User’s Guide: Hazardous Materials Inventory Statements

Section 1: Fire Code Requirements

Where required by the fire code official, an application for, or renewal of, a permit shall include a HMIS. The HMIS shall include the following information:

1. Location where stored or used
2. Hazard classification
3. Product name.
5. Chemical Abstract Service CAS number.
6. Quantities:
   a. In use, Open
   b. In use, Closed
   c. Storage
7. Container
8. Physical State

In the city of Seattle, new permits with the following permit codes will require an HMIS to be submitted at the time the permit is applied for:

- 3602  Drycleaners
- 4501  Limited Spray Finishing
- 4502  Spray Finishing Process/Non-Marine
- 4503  Spray Finishing Process/Non-Marine/Above Permit Quantities
- 4504  Marine Spray Finishing Process/Below Permit Quantities
- 4505  Marine Spray Finishing Process/Above Permit Quantities
- 4507  Combustible Powder Finishing/ Above Permit Quantities
- 7402  Medical Gas
- 7904  Bulk Plant or Terminal
- 801 Series Variety of Hazardous Gases/Liquids/Solids
- 8002  Laboratories

Section 2: How to Complete and Submit the HMIS Form to the Seattle Fire Department

Completed HMIS’s should be submitted along with your permit applications in person, by mail, or by email (preferred) to permits@seattle.gov. Materials must be reported separately for each control area. The following guidelines are provided to assist you in completing a Hazardous Materials Inventory Statement HMIS.

Column 1: Location Where Stored or Used
Identify the control area, or if it is a group H occupancy, provide the classification, such as H-2, H-3, etc...
Column 2: Hazard Class - Abbreviation
The hazard class e.g. flammable liquid, corrosive, oxidizer shall be based on the classification system provided in the current Seattle Fire Code SFC See SFC Appendix E.

Abbreviations for each hazard class are presented in Section 4 of this document.

Column 3: Product Name
Provide the common trade name e.g. Chlorox of the hazardous material.

Column 4a and 4b: Components and Concentration
Provide the chemical name and the concentration of the material. If the material is a mixture, provide the three major components constituents of the material and the concentration of each component.

Column 5: Chemical Abstract Service CAS Number
The Chemical Abstract Service CAS registry number is a unique number assigned to a material prior to manufacturing. These numbers may be obtained from the manufacturer of the material and should be identified on the Safety Data Sheet SDS for the product. For mixtures, list CAS Numbers of three major components, if available.

Column 6: Quantities
List the materials by weight or volume. All materials shall be listed in either metric or imperial measurements. Quantities must be listed for the following types of use and storage:

a) IN USE OPEN: Process or use with vapors escaping to the atmosphere
b) IN USE CLOSED: No vapors escaping to the atmosphere.
c) STORAGE: Stored only NOT in use open or in use closed

Column 7: Container >55 gallon
If product container, vessel or tank could exceed 55 gallons, indicate “yes” in the column.

Column 8: Physical State
Note whether material is Solid, Liquid or Gas

Refer to Appendices E and H of the Seattle Fire Code for more information or contact the Special Hazards Unit of the FMO for assistance by calling 206-386-1450

Section 3: HMIS Definitions and Reference Sheet

Definitions

Control Area: Spaces within a building where quantities of hazardous materials not exceeding the maximum allowable quantities per control area are stored, dispensed, used or handled. See also the definition of “Outdoor control area.”
Flammable and Combustible Liquids

<table>
<thead>
<tr>
<th></th>
<th>Hazard Class</th>
<th>Flash Point</th>
<th>Boiling Point</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flammable Liquids</strong></td>
<td>Class I-A</td>
<td>Less than 73° F</td>
<td>Less than 100° F</td>
</tr>
<tr>
<td></td>
<td>Class I-B</td>
<td>Less than 73° F</td>
<td>Greater than or equal to 100° F</td>
</tr>
<tr>
<td></td>
<td>Class I-C</td>
<td>Greater than or equal to 73° F and less than 100° F</td>
<td></td>
</tr>
<tr>
<td><strong>Combustible Liquids</strong></td>
<td>Class II</td>
<td>Greater than or equal to 100° F and less than 140° F</td>
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<tr>
<td></td>
<td>Class III-A</td>
<td>Greater than or equal to 140° F and less than 200° F</td>
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<tr>
<td></td>
<td>Class III-B</td>
<td>Greater than or equal to 200° F</td>
<td></td>
</tr>
</tbody>
</table>

Section 4: Hazard Class Abbreviations for the HMIS

*For Examples, refer to Appendix E of 2012 Seattle Fire Code

1. Explosives/Blasting Agents

   EX 1.1
   EX 1.2
   EX 1.3
   EX 1.4
   EX 1.5
   EX 1.6

2. Compressed Gases

   CFLG  Compressed Flammable Gas  (Acetylene, CO, Ethane, LPG)
   COxG  Compressed Oxidizing Gas  (Oxygen, Ozone, Chlorine)
   CCG  Compressed Corrosive Gas  (Ammonia, Fluorine)
   CHTG  Compressed Highly Toxic Gas  (Arsine, Cyanogen)
   CTxG  Compressed Toxic Gas  (Chlorine, Phosgene)
   CIG  Compressed Inert Gas  (Argon, Helium, Nitrogen)
   CPy G  Compressed Pyrophoric Gas  (Diborane, Phosphine)
   CUG  Compressed Unstable Gas  (Butadiene, Ethylene Oxide)

3. Flammable/Combustible Liquids

   a. Flammable Liquids

      FL 1A  Class 1-A Flammable Liquid  (Acetylide, Ethyl Ether)
      FL 1B  Class 1-B Flammable Liquid  (Gasoline, MEK, Laquer Thinner)
b. **Combustible Liquids**

- C 2  Class 2 Combustible Liquid (Fuel Oil, Naptha)
- C 3A Class 3A Combustible Liquid (Some Lubricating Oils)
- C 3B Class 3B Combustible Liquid (Waste Oil, Motor Oil, Mineral Oil)

4. **Flammable Solids**

- FLS  Cellulose Nitrate, Magnesium, Sulfur

5. **Combustible Dusts/ Powders**

- CDUST  Wood Sawdust, Flour, Coal

6. **Combustible Fibers**

- CFIB  Combustible Fiber

7. **Oxidizers  Gases, Liquids and Solids**

- OXY4  Class 4 Oxidizer
- OXY3  Class 3 Oxidizer
- OXY2  Class 2 Oxidizer
- OXY1  Class 1 Oxidizer

8. **Organic Peroxides Liquids, Pastes, Solids**

- ORGU  Unclassified Organic Peroxide
- ORG5  Class 5 Organic Peroxide
- ORG4  Class 4 Organic Peroxide
- ORG3  Class 3 Organic Peroxide
- ORG2  Class 2 Organic Peroxide
- ORG1  Class 1 Organic Peroxide

9. **Pyrophoric Materials Gases, Liquids, Solids**

- PYRO

10. **Unstable Reactive Materials**

- UR4  Class 4 Unstable
- UR3  Class 3 Unstable
- UR2  Class 2 Unstable
- UR1  Class 1 Unstable

11. **Water Reactive Materials**
12. Cryogenic Fluids

- Flammable, Oxidizing, Corrosive, Inert, Highly toxic

CRY

Cryogenic Fluids

MATERIALS THAT POSE A HEALTH HAZARD

13. Highly Toxic Materials

- Gases, Liquids, Solids

HTM

Highly Toxic Materials

14. Toxic Materials

- Gases, Liquids, Solids

TOX

15. Corrosives

- Acids, Bases, Other

COR