



# FIRE CONSTRUCTION PERMIT SUBMITTAL CHECKLIST

SERVING THE CITIES OF LAKE STEVENS, MONROE AND SULTAN

## PLANT EXTRACTION SYSTEMS -New and existing buildings

NOTE – The City of Monroe prohibits Marijuana related uses in all zoning districts within the city limits.  
MMC 22.56.040

<b>PROJECT INFORMATION</b>	
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**

- 2018 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 or modify a **plant extraction system** required by Section 105.6.17 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 “Plant extraction system submittal checklist”
- Plans
- Manufacturers extraction system installation/operation manual
- Listing information for the extraction system being proposed. Required to be listed per UL 1389.
- A Technical report shall be prepared and submitted by a Washington State registered design professional. The report shall comply with the requirements of WSFC 3904.2.2.1.
- Provide specification sheets for all appliances used in the processing of plant extraction. Include electrical ratings of any that may be used in the flammable atmosphere area around the hazardous exhaust fume hood.

**ATTENTION - The applicant is responsible to verify Marijuana Processing is allowed within the City that is being applied for.**

## **PLANS**

The following is a list of information required on all plan submittals for review of a “plant extraction system” 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:

### **Floor plan requirements**

- Plant extraction utilizing flammable gases or flammable cryogenic fluids shall not be located in any building that contains a Group A, E, I or R occupancy.
- The use of flammable liquids and combustible liquids for liquid extraction shall be located within a hazardous exhaust fume hood rated for exhausting flammable vapors. Provide specification sheets and show on the plan.
- Show the flammable atmosphere area around the hazardous exhaust fume hood and the electrical rating of this area.
- Provide details of the required gas detection system required for extraction processes using flammable gases as solvents
  - Provide information showing compliance with section 3905 and section 916 of the WSFC.

## **Content of technical report and engineering analysis.**

All, but not limited to, the items listed below shall be included in the technical report.

1. Manufacturer information.
2. Preparer of record of the technical report.
3. Date of review and report revision history.
4. Signature page shall include:
  - 4.1 Author of the report;
  - 4.2 Date of report;
  - 4.3 Date and signature of registered design professional of record performing the design or peer review.
5. Model number of the item evaluated. If the equipment is provided with a serial number, the serial number shall be included for verification at the time of site inspection.
6. Methodology of the design review process used to determine minimum safety requirements. Methodology shall consider the basis of design and shall include a code analysis and code path to demonstrate the reason why specific codes or standards are applicable.
7. Equipment description. A list of every component and subassembly, such as fittings, hose, quick disconnects, gauges, site glasses, gaskets, valves, pumps, vessels, containers and switches, of the system or equipment, indicating the manufacturer, model number, material and solvent compatibility, maximum temperature and pressure limits. Manufacturer's data sheets shall be provided.
8. A general flow schematic or general process flow diagram (PFD) of the process. Post-processing or winterization shall be included in this diagram. Primary components of the process equipment shall be identified and match the equipment list required in item 7. Operating temperatures, pressures and solvent state of matter shall be identified in each primary step or component. A piping and instrumentation diagram (PID & P&ID) shall be provided.
9. Analysis of the vessel(s) if pressurized beyond standard atmospheric pressure. Analysis shall include purchased and fabricated components.
10. Structural analysis for the frame system supporting the equipment.
11. Process safety analysis of the extraction system, from the introduction of raw product to the end of the extraction process.
12. Comprehensive process hazard analysis considering failure modes and points of failure throughout the process. This portion of the review should include review of emergency procedure information provided by the manufacturer of the equipment or process and not that of the facility, building or room.
13. Review of the assembly instructions, operational and maintenance manuals provided by the manufacturer.

14. Report shall include findings and observations of the analysis.
15. List of references used in the analysis.

### **Site inspection.**

The engineer of record of the equipment shall inspect the site of the extraction process once the equipment has been installed for compliance with the technical report and building analysis. The engineer of record or approved professional shall provide a report of findings and observations of the site inspection to the fire code official prior to the approval of the extraction process. The field inspection report shall include the serial number of the equipment used in the process and shall confirm that the equipment installed is the same model and type of equipment identified in the technical report.