



## Electronic Plan Standards

### File Naming Standards:

Electronic plans and documents shall be named as specified in the City of Vancouver [ePLANS](#) system:

<https://www.cityofvancouver.us/business/permits-licenses-and-inspections/eplans/>



### Acceptable File Types:

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

### Plan Sheet Standards:

All plans shall be drawn to scale, as identified in the checklist, and each sheet shall state the scale and show a measurable scale on the page for measurement calibrations.

### Document Orientation:

All plans must be uploaded in "Landscape" format in the horizontal position with a north indicator. All other documents can be in "Portrait" format.

### Stamped:

Where documentation contains a code analysis or engineering calculations, such documents shall be stamped by the design professional.

## Minimum Submittal Checklist for Upload to ePLANS

- Completed Fire Installation Permit Application – Cutting and Welding (this document) Check all *Permit Conditions* checkboxes that are applicable to your project
- Supporting documents listed below (See *Document Details* below)
- Site plans and floor plans (see *Plan Details* below)

## Document Details

HMMP Guide: <https://www.cityofvancouver.us/wp-content/uploads/2023/10/Hazardous-Materials-Management-Plan.pdf>

See *Vancouver Fire Department HMMP Guide* for direction on completing required HMMP and/or supplemental forms

- Completed Facility Information Forms, Hazardous Materials Inventory Statement (HMIS), Site Map, and Storage Plan (see HMMP Guide linked above for direction on these forms). A spreadsheet template for HMIS is available here: [https://www.cityofvancouver.us/wp-content/uploads/2023/10/HMIS\\_Template\\_VFD.xlsm](https://www.cityofvancouver.us/wp-content/uploads/2023/10/HMIS_Template_VFD.xlsm)
- Listing documents for all proposed equipment to be used for cutting/welding operations

## Plan Details

The following is a list of information required on all plan submittals for review of a cutting and welding permit. The plan shall be drawn to 1/8"= 1'-0" minimum scale. The applicant is required to submit all applicable information so an accurate and timely review may be done:

### General:

- Site plan to include a north arrow, a measurable scale for calibration purposes, fire hydrants, emergency access lanes and doors, vehicle gates, Fire Department Connection, points of assembly/accountability for evacuees, setbacks from property lines, the public way and unrelated combustible exposures, electrical room, gas meters, sprinkler riser, fire alarm control panel, Knox Box, roof access (if provided), and any outdoor hazardous storage.
- Interior plans showing all access points, hazardous materials storage rooms and/or cabinets, hazardous equipment or operations areas, proposed area dedicated to cutting and welding.
- Fire-resistance rated construction
- Electric or gas welding or cutting equipment
- Spray application of molten metals equipment
- Materials to be stored, used or trans-loaded/transported

- Portable fire extinguisher locations per WSFC 906
- Areas of open flames and sparks, hot surfaces, or other ignition sources
- Signage locations
- Presence or lack of fire sprinkler protection

## Permit Conditions

The following is a list of WSFC requirements related to cutting and welding operations. Use this form to confirm that all applicable requirements are met. Non-applicable requirements can be left blank.

### Gas Welding and Cutting:

- Devices or attachments mixing air or oxygen with combustible gases prior to consumption, except at the burner or in a standard torch or blow pipe, shall not be allowed unless approved (WSFC 3505.1).
- Storage, handling and use of compressed gas cylinders, containers and tanks shall be in accordance with WSFC Chapter 53 (WSFC 3505.2).
- The storage or use of a single cylinder of oxygen and a single cylinder of fuel gas located on a cart shall be allowed without requiring the cylinders to be separated when the cylinders are connected to regulators, ready for service, equipped with apparatus designed for cutting or welding and all of the following (WSFC 3505.2.1):
  1. Carts shall be kept away from the cutting or welding operation to prevent such cylinders or generators from being heated by radiation from heated materials, sparks or slag, or misdirection of the torch flame or fire-resistant shields shall be provided.
  2. Cylinders shall be secured to the cart to resist movement.
  3. Carts shall be in accordance with WSFC 5003.10.3.
  4. Cylinder valves not having fixed hand wheels shall have keys, handles or nonadjustable wrenches on valve stems while the cylinders are in service.
  5. Cylinder valve outlet connections shall conform to the requirements of CGA V-1.
  6. Cylinder valves shall be closed when work is finished.
  7. Cylinder valves shall be closed before moving the cart.
- Incompatible materials in storage and storage of materials that are incompatible with materials in use shall be separated where the stored materials are in containers having a capacity of more than 5 pounds (2 kg), 0.5 gallon (2 L) or any amount of compressed gases. Separation shall be accomplished by (WSFC 5003.9.8):
  1. Segregating incompatible materials in storage by a distance of not less than 20 feet (6096 mm).
  2. Isolating incompatible materials in storage by a noncombustible partition extending not less than 18 inches (457 mm) above and to the sides of the stored material.
  3. Storing liquid and solid materials in hazardous material storage cabinets.
  4. Storing compressed gases in gas cabinets or exhausted enclosures in accordance with WSFC Sections 5003.8.5 and 5003.8.6. Materials that are incompatible shall not be stored within the same cabinet or exhausted enclosure.
- Cylinders, valves, regulators, hose and other apparatus and fittings for oxygen shall be kept free from oil or grease. Oxygen cylinders, apparatus and fittings shall not be handled with oily hands, oily gloves, or greasy tools or equipment (WSFC 3505.3).
- Acetylene gas shall not be piped except in approved cylinder manifolds and cylinder manifold connections or utilized at a pressure exceeding 15 pounds per square inch gauge (103 kPa) unless dissolved in a suitable solvent in cylinders manufactured in accordance with DOTn 49 CFR Part 178. Acetylene gas shall not be brought in contact with unalloyed copper, except in a blowpipe or torch (WSFC 3505.4).
- Oxygen and fuel-gas cylinders and acetylene generators shall be located away from the hot work area to prevent such cylinders or generators from being heated by radiation from heated materials, sparks or slag, or misdirection of the torch flame (WSFC 3505.5).

- The torch valve shall be closed and the gas supply to the torch completely shut off when gas welding or cutting operations are discontinued for a period of 1 hour or more (WSFC 3505.6).
- Welding or cutting work shall not be held or supported on compressed gas cylinders or containers (WSFC 3505.7).
- Tests for leaks in piping systems and equipment shall be made with soapy water. The use of flames shall be prohibited for leak testing (WSFC 3505.8).

**NOTE:** *This is not intended to be an all-inclusive list. The WSFC requirements listed are intended to ensure that we have adequate information to begin a review of the application. Additional information may be required.*

**I understand that all applicable codes apply and that other regulatory codes may also apply. Errors and/or omissions on the plans and corrections from field inspections are the responsibility of the owner/contractor. All work is subject to compliance with City of Vancouver ordinances and laws of the State of Washington.**

APPLICANT NAME: \_\_\_\_\_ APPLICATION DATE: \_\_\_\_\_

APPLICANT SIGNATURE: \_\_\_\_\_