



# FIRE CONSTRUCTION PERMIT SUBMITTAL CHECKLIST

*SERVING THE CITIES OF LAKE STEVENS, MONROE AND SULTAN*

## HAZARDOUS MATERIALS

### PROJECT INFORMATION

Site address:	Associated Permits:
Project Name / Tenant:	Property Owner:

## Electronic file standards

File naming standard: Electronic plans and documents shall be named as specified in bold type under “permitting requirements”. For example, the seating plan must be named “Seating Plan”.

Acceptable file types: Plans, calculations, specifications and supporting documents shall be uploaded as a PDF file.

Document Orientation: All plans must be uploaded in “Landscape” format in the horizontal position. All other documents can be in “Portrait” format.

### CODE EDITIONS

- 2021 Washington State Fire and Building Code and as applicable - Lake Stevens Municipal Code 14.84, Monroe Municipal code 15.04.110 and Sultan Municipal Code 15.05.

### PERMITTING REQUIREMENTS

A Fire Construction Permit is required to Install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a storage facility or other area where the hazardous materials in use or storage where required by Section 105.6.12 of the 2021 Washington State Fire Code and local code amendments. **The following information is required at time of application for the Fire Construction Permit.**

- ❑ Completed Fire Construction permit submittal application
- ❑ Completed “Hazardous Materials – submittal checklist”
- ❑ Completed Hazardous Materials Inventory Statement – Reference 2021 WSFC H101-104
- ❑ Completed Hazardous Materials Management Plan – Reference 2021 WSFC H101-104
  
- ❑ If required by WISHA, provide a copy of the Emergency Action Plan or an Emergency Response Plan
  
- ❑ Completed Plans
- ❑ Cut sheets for all valves, piping, appurtenances, tanks, etc
- ❑ Provide SDS sheets for all hazardous materials

## PLANS

The following is a list of information required on all plan submittals for review of a “Hazardous materials” permit application. The plan shall be drawn to 1/8”=1’-0” minimum scale. The applicant is required to submit all of this information so an accurate and timely review may be done:

- ❑ **Site Plan requirements:**
  - Identify occupancy classification
  - Access to each storage and use area
  - Location of emergency equipment
  - Location where liaison will meet emergency responders
  - Facility evacuation meeting point locations
  - The general purpose of other areas within the building
  - Location of all aboveground and under-ground tanks and their appurtenances including, but not limited to, sumps, vaults, below grade treatment systems and piping. Indicate size of tanks
  - Show the hazard classes in each area
  - Location of all control areas and Group H occupancies
  - Identify emergency exits and door hardware types
  - Identify the location of the building, occupancy
  - Identify locations of hydrants
  - Identify fire apparatus access roadways
  - Identify Automatic Fire Extinguishment system location and access
  - Identify Knox Box location
  - Identify locations of NFPA 704 placarding requirements
  - Identify locations of “NO SMOKING” signs on all facility doors
  
- ❑ **Floor Plan requirements:**
  - Identify all walls, doors, ceiling heights, floor material type

- Identify required ventilation and associated controls, location of ventilation emergency shutoff (if required)
- Identify required gas detection systems
- Identify any integration of ventilation/gas detection systems with the fire alarm panel
- Identify limit control systems for liquid level, temperature and pressure
- Identify emergency alarm systems and supervision integration into the fire alarm
- Identify monitoring and supervisory alarm systems
- Identify manually activated shutdown controls required for compressed gas systems conveying pyrophoric gases
- Identify exit signs
- Identify all emergency lighting
- Identify all spill control and secondary containment types
- Identify the monitoring method provided to detect hazardous materials in the secondary containment system
- Identify locations and means of storing hazardous materials
- Identify all processes using hazardous materials and associated equipment
- Indicate floor sealing method
- Show location of spill mitigation equipment
- Identify fire sprinkler rating and density as shown on the sprinkler riser placard, Note- Indoor storage areas and storage buildings shall be equipped throughout with an automatic sprinkler system designed for not less than that required for an Ordinary Hazard Group 2 with a minimum design area of 3,000 square feet. IFC 5004.5
- Indicate areas where Class I, Division I or II wiring is required to be installed per NFPA 70
- Indicate all shelf storage and height above the floor level
- Indicate method of providing emergency standby power in accordance with Section 1203, for buildings where mechanical ventilation, treatment systems, temperature control, alarm, detection or other electrically operated systems are required.



# *Snohomish Regional Fire & Rescue*

*Division of Fire and Life Safety*

1163 Village Court, Monroe, WA 98272

(360) 805-0338 Office

[FireMarshal@SRFR.org](mailto:FireMarshal@SRFR.org)

## **HAZARDOUS MATERIALS INVENTORY STATEMENT**

### COMPLETING THE HAZARDOUS MATERIALS INVENTORY STATEMENT

The Hazardous Materials Inventory Statement (HMIS) documents the information required by Snohomish Regional Fire & Rescue for determining the applicable International Fire Code requirements.

Document hazardous materials that are stored or used indoors (each control area) and outdoors at a given location on a separate HMIS. For example, if a business stores permitable quantities of a corrosive liquefied gas outdoors and flammable liquids indoors, the gases stored outdoors will be documented on one HMIS. A second HMIS will be prepared for the indoor storage by control area.

#### Control Areas

When preparing the HMIS, report building control areas on separate forms. Examples of control areas are Outside control area; fire rated, exhausted battery, or gas cylinder room; fire areas separated by fire walls, fire barriers, and floor ceiling assemblies. 1<sup>st</sup> floor control area A; 1<sup>st</sup> floor control area B; 2<sup>nd</sup> floor control area; Outdoor control area; etc...

When completing the quantity field, state the largest maximum quantity that may be on site.

A hazardous material shall be reported when:

- The information is required to classify a building, occupancy or area in accordance with the 2015 International Fire Code and the 2015 International Building Code.
- The amount of hazardous material exceeds the permit quantities as specified in the 2015 International Fire Code; or
- The hazardous material has a Special Hazard or has a health, flammability or reactivity ranking of "4", "3", or "2" when classified in accordance with NFPA 704 and the 2018 Washington State Fire Code.

#### Introduction

The Hazardous Material Inventory Statement (HMIS) documents the information required by the Fire Department for determining the applicable WA Fire and Building Code requirements. Snohomish Regional Fire & Rescue uses the information to establish tactical planning priorities for particular businesses. This information is entered into the Fire Department's Computer Aided Dispatch and Data Management system so that firefighting personnel are aware of the hazardous materials at a given location.

#### Electronic Submission

This HMIS can be submitted to the Fire Department as an Excel spreadsheet using the attached forms to [FireMarshal@SRFR.org](mailto:FireMarshal@SRFR.org).

#### What should be included in the HMIS?

When preparing the HMIS, include containers that are marked with US Department of Transportation (DOT) hazard labels such as "Flammable Liquid," "Corrosive," "Explosive," "Organic Peroxide," and the like. Materials that have a NFPA 704 hazard rating of "4", "3", or "2" or have special hazard ratings like water reactive (W), corrosive (COR) or oxidizer (OXY) should be included. All compressed gas cylinders marked with a DOT hazard label should also be included on the HMIS. Buildings that store pesticides, fungicides or herbicides with a US Environmental Protection Agency warning label of "Danger" or "Warning" should be included. Buildings storing and using a hazardous material that exceed the values in Tables 105.6.8, 105.6.10, and 105.6.20 of the 2018 Washington State Fire Code. (See attachment)

#### What can be excluded from the HMIS?

Storage and use of less than 500 pounds of aerosols, Office supplies like copier toner or correction fluid. Cleaning products intended for consumer use. Solder and solder flux. Automotive batteries.

How are mixtures classified?

Mixtures of products or products that are sold by a particular name (ex.: Number 4 Cleaner) require a review of the Material Safety Data Sheet to determine which chemical constituents represent the greatest hazard.

Classifications of Commonly Stored and Used Hazardous Materials

Chemical	Conc. %	CAS No.	IFC Classification	Physical State	704 H	704 F	704 R	704 S/H
Calcium Hypochlorite	100	7778-54-3	Class 3 Oxidizer; Class 2 Unstable (Reactive); Corrosive	Solid	3	0	2	OXY COR
Trichloroisocyanuric Acid	100	87-90-1	Class 1 Oxidizer, Class 1 Unstable (Reactive); Toxic	Solid	3	0	1	OXY
Sodium Dichloroisocyanurate, dehydrate	100	51580-86-0	Class 1 Oxidizer, Class 1 Unstable (Reactive)	Solid	2	0	1	
Sodium Hydroxide Pellets	100	1310-73-2	Corrosive	Solid	3	0	0	COR
Potassium Hydroxide Pellets	100	1310-58-3	Corrosive, Toxic	Solid	3	0	0	COR
Chromium Trioxide	100	1332-82-0	Class 2 Oxidizer, Corrosive, Toxic	Solid	3	0	0	COR
Gasoline	100	8006-61-9	Flammable Liquid I-B, Irritant	Liquid	1	3	0	
Diesel Fuel	100	Mixture	Combustible Liquid II	Liquid	0	2	0	
Motor Oil	100	Mixture	Combustible Liquid IIIB	Liquid	0	1	0	
Isopropyl Alcohol	100	67-63-0	Flammable Liquid I-B	Liquid	1	3	0	
Hexane	100	110-54-3	Flammable Liquid I-B	Liquid	1	3	0	
Methyl Ethyl Ketone	100	78-93-3	Flammable Liquid I-B	Liquid	1	3	0	
Styrene Monomer	100	100-42-5	Flammable Liquid I-C, Class 2 Unstable (Reactive)	Liquid	2	3	2	
Hydrochloric Acid	15-37	7647-01-0	Corrosive	Liquid	3	0	0	COR
Sulfuric Acid	98	7664-93-9	Corrosive, Class 2 Water Reactive, Toxic	Liquid	3	0	2	W
Sulfuric Acid	12.7-50	7664-93-9	Corrosive, Class 1 Water Reactive, Toxic	Liquid	3	0	1	W
Sodium Hydroxide, aqueous	2-50	1310-73-2	Corrosive	Liquid	3	0	0	
Propane	100	74-98-6	Flammable Liquid Gas	Liq. Gas	0	4	0	
Acetylene	100	74-86-2	Flammable Compressed Gas	Com. Gas	0	4	2	
Oxygen, Compressed	100	7782-44-7	Oxidizer Compressed Gas	Com. Gas	0	0	0	
Oxygen, Liquefied	100	7782-44-7	Oxidizer Cryogenic Fluid	Cryogenic	3	0	0	
Nitrogen, Liquefied	100	7727-37-9	Inert Cryogenic Fluid	Cryogenic	3	0	0	
Nitrous Oxide	100	10024-97-2	Oxidizer Compressed Gas	Liquid Com. Gas	0	0	0	
Nitrogen, gas	100	93037-13-9	Inert Compressed Gas	Com. Gas	0	0	0	

**COMPLETING THE SITE PLAN WORKSHEET**

The site plan should be prepared on the attached form or approved electronic format.

The drawing should illustrate the basic layout and orientation of the building showing emergency exits, the general purpose of other areas within the building, the locations where hazardous materials are stored and used indoors and outdoors, and the location of the fire sprinkler intake connection. Access gate locations and points of Fire Department access such as doors should also be identified.

**Please complete the drawing using the following directions:**

1. Include all exterior and any significant interior walls. (i.e. Firewalls, separations between office space and warehouse).
2. Utilizing the symbols located on the bottom of the form include all pertinent information.
3. When drawing elevators and stairwells, please include what floors are serviced (B2 = Basement to 2<sup>nd</sup> Floor; or 1R = 1<sup>st</sup> floor to roof).
4. Identify where liaison will meet emergency responders.
5. Identify facility evacuation meeting point locations.
6. Identify locations of all hazardous materials control areas and the hazard classes in each area.
7. Identify the location of all above-ground and underground tanks including but not limited to, sumps, vaults, below-grade treatment systems and piping.





