

**University of Washington
Chemistry Building
Hazardous Material Laboratory Below Exempt Amounts
8002 Permit Conditions**

1. Environmental Health and Safety shall provide Control Zone boundary descriptions upon request from the Fire Marshals Office.
2. Environmental Health and Safety shall provide Hazardous Material Inventory Statements for specific Control Zones (Control Zone Summary Reports) upon request from the Fire Marshal's Office.
3. Environmental Health and Safety, in conjunction with the Director of Facilities & Services for the Chemistry Dept., shall ensure that minimum amounts of hazardous materials necessary for demonstration, treatment or lab work are maintained and maximum allowable amounts of hazardous materials per control area are not exceeded.
4. The Director of Facilities & Services shall identify the Responsible Party for each laboratory in a control zone and provide current contact information upon request from the Fire Marshal's Office.
5. The person identified as the Responsible Party shall ensure that the Laboratory Safety System is updated and reflective of actual hazardous material inventory conditions of the laboratories within their control.
6. The Responsible Party, in conjunction with the Director of Facilities & Services, shall ensure that minimum amounts of hazardous materials necessary for demonstration, treatment or lab work are maintained and maximum allowable amounts of hazardous materials per control area are not exceeded.
7. Where the Responsible Party is unavailable the Director of Facilities & Services shall ensure all conditions have been met.
8. Permits shall be kept on the premises designated herein at all times and shall be posted in a conspicuous location on the premises. Permits shall be available for inspection at all times. [1997 SFC Sec. 105.5]
9. MSDS shall be readily available on the premises for hazardous materials regulated by this permit. MSDS that are electronically available through an offsite vendor are acceptable for meeting this permit condition. [1997 SFC Sec. 8001.6]
10. Persons responsible for the operation of areas in which hazardous materials are stored dispensed, handled, or used shall be familiar with the chemical nature of the materials and the appropriate mitigating actions necessary in the event of a fire, leak, or spill. [1997 SFC Sec. 8001.11.1.1]
11. Equipment, machinery, and required detection and alarm systems associated with hazardous materials shall be listed or approved, and shall be maintained in an operable condition. Electrical wiring and equipment shall be in accordance with the Electrical Code. [1997 SFC Sec's. 8001.4.4, 8001.4.7.1, 8001.11.4]
12. Provisions shall be made for controlling and mitigating unauthorized discharges of hazardous materials. [1997 SFC Sec. 8001.5.2.3]

**University of Washington
Chemistry Building
Hazardous Material Laboratory Below Exempt Amounts
8002 Permit Conditions**

13. Hazardous materials shall not be released into a sewer, storm drain, ditch, drainage canal, lake, river or tidal waterway, or upon the ground, sidewalk, street, highway, or into the atmosphere. The Chief shall be notified immediately when an unauthorized discharge becomes reportable under state, federal, or local regulations, or when any release inside or outside a building could present a life safety hazard. [1997 SFC Sec's. 8001.5.1 and 8001.5.2.2]
14. The person, firm, or corporation responsible for an unauthorized discharge shall institute and complete all actions necessary to remedy the effects of such unauthorized discharges, whether sudden or gradual, at no cost to the jurisdiction. [1997 SFC Sec. 8001.5.2.5]
15. "NO SMOKING" signs, and/or hazard identification signs as specified by UFC Standard 79-3, shall be posted and maintained in a conspicuous locations as required by the Chief. The marks or labels on individual containers, cylinders, tanks, or systems shall be maintained in accordance with nationally recognized standards. [1997 SFC Sec's. 8001.7-8001.9]
16. Hazardous materials storage, dispensing, use and handling areas shall be secured against unauthorized access and safeguarded with such protected facilities as public safety requires. [1997 SFC Sec. 8001.11.2]
17. A minimum rated 40BC fire extinguisher shall be located within 30 feet of all hazardous material storage and use. [1997 SFC Sec. 1002.1]
18. Means of egress shall not be obstructed in any manner and shall remain free of any material or matter where its presence would obstruct or render the means of egress hazardous. Storage is prohibited under exit stairways. [1997 SFC Sec's. 1203 and 1210.3]
19. Storage of combustible material shall be orderly. [1997 SFC Sec. 1103.3.1]
20. Incompatible materials in storage and storage of materials that are incompatible with materials being used shall be separated when the stored materials are in containers having a capacity of more than 5 pounds or ½ gallon.
Separation shall be accomplished by one of the following methods:
 - Segregating incompatibles by a distance of not less than 20 feet,
 - Isolating storage by a noncombustible partition extending not less than 18 inches above and to the sides of the stored material,
 - Storing liquid and solid materials in hazardous materials storage cabinets,
 - Storing compressed gases in gas cabinets or exhausted enclosures.
21. Materials that are incompatible shall not be stored within the same cabinet or exhausted enclosure. [1997 SFC Sec. 8001.11.8]
22. Class 2 oxidizers must not be stored in basements except when in stationary tanks. Class 3 and Class 4 oxidizers must be separated from other hazardous materials by not less than one-hour fire-resistive construction or stored in hazardous material storage cabinets. [1997 SFC Section 8003.6.1.8]
23. When more than two containers of hazardous materials having a hazard ranking of 3 or 4 in accordance with U.F.C. Std. 79-3 are transported within an exit corridor or exit enclosure, they shall be on an approved cart in accordance with SFC Sec. 80.403(c). [1997 SFC Sec. 8001.10.2]

**University of Washington
Chemistry Building
Hazardous Material Laboratory Below Exempt Amounts
8002 Permit Conditions**

24. Class 3 and 4 unstable (reactive) detonable materials shall be stored in accordance with the Building Code requirements for explosives. [1997 SFC Sec. 8003.9.1.1]
25. Unstable (reactive) materials shall not be stored in basements. [1997 SFC Sec. 8003.9.1.5]
26. Class I liquids shall not be stored near exit doorways, stairways, or in location that would impede egress. [1997 SFC Sec. 7902.5.5]
27. Shelving shall be of substantial construction, adequately braced and anchored. [1997 SFC Sec. 7902.5.6.1]
28. Shelves shall be of sufficient depth and provided with a lip or guard to prevent individual containers from easily being displaced. [1997 SFC Sec. 7902.5.6.2]
29. Shelf storage of hazardous materials shall be maintained in an orderly manner. Shelves shall be of substantial construction, adequately braced and anchored. [1997 SFC Sec. 8001.11.9]
30. Shelves shall be provided with a lip or guard when used for the storage of individual containers.
EXCEPTIONS: 1) Storage in hazardous materials storage cabinets or laboratory furniture specifically designed for such use.
2) Storage of hazardous materials in amounts not requires a permit. [1997 SFC Sec. 8001.11.9]
31. Open flames and high temperature devices shall not be used in a manner that creates a hazardous condition. Smoking shall be prohibited in rooms or areas where hazardous materials are stored or dispensed or used in open systems. [1997 SFC Sec. 8001.9]
32. Containers, cylinders and tanks shall be of an approved type and shall be designed in accordance with nationally recognized standards. [1997 SFC Sec. 8001.4.2]
33. Defective or leaking containers, cylinders and tanks shall be removed from service, repaired, or disposed of in an approved manner in an area inaccessible to the public. [1997 SFC Sec. 8001.4.3]
34. Empty containers and tanks previously used for the storage of hazardous materials shall be free from residual material and vapor as defined by DOT, R.C.R.A. or other regulating authority or shall be maintained as specified for the storage of the hazardous material. [1997 SFC Sec. 8001.4.6]
35. Carts and trucks used to transport hazardous materials shall be designed to provide a stable base for the commodities transported and shall have a means of restraining containers to prevent accidental dislodgment. [1997 SFC Sec. 8001.12.3.2]
36. When processes or conditions exist where a flammable mixture could be ignited by static electricity, means shall be provided to prevent the accumulation of a static charge. [1997 SFC Sec. 8001.11.5]
37. Outdoor storage areas shall be kept free of weeds, debris and common combustible materials not necessary to the storage. The area surrounding an outdoor storage area shall be kept clear of such materials for a minimum of 15 feet. [1997 SFC Sec. 8001.15.4.2]

**University of Washington
Chemistry Building
Hazardous Material Laboratory Below Exempt Amounts
8002 Permit Conditions**

38. Outdoor storage areas shall be located not closer than 20 feet of a property line that can be built upon, street, alley or public way. A two-hour fire-resistive wall without openings extending not less than 30 inches above and to the sides of the storage area is allowed in lieu of such distance. [1997 SFC Sec. 8001.15.4.2]
39. "COMPRESSED GAS" signs, "NO SMOKING" signs, and/or hazard identification signs as specified by UFC Standard 79-3, shall be posted and maintained in conspicuous locations as required by the Chief. The marks or labels on individual containers, cylinders, tanks, or systems shall be maintained in accordance with nationally recognized standards. [1997 SFC Sec's. 8001.7-8001.9, 7401.5.1]
40. Compressed gas containers, cylinders, tanks, and systems shall be secured against unauthorized access and safeguarded with such protected facilities as public safety requires. [1997 SFC Sec's. 7401.6.1, 8001.11.2]
41. Visible hazard identification signs as specified in U.F.C. Standard NO.79-3 shall be placed on the exterior entrances to locations where hazardous materials are stored in quantities requiring permit. [SFC Sec. 8001.7]
42. Empty containers previously used for the storage of hazardous materials shall be free from residual material and vapor as defined by D.O.T., R.C.R.A. or other regulating authority or maintained as specified for storage of hazardous material. [1997 SFC Sec. 8001.4.6]
43. Means of egress shall not be obstructed in any manner and shall remain free of any material or matter where its presence would obstruct or render the means of egress hazardous. Storage is prohibited under exit stairways. [1997 SFC Sec's. 1203, 1210.3]
44. Combustible waste, vegetation or similar materials shall be kept a minimum of 10 feet from compressed gas containers, cylinders, tanks, and systems. An unpierced noncombustible barrier extending not less than 18 inches above and to the front and rear of the area of storage or use is allowed in lieu of such distance. [1997 SFC Sec. 7401.8.3]
45. Compressed gas containers, cylinders, tanks and systems shall not be exposed to open flame, high temperature or heating devices which could raise the surface temperature above 125 degrees, or which could otherwise create a hazardous condition. [1997 SFC Sec's. 7401.8.9, 8001.9]
46. Compressed gas containers, cylinders, tanks and systems shall not be used for electrical grounding and shall not be located where they could become part of an electrical circuit. [1997 SFC Sec. 7401.9]
47. Compressed gas containers, cylinders, tanks and systems which could be exposed to vehicular or other physical damage shall be protected by guard posts or other approved means. [1997 SFC Sec's. 7401.6.3, 8001.11.3]
48. Compressed gas containers, cylinders and tanks shall not be placed near unprotected ledges or other areas where they could drop distances exceeding one half the height of the container, cylinder or tank. [1997 SFC Sec. 7401.8.4]
49. Compressed gas containers, cylinders and tanks shall not be placed in areas where they are likely to be damaged by falling objects. [1997 SFC Sec. 7401.8.6]

**University of Washington
Chemistry Building
Hazardous Material Laboratory Below Exempt Amounts
8002 Permit Conditions**

50. Compressed gas containers, cylinders and tanks shall be protected from direct contact with soil, other unimproved surfaces, or areas of standing water in order to prevent bottom corrosion. [1997 SFC Sec. 7401.14]
51. Compressed gas containers, cylinders, tanks and systems shall be designed and constructed in accordance with nationally recognized standards and shall not be used for any purpose other than to serve as a vessel for containing the product which it is designed to contain. [1997 SFC Sec's. 8001.4.1, 8001.4.2, 7401.11]
52. Leaking, damaged, corroded, or defective compressed gas containers, cylinders, tanks and systems shall be removed from service and repaired, replaced, or disposed of in an approved manner. [1997 SFC Sec's. 7401.13, 8001.4.7.1]
53. Service, repair, modification or removal of valves, pressure relief devices or other compressed gas container, cylinder or tank appurtenances shall be performed by trained personnel in accordance with nationally recognized standards. [1997 SFC Sec. 7401.10]
54. Empty containers and tanks previously used for the storage of hazardous materials shall be free from residual vapor or explosive vapors as defined by DOT or R.C.R.A. or other regulating authority or shall be maintained as specified for the storage of the hazardous material. [1997 SFC Sec. 8001.4.6]
55. Compressed gas containers, cylinders, or tanks designed for protective caps, collars or other protective devices shall have the caps or devices in place except when the containers, cylinders or tanks are in use or are being serviced or filled. [1997 SFC Sec. 7401.7.2]
56. Compressed gas containers, cylinders, tanks and systems shall be secured against accidental dislodgment or falling due to contact, vibration, or seismic activity. [1997 SFC Sec. 7401.6.1, 7401.6.4]
57. Liquefied gas compressed gas containers, cylinders and tanks, except those designed for use in a horizontal position, and all compressed gas containers, cylinders and tanks containing non-liquefied gases shall be stored in a "valve end up" upright position.
EXCEPTION: Compressed gas containers with a water volume less than 1.3 gallons are allowed to be stored in a horizontal position. [1997 SFC Sec's. 7402.1.2, 8001.16.3]
58. Where containers, cylinders, and tanks are moved by hand cart, hand truck or other mobile device, such carts, trucks or devices shall be designed for the secure movement of containers, cylinders or tanks. [1997 SFC Sec's. 7403.3.2, 8001.12.3.2]
59. When processes or conditions exist where a flammable mixture could be ignited by static electricity, means shall be provided to prevent the accumulation of a static charge. [1997 SFC Sec. 8001.11.5]
60. Transfer of gas between containers, cylinders and tanks shall be performed by qualified personnel utilizing equipment and operating procedures in accordance with nationally recognized standards. [1997 SFC Sec. 7403.1.8]
61. Markings used for piping systems shall consist of the content's name and include a direction of flow arrow. Markings shall be provided at each valve; at wall or ceiling penetrations; at each change of

**University of Washington
Chemistry Building
Hazardous Material Laboratory Below Exempt Amounts
8002 Permit Conditions**

direction; and at a minimum of every 20 feet or fraction thereof throughout the piping run. [1997 SFC
Sec. 7401.5.3]