THE CITY OF SEATTLE
FIRE DEPARTMENT
Fire Marshal's Office
220 Third Ave South
Seattle, WA 98104-2608
(206) 386-1450

UW CHEMISTRY DEPT
BOX 351700
SEATTLE, WA 98195
GARY PEDERSEN

PERMIT CODE(S): 801-G
PERMIT TITLE: Flammable Liquids
JOB SITE: 3900 OKANOGAN LN NE-BAGLEY HALL

OPERATIONS PERMITTED: Store and use "Flammable Liquids" in accordance with applicable provisions of the Seattle Fire Code and the attached conditions at the noted operation address.

PERMIT CONDITION(S): *** SEE ATTACHED CONDITIONS. ***

<table>
<thead>
<tr>
<th>TYPE OF MATERIAL</th>
<th>AMOUNT OF MATERIAL</th>
<th>MATERIAL LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I-B Flammable Liquids [Acetone]</td>
<td>10 gallons</td>
<td>Room 271.</td>
</tr>
</tbody>
</table>
STANDARD PERMIT CONDITIONS
PERMIT CODE 801-AG
FLAMMABLE AND COMBUSTIBLE LIQUIDS

Administrative Controls

1. 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]

2. MSDS shall be readily available on the premises for hazardous materials regulated by this permit. [1997 SFC Sec. 8001.6]

3. 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]

4. Maintenance and operating practices shall be in accordance with established procedures that tend to control leakage and unauthorized discharge of flammable or combustible liquids. Spills shall be cleaned up promptly. [1997 SFC Sec's. 7901.7.2, 7902.5.10.1, 8001.5.2.5]

5. Flammable and combustible liquids and petroleum waste products shall not be discharged or released on sidewalks, streets, highways, drainage canals, ditches, storm drains, sewers, flood control channels, lakes, rivers, tidal waterways, or the ground. The Chief shall be notified immediately when an unauthorized discharge becomes reportable under state, federal, or local regulations, or when any spill or accidental release inside or outside of a building could present a fire or life safety hazard. [1997 SFC Sec's. 7901.7.1, 8001.5.1]

6. "NO SMOKING" signs, "DANGER-FLAMMABLE LIQUIDS" signs, and/or hazard identification signage 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 shall be maintained in accordance with nationally recognized standards. [1997 SFC Sec's. 7901.9.1-7901.9.3, 7902.1.3, 8001.7-8001.9]

7. Hazardous material storage, dispensing, use and handling areas shall be secured against unauthorized access and safeguarded with such protected facilities as public safety requires. Outside storage areas shall be protected against tampering by fencing or other control measures. [1997 SFC Sec's. 7902.3.5, 8001.11.2]

Storage Placement

1. A minimum rated 40BC fire extinguisher shall be located within 30 feet of all hazardous material storage and use. [1997 SFC Sec's. 7902.5.11.5.2, 1002.1]

2. Class I, II, III-A liquids (including stock for sale) shall not be stored near exit access doorways, stairways or in a location that would impede egress. 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. 7902.5.5, 1203, 1210.3]

3. The storage area shall be kept free of other combustible material or storage, grass, or weeds for a minimum distance of 15 feet [1997 SFC Sec's. 7902.1.6, 7902.3.7, 7902.5.10.2.4]

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4. Storage of incompatible hazardous materials shall be separated from flammable and combustible liquids by a minimum distance of 20 feet or isolated from each other by a noncombustible partition extending not less than 18 inches above and to the side of the stored materials.

   EXCEPTION: Containers of solids and liquids having a capacity of less than 5 pounds or ½ gallon when stored in quantities not exceeding exempt amounts. [1997 SFC Sec's. 7902.1.6, 8001.11.8]

5. Smoking, open flame, or other sources of ignition shall be prohibited in storage areas and within 25 feet of any dispensing area.[1997 SFC Sec's. 7901.10, 7902.1.4, 8001.9]

6. Class I liquids shall not be used or stored in basements. [1997 SFC Sec. 7902.5.10.1]

Storage and Handling Requirements

1. Portable tanks, containers and equipment used or intended to be used for the storage of flammable or combustible liquids shall be of an approved type. Containers and portable tanks shall be designed and constructed in accordance with nationally recognized standards. [1997 SFC Sec. 7902.1.8.1.1]

2. The capacity of individual containers and portable tanks for liquids shall be in accordance with the following:

   MAXIMUM SIZE OF CONTAINERS AND PORTABLE TANKS

<table>
<thead>
<tr>
<th>Container Type</th>
<th>Class I-A</th>
<th>Class I-B</th>
<th>Class I-C</th>
<th>Class II</th>
<th>Class III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass</td>
<td>1 pint</td>
<td>1 quart</td>
<td>1 gallon</td>
<td>1 gallon</td>
<td>5 gallon</td>
</tr>
<tr>
<td>Metal</td>
<td>1 gallon</td>
<td>5 gallons</td>
<td>5 gallons</td>
<td>5 gallons</td>
<td>5 gallons</td>
</tr>
<tr>
<td>Safety Cans</td>
<td>2 gallons</td>
<td>5 gallons</td>
<td>5 gallons</td>
<td>5 gallons</td>
<td>5 gallons</td>
</tr>
<tr>
<td>Metal drum</td>
<td>60 gallons</td>
<td>60 gallons</td>
<td>60 gallons</td>
<td>60 gallons</td>
<td>60 gallons</td>
</tr>
<tr>
<td>Approved portable tanks</td>
<td>660 gallons</td>
<td>660 gallons</td>
<td>660 gallons</td>
<td>660 gallons</td>
<td>660 gallons</td>
</tr>
</tbody>
</table>

3. Class I, II and III liquids in plastic containers shall be located in approved flammable liquid cabinets, liquid storage rooms or liquid storage warehouses. [1997 SFC Sec. 7902.1.8.1.3]

   EXCEPTION: Medicines, beverages, foodstuffs, and cosmetics when packaged and displayed according to commonly accepted practices for retail sales in mercantile occupancies. [1997 SFC Sec. 7902.1.8.1]

4. Defective or leaking containers 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's. 7901.7.3, 8001.4.3]

5. Waste liquids shall be kept in a sump, tank, or receptacle approved for this purpose. [1997 SFC Sec. 7901.7.5]

6. Empty tanks and containers used for the storage of flammable or combustible liquids, unless free from residual vapor or explosive vapors as defined by D.O.T. or R.C.R.A., shall be stored and counted as required for filled containers. [1997 SFC Sec's. 7902.5.3, 8001.4.6]
IN ALL OCCUPANCIES, WHEN PORTABLE CONTAINERS ARE USED FOR STORAGE, ADD:

Storage in Containers of 60 Gallons or Less

1. In all occupancies, quantities of flammable and combustible liquids in excess of 10 gallons used for maintenance and the operation of equipment shall be stored in liquid storage cabinets. **EXCEPTION:** When containers are stored in flammable liquid storage rooms or warehouses constructed and separated as required by the Building Code. [1997 SFC Sec's. 7902.5.8, 7902.5.10.1, 7902.5.11, 7902.5.12]  

2. Containers having less than 30-gallon capacity shall not be stacked more than 3 feet or two containers high, whichever is greater. Containers having a capacity of 30 gallons or more shall not be stored more than one container high. [1997 SFC Sec. 7902.5.10.1]  

3. Shelf storage of flammable and combustible liquids shall be maintained in an orderly manner. Shelves shall be of substantial construction, adequately braced and anchored. Shelves shall be of a sufficient depth and provided with a lip or guard to prevent containers from being easily displaced. [1997 SFC Secs. 7902.5.6.1/2/3]  

4. Piles shall not be closer than 3 feet to the nearest beam, chord, girder or other obstruction and shall be 3 feet below sprinkler deflectors or discharge orifices of water spray or other overhead fire protection systems. [1997 SFC Sec. 7902.5.10.1]  

FOR ALL OCCUPANCIES EXCEPT GROUP M, WHEN INTERIOR STORAGE QUANTITIES HAVE EXCEEDED EXEMPT AMOUNTS, ADD:

Flammable Liquid Storage Room and Warehouse Requirements

1. The quantity limits and arrangements of storage in liquid storage rooms or warehouses shall be maintained in accordance with Seattle Fire Code Tables 7902.5-D or 7902.5-E. When two or more classes of liquids are stored in a single pile or rack, the maximum quantities permitted in the pile or rack shall be the smallest of the two or more separate maximum quantities. [1997 SFC Sec's. 7902.5.11.2.1, 7902.5.11.2.2, 7902.5.12]  

2. Mechanical ventilation shall be maintained at a rate of not less than 1 cubic foot per minute per square foot of floor area. [1997 SFC Sec. 7903.2.3.4.2]  

3. Containers and piles shall be separated by pallets or dunnage to provide stability and to prevent excessive stress to container walls by distributing the weight of the containers over a wide area. [1997 SFC Sec. 7902.5.11.2.4]  

4. 4-foot aisles shall be maintained between piles, between racks, or to separate piles and racks. Main aisles shall be maintained at a minimum of 8 feet wide. [1997 SFC Sec. 7902.5.11.2.3]  

5. Electrical installations located inside liquid storage rooms or warehouses shall be approved for Class 1, Division 2 hazardous locations in accordance with the Seattle Electrical Code. [1997 SFC Sec's. 7901.4, 105.8]
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WHEN STORAGE IS IN ACCORDANCE WITH GROUP M WHOLESALE AND RETAIL SALES REQUIREMENTS, ADD:

Wholesale and Retail Storage Requirements

1. Storage heights and arrangements for pallet, pile, or rack storage greater than 4 feet 6 inches in height shall be maintained in accordance with Seattle Fire Code Tables 7902.5-D or 7902.5-E. [1997 SFC Sec. 7902.5.10.2.4]

2. Storage on shelves shall not exceed 6 feet in height and shelving shall be metal. [1997 SFC Sec. 7902.5.10.2.4]

3. Class I liquids in plastic containers shall be stored in approved flammable liquid cabinets, liquid storage rooms or liquid storage warehouses.
   EXCEPTION: In Group M wholesale and retail sales buildings protected by an automatic sprinkler system, an aggregate quantity of 120 gallons of water-miscible Class I-B and I-C liquids is allowed in nonmetallic containers, each having a maximum capacity of 16 ounces or less. [1997 SFC Sec's. 7902.1.8.1.3 and 7902.5.10.2.2]

4. Class II or III liquids in plastic containers shall be stored in approved flammable liquid cabinets, liquid storage rooms or liquid storage warehouses.
   EXCEPTION: In Group M wholesale and retail sales occupancies provided individual containers are stored less than 5 feet high or containers are confined to bin-boxes protected by automatic sprinklers within racks. [1997 SFC Sec's. 7902.1.8.1.3 and 7902.5.10.2.2]

FOR ALL USE, DISPENSING, OR MIXING OF FLAMMABLE OR COMBUSTIBLE LIQUIDS, ADD:

Requirements for All Use, Dispensing, or Mixing of Flammable or Combustible Liquids

1. Class I and II liquids in containers exceeding 5.3-gallons shall be transferred by one of the following methods:
   1. From safety cans,
   2. Through an approved closed piping system
   3. From containers or tanks by an approved pump taking suction through an opening in the top of the container or tank,
   4. For Class 1-B, 1-C, II or III liquids, from containers or tanks by gravity through an approved self- or automatic-closing valve when the container or tank and dispensing operations are provided with spill control and secondary containment. Class I-A liquids shall not be dispensed by gravity from tanks, or
   5. Approved engineered liquid transfer systems. [1997 SFC Sec. 7903.1.3.5]

2. Adequate grounding and bonding shall be provided to prevent the accumulation of static electricity wherever Class I or II liquids are transferred or dispensed. [1997 SFC Sec's. 7901.10, 7903.2.1.3]

3. When gases are introduced to provide for liquid transfer by pressure, only inert gases shall be used. Air or oxygen shall not be used for pressurization. [1997 SFC Sec. 7903.1.3.3]

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WHEN USE QUANTITIES EXCEED EXEMPT AMOUNTS, ADD:

Flammable or Combustible Liquid Use, Dispensing, or Mixing Rooms

1. Continuous mechanical ventilation shall be maintained at a rate of not less than 1 cubic foot per minute per square foot of floor area. [1997 SFC Sec. 7903.2.3.4.2]

2. Electrical installations located inside liquid use, dispensing, or mixing rooms shall be approved for Class 1, Division 2 hazardous locations in accordance with the Seattle Electrical Code. [1997 SFC Sec's. 7901.4, 105.8]

Outside Flammable or Combustible Liquid Use, Dispensing, or Mixing Areas

1. Dispensing activities shall not be conducted within 15 feet of buildings, combustible materials, or storage of Class I, II or III liquids unless such liquids are stored in tanks which are tested and labeled as two-hour protected tank assemblies. [1997 SFC Sec. 7903.3.3]

2. Dispensing activities shall not be within 25 feet of building openings, property lines, streets, alleys, or public ways. [1997 SFC Sec. 7903.3.3]