporary.
3. Chairs, desks, cabinets, equipment or displays should not be placed in corridors without specific approval from the Director of Environmental Health and Safety. Policies and procedures pertaining to building corridor and hallway use in university facilities may be found in the Administrative Procedures Manual (APM) Chapter 35, sections 23, 27 and 34.
4. In rare circumstances approval may be obtained to place items within the exit corridor provided specific requirements are met. To obtain approval, a request may be sent to the Director of EHS using a BUILDING CORRIDOR USE EXEMPTION REQUEST FORM (copy available at the end of this document).

B. Minimum Egress Widths
1. All work areas must have a clear path to exit doors a minimum of 36 inches in width.
2. Corridors, hallways, and exit paths to stairwells or exterior doors must be maintained at their full width to accommodate the expected occupant load.
3. In no case shall the exit width of corridors be less than 44 inches.

C. Fire Doors
1. Fire Doors must remain closed at all times, unless equipped with automatic controls.
2. Never prop open fire doors, or place any objects in such a way as to interfere with their operation.
3. All fire doors must close and latch in place.
4. Never lock, or block access to fire doors and stairwells.
D. Exits and Signage
   1. All exits must be identified with illuminated signs
   2. Never cover or block Exit signs – signs must be visible at all times
   3. Exit signs are required in every room, corridor or other occupied space when the number of persons could be 50 or more.

VI. Open Flame / Ignition sources

A. Candles
   1. Candles and other open flame devices are prohibited in all working spaces, classrooms outside of laboratories or University dining areas.
   2. No burners, incense, or other burning or smoldering items are allowed in any structure without prior approval/permit.

B. Events
   1. Hurricane Lamps and candles are allowed for use in food service areas, provided that they meet the requirements of The International Fire Code, Section 308.3.1 and have prior approval of EHS.
   2. No portable flame device utilizing flammable gases, compressed gases, or liquid fuel are allowed in any campus structure, unless specifically permitted.
   3. The use of flame producing devices, or pyrotechnics as part of a stage production or a religious service is allowed only after approval and permit issuance by Environmental Health and Safety and the State Fire Marshal.
   4. The use of indoor pyrotechnics must meet the requirements of The International Fire Code, Chapter 33, Section 3308.2.2
   5. All pyrotechnic displays must meet insurance liability requirements set by the University of Idaho, Risk Management Office.

C. Welding and Hot Work
   1. All welding, braising, or soldering on University property must conform to the requirements of The International Fire Code, Chapter 26.
   2. All welding and other hot work should also be done in utilizing the University of Idaho Hot Work and Welding Checklist.(located at end of document.)

D. Pyrotechnics
   1. All fireworks and other pyrotechnic displays require prior approval and permitting by the University of Idaho, and the Moscow Fire Marshal.
   2. The use of outdoor pyrotechnics must meet the requirements of The International Fire Code, Chapter 33, Section 3308.1.
   3. All pyrotechnic displays must meet insurance liability requirements set by the University of Idaho, Risk Management Office.

E. Recreational Fires
   1. Activities conducted on university property that involve recreational fires (e.g., bonfires, open-pit burning, and barbecues, other than those using charcoal or gas grills) require (1) prior authorization of the event, and (2) a recreational fire
authorization permit from the university and a burning permit from the City of Moscow. It is important for the proper authorities to know what activities are taking place and if the fire conditions are appropriate for the event. [rev. 9-09]

2. Prior authorization of an outdoor event on the Moscow campus is obtained through the Facility Scheduler in Campus Recreation. Any event with a recreational fire also must have a completed Recreational Fire Authorization Form, which can be obtained from the Environmental Health and Safety Office.

3. In the case of locations outside of Moscow, authorization of the event is obtained from the senior administrator at the location, using the Recreational Fire Authorization Form, and the local fire authority must be contacted regarding fire permit requirements in that jurisdiction.

4. Procedures for Obtaining a Recreational Fire Authorization and a Burning Permit (Moscow Campus)

   a. Download a Recreational Fire Authorization Form or obtain one from the Environmental Health and Safety Office.

   b. Complete all the information required on the form

   c. Return the form to the Environmental Health and Safety Office and obtain the approval signature of the Fire Safety Specialist or Director of Environmental Health and Safety. For locations outside of Moscow, return the form to the senior administrator at the location for his or her authorization.

   d. Take the completed authorization form to the Moscow Fire Department (Station #3, 229 Pintail Lane). The Moscow Fire Department will review the proposed activity and weather conditions and either issue or deny burning permit. For locations outside of Moscow, inform the local jurisdiction of the Recreational Fire Authorization Form and be prepared to share a copy if requested.

   e. Information. For additional information regarding recreational fires, please contact the Environmental Health and Safety Office at (208) 885-6524
VII. Flammable/Combustible Liquids

A. Storage
1. All flammable and combustible liquids storage must meet the requirements of The International Fire Code, Chapters 27 and 34.
2. Quantities of flammable liquids must be maintained below the limits established for each control area (see VII.C following).
3. Containers and cabinets:
   a. Flammable liquids should be stored in appropriate containers with tight fitting lids to control vapors.
   b. Containers should be stored in listed, approved flammable liquids storage cabinets that have self-closing doors and a lock.
   c. Cabinets should not be vented. If it is necessary to vent cabinets due to excessive vapors, or health concerns, the venting material and the installation of vents must be of the same fire-rating as the cabinets, and be directly vented to the exterior, without manifolding.
   d. Cabinets must meet the requirements of International Fire Code, Chapter 34, Section 3404.3.2.1.
   e. Cabinets are not to be placed near exit/corridor doors nor in the path of travel to an exit door.
   f. No more than three (3) cabinets are allowed in any lab, or shop space.
   g. Individual containers are restricted to the following sizes and types:*  

<table>
<thead>
<tr>
<th>Container Type</th>
<th>IA</th>
<th>IB</th>
<th>IC</th>
<th>II</th>
<th>IIIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass</td>
<td>500ml</td>
<td>1L</td>
<td>4L</td>
<td>4L</td>
<td>20L</td>
</tr>
<tr>
<td>Metal – other than DOT drums</td>
<td>4L</td>
<td>20L</td>
<td>20L</td>
<td>20L</td>
<td>20L</td>
</tr>
<tr>
<td>Safety Cans</td>
<td>10L</td>
<td>20L</td>
<td>20L</td>
<td>20L</td>
<td>20L</td>
</tr>
<tr>
<td>Metal (DOT)</td>
<td>4L</td>
<td>20L</td>
<td>20L</td>
<td>60 gallon</td>
<td>60 Gallon</td>
</tr>
</tbody>
</table>

* Within the overall maximum quantities allowed. See VII.C following.

B. Classification of Liquids
1. Flammable and Combustible liquids are classified by properties as follows:

   a. Flammable Liquid: Any liquid that has a closed-cup flash point below 100F and a Reid vapor pressure not exceeding 40 psia.

<table>
<thead>
<tr>
<th>Class</th>
<th>Flash point</th>
<th>Boiling point</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>&lt; 73F</td>
<td>&lt; 100F</td>
</tr>
<tr>
<td>1B</td>
<td>&lt; 73F</td>
<td>&gt;= 100F</td>
</tr>
<tr>
<td>1C</td>
<td>&gt;=73F, &lt;100F</td>
<td></td>
</tr>
</tbody>
</table>
b. Combustible liquid: Any liquid that has a closed-cup flash point at or above 100°F

<table>
<thead>
<tr>
<th>Class</th>
<th>Flash point</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>=&gt; 100F &lt;140F</td>
</tr>
<tr>
<td>IIIA</td>
<td>&gt;140 &lt;200</td>
</tr>
<tr>
<td>IIIB</td>
<td>=&gt; 200</td>
</tr>
</tbody>
</table>

C. Maximum Allowable Quantities
1. Control Areas
   a. Control Areas are spaces within a building where quantities of hazardous materials, not exceeding the maximum allowable quantity per control area, are stored, dispensed, used or handled. The intent of the control area concept is to provide an alternative method for the handling of hazardous materials without classifying the occupancy as a Hazardous Occupancy. In order to not be considered a Hazardous Occupancy, and avoid all the additional safety features and fire protection required, the amount of hazardous materials within any single control area bounded by fire barriers, fire walls or exterior walls cannot exceed a defined maximum allowable quantity for a specific material.
   b. A control area may be an entire building or a portion thereof.
   c. Construction/Separation Requirements
   i. Control areas shall be separated from each other by fire barriers constructed in accordance with the International Building Code.
   d. Percentage of maximum allowable quantities
   i. The percentage of maximum allowable quantities of hazardous materials per control area allowed at each floor level within a building shall be as follows:

<table>
<thead>
<tr>
<th>Floor Level</th>
<th>% of max allowed Per Control Area</th>
<th>Number of Control Areas Allowed per floor</th>
<th>Fire resistance rating for fire barriers (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>12.5%</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>12.5%</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>12.5%</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>50%</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>75%</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>100%</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Below Grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1*</td>
<td>75%</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2*</td>
<td>50%</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

*Cannot store Class 1 in basements.
2. Maximum Quantities  
a. Maximum Allowable Quantities per Control Area of Hazardous Materials  
Posing a Physical Hazard

Storage/Use

<table>
<thead>
<tr>
<th>Material</th>
<th>Class</th>
<th>Solid pounds (cubic ft.)</th>
<th>Liquid Gallons (pounds)</th>
<th>Gas cu.ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combustible Liquid</td>
<td>II</td>
<td>NA</td>
<td>120</td>
<td>330</td>
</tr>
<tr>
<td></td>
<td>IIIA</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IIB</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cryogenic Flammable</td>
<td>NA</td>
<td>NA</td>
<td>45</td>
<td>NA</td>
</tr>
<tr>
<td>Cryogenic Oxidizing</td>
<td>NA</td>
<td>NA</td>
<td>45</td>
<td>NA</td>
</tr>
<tr>
<td>Flammable Gas</td>
<td>Gaseous Liquefied</td>
<td>NA</td>
<td>150</td>
<td>1,000</td>
</tr>
<tr>
<td>Flammable Liquid * **</td>
<td>1A</td>
<td>NA</td>
<td>30</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>1B and 1C</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammable Liquid Combination (1A,1B,1C)</td>
<td>NA</td>
<td>NA</td>
<td>120</td>
<td>NA</td>
</tr>
<tr>
<td>Organic Peroxide</td>
<td>UD</td>
<td>1</td>
<td>(1)</td>
<td>(5)</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>125</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>Unlimted</td>
<td>(125)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>Unlimted</td>
<td>Unlimited</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Gas</td>
<td>Gaseous Liquid</td>
<td>NA</td>
<td>NA (150)</td>
<td>1500</td>
</tr>
<tr>
<td>Pyrophoric</td>
<td>NA</td>
<td>4</td>
<td>(4)</td>
<td>50</td>
</tr>
</tbody>
</table>

* Max allowable quantities shall be increased 100% in buildings equipped throughout with an automatic sprinkler system in accordance with IFC 903.3.1.1 – Where ** note applies, the increase for both shall be accumulative.
** Max allowable quantities shall be increased 100% when stored in approved storage cabinets.
D. Dispensing Flammable Liquids

1. Dispensing, use, mixing and handling of flammable liquids shall be in accordance with International Fire Code, Section 3403.
   a. The dispensing, use, mixing and handling of flammable and combustible liquids provide opportunities for liquids to become mixed with air. These operations can create a vapor-air mixture between the Lower flammable limit and the Upper flammable limit.
   b. Liquid transfer equipment and methods for transfer of Class I, II and IIIA liquids shall be approved and be in accordance with IFC Sections 3405.2.1 and 3405.2.6.
   c. Class I liquids, or Class II and III liquids that are heated to or above their flash points, shall be transferred by one of the following methods:
      i. From safety cans complying with U.L. 30
      ii. Through an approved closed piping system
      iii. From containers or tanks by an approved pump, taking suction through an opening in the top of the container.
      iv. Approved, engineered liquid transfer systems.

      **Exception**: Liquids in containers not exceeding 20L (5.3 gal.)

d. Grounding and Bonding:
   Flammable and combustible liquids being transferred near or above their flash point will generate vapors and are near their point of ignition. Transferring these liquids must be done in a manner that prevents a static spark. Grounding the container and nozzle will equalize the potential and eliminate a possible static ignition of vapors.
   Class I liquids, or Class II and III liquids that are heated to or above their flash points, shall not be transferred into containers unless the nozzle and containers are electrically interconnected. Acceptable methods of interconnections include:
      i. Metallic floor plates on which containers stand while filling, when such floor plates are electrically connected to the fill stem. Or –
      ii. Where the fill stem is bonded to the container during filling by means of a bond wire.
VIII. Fire Safety Equipment

A. Fire extinguishers

Fire extinguishers are provided to extinguish small fires while in their beginning stage. Warning: Do not attempt to extinguish large or rapidly growing fires. Only persons trained in the use of extinguishers should attempt to fight a fire. Fire extinguishers are required to be visible and readily accessible at all times.


2. Types. Different types of fires require different types of extinguishers. Fire extinguisher labels explain the types of fires they are configured for. Fire types and appropriate types of extinguishers are classified as follows:
   a. Class A.
      Class A type fires are those that involve “ordinary” combustible fuels, such as wood, wood by-products (paper, cardboard, etc.), cloth, and some plastics. Examples of Class A fire extinguishers: Pressurized water units, multi-purpose dry chemical units and certain foaming agents.
   b. Class B.
      Class B type fires are those that involve flammable liquids. Flammable liquids include gasoline, oils, solvents, greases, and most liquid forms of petroleum products. Examples of Class B fire extinguishers: Carbon dioxide, dry chemicals of most types, and most foaming agents.
   c. Class C.
      Class C type fires are those that involve energized electrical equipment. All “C” class units utilize a non-conductive agent. They may or may not be the required type for the fuel involved. Warning: It is important to make sure the unit has both a “C” designation and the rating for the fuel involved before attempting to use the extinguisher. The energy source involved must be shut-off to prevent the fire from re-igniting.
   d. Class D.
      Class D type of fires are those that involve combustible metals such as titanium, magnesium and sodium. Fire extinguishers for these types of fires must be specifically designed for the metal (or combination) involved.
   e. Availability. Fire extinguishers must be readily available to building occupants in case of fire. Fire extinguishers are only effective in the very early stages of a fire. The time needed to safely retrieve an extinguisher and return
to the fire is limited. As such, fire codes require a limit of seventy-five (75) feet of travel distance from any point within a building to a fire extinguisher.

   Fire extinguishers are required to be maintained and ready for use at all times. Facilities personnel inspect and maintain extinguishers for academic buildings on campus. Auxiliary units and locations outside of Moscow should use qualified vendors to inspect, maintain and recharge assigned extinguishers.
   a. Monthly Inspections.
      Facilities personnel will inspect each unit for damage, loss of pressure, mounting location and availability. Monthly inspections should be certified on the attached labels for each unit. After twelve (12) consecutive monthly inspections, the unit is due for annual maintenance.
   b. Annual Maintenance. Facilities personnel (or qualified vendors) should perform periodic maintenance inspections at least once a year, including all operating components of the unit, and if necessary, verify the condition of the extinguishing agent. The pressure test date is certified and, if necessary, a hydrostatic test is performed.
   c. Recharging or Replacement. If fire extinguishers are used, damaged or missing from their usual location, contact Facilities at (208) 885-6246 for immediate recharging or replacement.
   d. Placement. The type and size of fire extinguisher available in each location has been determined by the anticipated use of that area. If the use of an area changes, or the addition of a new process or procedure creates additional hazards, or if there are doubts regarding the type of fire extinguisher required for a particular area, conduct a survey to verify proper fire equipment coverage. These surveys may be requested from the Environmental Health and Safety Office at (208) 885-6524.

4. Educational Opportunities. Environmental Health and Safety personnel provide fire safety and fire equipment training upon request. For further information or to schedule training workshops call (208) 885-6524.

5. Information. For additional information on fire extinguisher use and types, contact Environmental Health and Safety at (208) 885-6524.

B. Fire and Smoke alarms
   1. Fire Alarms/Smoke and Heat detectors
      All Moscow campus buildings have automatic fire alarm systems installed that include smoke detector and/or heat detection devices. These devices are ceiling mounted and will detect the presence of fire or smoke. They should never be
Fire Safety Handbook

covered or blocked. Never use aerosols or perform any operation in the vicinity of smoke/heat detectors that might generate dusts, mists or smoke.

2. Fire alarm manual pull-stations are available at all building exits, and exits from each floor, for activating fire alarms in a fire emergency. They should never be blocked and should be plainly visible and accessible at all times.

3. Fire Horns and Strobes are installed in every building to notify occupants whenever a fire alarm is activated. These devices are wall mounted high on the wall, and are intended to be plainly visible. They should never be blocked, or have items placed in such a way as to block the sound or the flashing lights. Be careful not to place cabinets or bookshelves in front of fire horns.

C. Fire Sprinklers

1. Fire sprinkler systems are installed in many campus buildings. The sprinklers can be on the ceiling, or high on the walls. It is critical for all sprinklers to have sufficient room to disperse water in a specific pattern to be able to extinguish a fire, should one occur.

2. There should be nothing placed next to, or underneath a sprinkler closer than 18 inches. Do not allow storage, bookshelves, or other items to be placed within 18 inches of sprinklers.

3. Never paint or put any foreign material on sprinklers or sprinkler bulbs. These materials will inhibit the sprinkler from responding properly to the heat from a fire.

4. Never hang objects from a sprinkler or sprinkler piping.

5. Fire sprinkler controls may be installed in some areas of the building available to the public, such as corridors or stairwells. Never attempt to operate valves or in any way tamper with this equipment. Injury and/or water damage may result.

D. Standpipes

1. Standpipes are piping connections for fire department use within buildings. They are commonly found in stairwells and corridors. These piping systems may be either dry, or fully charged with water.

   a. Never operate a standpipe valve, or attempt to remove the cap on the piping valve – serious water damage may occur.

   b. Some standpipes may be mounted inside cabinets and include a length of folded hose with nozzle. Never unravel hoses or operate valves – these hoses are for fire department use only.
E. Fire Department Connections
1. Fire department connection can be found on the exterior of buildings. These connections are necessary for fire department use during a fire situation.
2. Never park cars or bicycles in front of connections, or block access or visibility in any way.
3. Never attempt to open or remove piping caps, or tamper with valves.
4. It is necessary that access to these connections be available at all times. If landscaping, vines, trees or other vegetation blocks visibility, notify Facilities for trimming or removal.

IX. Emergency Response/ Evacuation

A. Exits and exit access are critical elements for building safety considerations. For purposes of personal safety and emergency response activity, exits and exit access must remain unobstructed and clearly identified.
1. Exits. An “exit” should be seen as a continuous and unobstructed pathway that provides a means of accommodating the flow of people to a public way or staging area. Exits include intervening aisles, doors, doorways, gates, corridors, exterior exit balconies, ramps, stairways, exit passageways, and exit courts and yards.
Exits within buildings are designed for the number of occupants the building can safely accommodate. As such, any obstructions in exits or exit access will hinder emergency evacuation procedures. Building and fire codes require the full available width of all exits to be available and unobstructed at all times.
2. Exit Doors. Exit doors and fire doors are intended to provide the necessary means to move from one exit way element to another, while maintaining the fire-rated separation required by code. Never place items in front of, or block or restrict the visibility or access to, exit doors or exit door signs. Never lock an exit door, or restrict re-entry through an exit door.
3. Room Exit Doors. Exits from rooms to corridors or other portions of the exit way must be kept clear and unobstructed at all times. A pathway at least as wide as the doorway must be maintained from the exit door to room aisles or walkways.
4. Corridors accommodate larger groups and faster flow. The corridor width provided must be maintained at all times, and fire rated doors leading to corridors and stairwells must remain closed. Do not place items in corridors that would obstruct or impede egress.
5. Stairwells are separated from other areas of the building by fire-rated construction to provide a means of egress. To maintain this separation, it is necessary that all stairwell doors remain closed at all times. Never prop open stairwell doors. Do not place any items within a stairwell enclosure.
6. Building exit doors lead to exit dispersal area and/or public ways. A pathway at least as wide as the exit door must be maintained from the door to the public way or yard. Never place bicycles or other restricting items in this pathway.

B. Unit Emergency Response Plan

1. Every Unit within the University of Idaho, is required to develop a Unit Emergency Response Plan.
   a. Unit Emergency Response Plan should include the emergency evacuation information included here, as well as any building, departmental or group specific information required for a safe and rapid evacuation of occupants in an emergency.

C. Emergency Information

Fire emergencies require prompt, safe and knowledgeable responses by fire department, university personnel and students in order to ensure that hazards are identified, warning is given, persons can exit safely, and help can be obtained quickly. All university personnel are expected to:

1. Know the location of exits from work, classroom, study, laboratory or residence areas, and memorize landmarks that might aid in evacuation if visibility is impaired by smoke.
2. Look for the most immediate exit from the building, and know at least one alternate path.
3. Know the location of fire extinguishers and the proper method and appropriateness for their use.
4. Know the location of all fire alarm stations for activating the building alarm.
5. Know the emergency telephone numbers (911), and clearly post emergency numbers at every phone.
6. Be alert for situations that could be sources of ignition or that might pose a threat of fire. Ensure a routine daily inspection of work areas, note any potential problems and resolve them or bring them to the attention of the Environmental Health and Safety Office at (208) 885-6524.
7. Fire safety involves prevention, warning, escape, and extinguishing. Employees and students are responsible for knowing and following basic fire safety procedures, set forth below. The health and safety of occupants is always paramount.
8. Procedures.

   Immediate response by the fire department is critical in providing evacuation assistance and in successfully extinguishing a fire. Ensure that all building occupants understand the need to alert the fire department immediately when a fire is discovered.
Fire Safety Handbook

a. Call for Help.
   Immediately call 911. Identify yourself and the location of the fire (by
   building, floor, and room number, if possible).

b. Warn others.
   Activate the fire alarm or have someone do so immediately. Alert other
   occupants, if necessary.

c. Attempt to extinguish ONLY if you can do so safely:
   i) Attempt to extinguish the fire only if the fire is small, can be
      extinguished quickly, and you have the proper fire extinguisher. If
      the fire cannot be extinguished easily, leave the area immediately.
   ii) Never attempt to fight a fire unless it can be accomplished with the
       exit to your back. Leave immediately before it grows and blocks
       your exit(s).
   iii) Never attempt to extinguish a fire with a fire hose. If it is too large
       for you to safely control using a fire extinguisher, evacuate, call
       the fire department, and leave extinguishing of the fire to trained
       fire fighters.

d. Evacuate Immediately Upon Alarm. Whenever a fire alarm sounds, evacuate
   the building immediately, whether or not you can see fire or smoke. Fires in
   areas remote from you in the building can quickly spread and become
   threatening to everyone in the building.

e. Close Off Fire Area. Close off the area of fire origin as much as possible.
   Close doors to the area of fire origin as you leave the area. It is important to
   slow the spread of smoke during this critical time to allow a greater degree of
   safety during evacuation.

f. Information. Please review your Unit Emergency Response Plan. If you do
   not have a copy of the Unit Emergency Response Plan, ask your supervisor
   for a copy.

D. Emergency Evacuation Procedures

1. All university employees and students should be aware of emergency evacuation
   procedures. The Environmental Health and Safety Office has developed general
   emergency evacuation procedures and each department should supplement these
   procedures with departmental specific information via the Unit Emergency
   Response Plan. It is recommended that these procedures be posted in every
   department and distributed to all building occupants.

2. Each department is responsible for ensuring that their employees and students are
   aware of the proper emergency evacuation procedures. Each department is also
   required to develop additional evacuation procedures that account for activities
   being conducted in the department, account for all individuals after an evacuation,
etc. Environmental Health and Safety personnel can assist departments in developing and reviewing these procedures.

3. Procedures.
   a. General Procedures. All occupants are required to evacuate the building immediately when a fire alarm sounds or other evacuation signal is given.
      i) Call 9-911
      ii) Close all the doors to the room of fire origin or other hazard when leaving.
      iii) Activate the fire alarm at the nearest manual station located in the hallway, if necessary.
      iv) Leave the building through the nearest exit.
      v) Do not use the elevator; use the stairwell or proceed to the Area for Evacuation Assistance.
      vi) Do not leave any doors open behind you. Unlock and close all doors if possible.
      vii) Never open doors that feel hot to the touch, use a different exit.
      viii) Never attempt to travel through smoke-filled or other imminently hazardous area. If you encounter smoke in stairwells, close the door and use a different exit.
      ix) After evacuation, move away from the building. Never assemble near exits or fire lanes.

   b. If You Become Trapped due to smoke, heat, flames, or other hazard. In the event you become trapped by smoke, heat, flames, or other hazard, use the following procedures.
      i) Leave the room door closed. Seal door cracks and ventilation grilles with cloth or wetted towels or clothing if possible.
      ii) Use the telephone to call 9-911 and let them know your location. Hang an article of clothing, large enough for rescuers to see, out the window.
      iii) If smoke enters the room, open the window to let it out. Close the window if outside smoke enters. Tie a cloth or piece of clothing around your nose and mouth to filter out smoke if necessary.
      iv) Stay close to the floor where the air is cleaner.

   c. Plans.
      Each departmental administrator is required to establish and maintain an evacuation plan for building occupants. Evacuation plans should consist of written statements describing exit routes and the expected response of personnel to an alarm or other call for evacuation.
i) The evacuation plan should address, as appropriate, the following situations.
   a) The needs of persons with disabilities, e.g., mobility, visual or hearing impairments.
   b) Scientific experiments or demonstrations in progress.
   c) Hazardous or volatile substances in use or processes in progress.
   d) Classes in progress.
   e) Sensitive or valuable items to be secured.
   f) Assembly areas after evacuation and accounting for personnel.

   ii) All building occupants should be familiar with evacuation plans through employee orientations and/or training sessions provided or arranged by the department administrator.

   iii)Copies of the plan should be submitted to the Environmental Health and Safety Office and posted in the work area.

d. Public and Assembly Buildings. Public or assembly buildings are those buildings that may contain large numbers of persons gathered in one area, or buildings that may contain a large group gathered for a specific event (e.g., ASUI-Kibbie Activity Center, Administration Auditorium, Hartung Theater, Borah Theater, etc.).

   i) Activities within public or assembly-type buildings may require building-specific evacuation procedures that necessitate the involvement of building or event staff to aid evacuees.

   ii) Assembly buildings differ from the office or classroom setting in that some occupants may be in the building for the first time and may be unfamiliar with the location of exits.

   iii) Managers or administrators of buildings housing such activities should consult with the Fire Safety Specialist in the Environmental Health and Safety Office to formulate a unique procedure for evacuation for their facility and proper training of personnel.

X. Fire Reporting

A. All fires, or false alarms should be reported immediately to the Moscow Fire Department and Environmental Health and Safety.
Step 1: Complete the following information.

Location: _______________________________________________ Date: __________________________

Time: _____ to _______ Purpose: ___________________________________________________________

Type of Fuel: __________________ Quantity: ____________________________

Responsible Organization: _________________________________________________________________

Responsible Individuals (two required):

1) Name: ___________________________ Campus Address: _________________________________
   Phone: ______________________

2) Name: ___________________________ Campus Address: _________________________________
   Phone: ______________________

Note: Individuals named on this form must attend the fire/burning and assume full responsibility for controlling and extinguishing all fire.

Permits are issued on the condition that equipment be on hand to control and/or extinguish all fire when necessary. The following are required as a minimum:

1) Garden hose or other water source capable of controlling the fire;

2) Shovel; and

3) 2-5 gallon size bucket.

It is the responsibility of the undersigned to assure all flames and embers are extinguished prior to vacating the area, and to abide by any additional requirements set by the Moscow Fire Department and the City of Moscow, and for locations outside of Moscow, the requirements of that jurisdiction.

_________________________________________ ______________________
Signature         Date

Step 2: Obtain approval from Environmental Health and Safety (1108 West Sixth Street) or for locations outside of Moscow, the senior administrator for the location.

Approved: ___________________________ Date: __________________________

Step 3: Moscow only: Obtain a burning permit from the Moscow Fire Department.
This form must be taken to the Moscow Fire Department (Station #3, 229 Pintail Lane) to secure a burning permit. For locations outside of Moscow, check with the local jurisdiction.
MONTHLY SELF- INSPECTION FORM

Building: __________________ Inspector: _______________  Date:_______
Department________________________________   Room # _____________

“YES” items require correction.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>Description</th>
<th>Comments/Action(s)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Electric cord attached to building surface or run through door/ceiling/wall.</td>
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<td>Electric cord frayed, cut, or damaged.</td>
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<td>Exposed live electrical parts.</td>
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<td>Ungrounded equipment.</td>
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<td>Storage within 3’ of electric panels.</td>
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<td>Circuit breakers/disconnects not labeled.</td>
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<td>Fire extinguishers obstructed? Accessible?</td>
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<td>Fire extinguishers not current monthly check.</td>
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<td>Exit doors obstructed</td>
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<td>Exit signs not visible/ illuminated</td>
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<td>Storage not within 18&quot;of sprinkler heads</td>
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<td>Storage/combustibles near heater/heat source.</td>
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<td>Aisles narrower than 29 inches</td>
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<td>Compressed gas cylinders not capped/chained</td>
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<td>Flammable liquids outside of cabinets.</td>
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<td>Incompatible chemicals stored together</td>
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<td></td>
<td>Chemicals not labeled with name/hazards</td>
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<td>Material Safety Data Sheets not available.</td>
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<td>Excess of combustible waste materials</td>
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<td>Oily/greasy rags in not in covered metal can.</td>
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<td>Extension cords in use</td>
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<td>Emergency plan not posted/ emergency numbers not near phone?</td>
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</tbody>
</table>
### Fire Safety Handbook

*Welding and other hotwork should be performed in designated maintenance areas where appropriate controls are present whenever possible.*

Conditions should allow all items on this list to be checked “Yes” before welding or other hotwork operations are permitted to proceed.

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welders, assistants and observers have been supplied with and instructed to wear appropriate eye, face, hearing and hand protection.</td>
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<td></td>
</tr>
<tr>
<td>Welders and other persons in the work area will wear clothing that protects all parts of the body from burns and damage associated with the ultraviolet radiation produced.</td>
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<tr>
<td>If welding is performed overhead welders will wear leather caps or helmets and shoulder covers.</td>
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<tr>
<td>Welders will wear boots or similar substantial foot gear that completely covers the feet and ankles with pants-cuffs worn on the outside.</td>
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<tr>
<td>If work will be done on an elevated surface an effective means of fall protection is provided.</td>
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<tr>
<td>If work must be performed under wet/damp conditions, mats, platforms or other means are provided that effectively insulate workers from shock hazards.</td>
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<tr>
<td>Workers have been provided and have reviewed appropriate Material Data Safety Sheets for all potentially hazardous materials that will be used.</td>
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<tr>
<td>If compressed gas cylinders are present, they are secured in an upright position and caps are in place when not in use.</td>
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<tr>
<td>Mechanical ventilation is provided to pull welding fumes away from the welder and discharge exhaust fumes safely for welding that must be performed in an area where natural ventilation is not sufficient to maintain a safe atmosphere.</td>
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<td>If hotwork will be performed in a confined space, continuous air monitoring will be performed and documented as required by the university’s confined space standard.</td>
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<tr>
<td>If hotwork will be performed in a confined space, compressed gas cylinders will remain outside the space and torches will be removed from space when not in use.</td>
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<tr>
<td>Appropriate respirators are provided and will be used if natural or mechanical ventilation is not sufficient for maintaining a safe atmosphere. (NOTE: Welding or cutting operations that involve materials containing fluorine compounds, stainless steel, zinc, lead, beryllium, cadmium, and mercury are especially hazardous and may require the use of both local ventilation and respiratory equipment to ensure adequate protection)</td>
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<tr>
<td>Gas welding hoses are equipped with flashback arrestors.</td>
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<td>Noncombustible or flameproof flash screens are placed as needed to protect other personnel from flash and sparks.</td>
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<tr>
<td>Screens are positioned approximately 2 feet above the floor to allow for maximum ventilation (unless work must be performed at so low a level that...</td>
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</table>
they must be extended to the floor to provide protection).

__ Yes  ___ No  The person(s) who will be performing hotwork are adequately trained and qualified.

__ Yes  ___ No  Sprinklers located in the area where the hotwork will be performed are operational.

__ Yes  ___ No  If smoke detectors are present and must be covered/de-activated to prevent false alarms, Environmental Health & Safety has been notified.

__ Yes  ___ No  Cutting and welding equipment is in good repair.

__ Yes  ___ No  Ducts and conveyor systems (that might carry sparks to distant combustibles) are suitably protected or shut-down.

__ Yes  ___ No  Floors have been swept and cleared of all combustibles within 35 feet of hotwork (if possible).

__ Yes  ___ No  Combustible floor or wall surfaces within 35 feet of hotwork are wet down or protected with damp sand, metal or other safety shields.

__ Yes  ___ No  There are no unprotected combustible materials or flammable liquids in the hotwork area.

__ Yes  ___ No  All combustibles that are likely to be ignited by conduction or radiation are moved away from the opposite side of partitions, walls, ceilings or roofs.

__ Yes  ___ No  All wall and floor openings are covered.

__ Yes  ___ No  Covers that need to be suspended beneath the work to collect sparks are installed.

__ Yes  ___ No  All combustibles are cleaned and removed from equipment near the hotwork area.

__ Yes  ___ No  Containers on which hotwork will be performed are purged of all flammable vapors.

__ Yes  ___ No  Provisions have been made to provide a fire watch during hotwork operations and for at least 30 minutes after the work is completed.

__ Yes  ___ No  The fire watch is supplied with suitable fire extinguisher and other appropriate fire-suppression materials.

__ Yes  ___ No  The fire watch is trained in the proper use of suppression equipment and how to sound the alarm if necessary.

__ Yes  ___ No  Adjoining areas, above and below, have been checked for the necessity of fire watch.

__ Yes  ___ No  An approved first aid kit is readily available.

__ Yes  ___ No  A phone with emergency numbers posted nearby is available and accessible.

OTHER:  

Checklist Completed by:  ___________________________  Date:  _____________

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