



Operational Permit Application

Wood Products



www.cityofvancouver.us/departments/fire-department

International Fire Code as adopted by VMC 16.04 (Washington State Fire Code)

Permitting Requirements

An **operational permit** is required to store chips, hogged material, lumber or any processed wood or forest products in excess of 200 cubic feet (WSFC 105.5.52).

This application is intended for the storage of wood products. A separate permit is also required for the storage or processing of lumber exceeding 100,000 board feet (8,333 cubic feet). See the *Lumber Yard Woodworking* permit application for more information.

Project Information

Site Address		Owner Name	
Other			

Applicant Information

Company Name		Address		
Contact Name				
Office Phone		Cellular		Email

Contractor

Company Name		Address		
Contact Name				
Office Phone		Cellular		Email
Installation by:	<input type="checkbox"/> Contractor <input type="checkbox"/> Owner <input type="checkbox"/> Tenant	Type:	<input type="checkbox"/> Storage and Processing <input type="checkbox"/> Exceed 100,000 board feet	<input type="checkbox"/> Storage Only <input type="checkbox"/> Exceed 200 ft ³
Related Permits:	FRI _____	CMI _____	DEF _____	MPE _____

Description of Work

Electronic Plan Standards

File Naming Standards:

Electronic plans and documents shall be named as specified in the City of Vancouver [ePLANS](https://www.cityofvancouver.us/business/permits-licenses-and-inspections/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 – Wood Products (this document) Check all *Permit Conditions* checkboxes that are applicable to your project
- Completed Materials Management Plan (HMMP) documents and supplemental documents (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

Does your business...	If YES, please complete these pages of the HMMP (linked above):	
Conduct operations, such as woodworking, that produce combustible dust?	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> Facility Information Forms <input type="checkbox"/> HMIS <input type="checkbox"/> Site Map & Storage Plan (Combustible Dust requires a separate permit application)

In addition to the HMMP forms listed above, submit the following documents:

- High-Piled or Rack Storage Supplemental Application (if applicable)
- Fire Prevention Plan including the following information (WSFC 2810.3):
 1. Frequency of walk-through inspections to verify compliance with the plan.
 2. Hot work permit program in accordance with Chapter 35.
 3. Preventative maintenance program for equipment associated with pallet activities.
 4. Inspection, testing and maintenance of fire protection systems in accordance with Chapter 9.
- Where outdoor piles or stackable products are stored beyond the outlined in WSFC 2808.3, a Fire Protection Plan including the following must be completed to include the following:
 - Contact information for after-hours response by facility personnel.
 - Storage yard areas and material-handling equipment selection, pile design and arrangement shall be based on sound safety and fire protection principles.

- Fire apparatus access roads around the piles or stacks and access roads to the top of piles, if applicable, shall be established, identified and maintained.
- The potential for spontaneous heating shall be evaluated and provisions made to control the temperature of the piles. Methods for monitoring the internal temperature of the pile shall be provided.
- Routine yard inspections shall be conducted by trained personnel.
- A means for early fire detection and reporting to the public fire department shall be provided.
- Facilities and equipment needed by the fire department for fire extinguishment shall be provided, including a water supply in compliance with Section 507 and heavy equipment necessary to move material.
- A de-inventory plan shall be utilized to remove alternating piles or stacked products in a manner to increase the separation distances between the remaining piles or stacks.
- The increased pile size shall be based on the capabilities of the installed fire protection systems and features.
- A controlled burn area shall be provided on-site for smoldering or damaged product.
- Security management plan based on a facility security risk assessment (WSFC 2810.5).
- Emergency plan for monitoring, controlling and extinguishing spot fires (WSFC 2807.5, 2808.10).
- For log storage areas, provide a narrative on how log and pole piles will be stabilized (WSFC 2806.3).

Plan Details

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

- 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, facility evacuation meeting point locations, sprinkler riser(s), standpipes, fire alarm control panel, Knox Box, and roof access (if provided).
- Locations and dimensions (length, width, height and cubic feet) of wood product storage piles. Indicate whether piles are of stackable products.
- Locations of pallet storage
- Designated smoking areas
- Portable fire extinguisher types, sizes, and locations
- Clearance to property line and surrounding buildings
- Equipment protected with a dust collection system (if applicable)

Permit Conditions

The following is a list of WSFC Chapter 28 requirements related to wood product storage. Use this form to confirm that all applicable requirements are met. Non-applicable requirements can be left blank.

General:

- Open yards required by the International Building Code shall be maintained around structures (WSFC 2803.1).
- Means for transmitting alarms to the fire department shall be provided in timber and lumber production mills and plywood and veneer mills (WSFC 2804.2).
- A manual fire alarm system complying with WSFC 907.2 shall be installed in areas of timber and lumber production mills and for plywood and veneer mills that contain product dryers (WSFC 2804.2.1).
Exception: Where dryers or other sources of ignition are protected by a supervised automatic sprinkler system complying with WSFC 903.
- Portable fire extinguishers or standpipes and hose supplied from an approved water system shall be provided within a 50-foot distance of travel from any machine producing shavings or sawdust. Portable fire extinguishers shall be provided in accordance with Section 906 for extra-high hazards (WSFC 2804.3).
- An automatic sprinkler system shall be installed in accordance with WSFC 903.3.1.1 (WSFC 2804.4).

Log Storage Areas:

- Cold decks shall not exceed 500 feet in length, 300 feet in width and 20 feet in height. Cold decks shall be separated from adjacent cold decks or other exposures by not less than 100 feet (WSFC 2806.2):
Exception: The size of cold decks shall be determined by the fire code official where the decks are protected by special fire protection including, but not limited to, additional fire flow, portable turrets and deluge sets, and hydrant hose houses equipped with approved fire-fighting equipment capable of reaching the entire storage area in accordance with WSFC Chapter 9.
- Log and pole piles shall be stabilized by approved means (WSFC 2806.3).

Storage of Wood Chips and Hogged Materials Associated with Timber and Lumber Production Facilities:

- Piles shall not exceed 60 feet in height, 300 feet in width and 500 feet in length. Piles shall be separated from adjacent piles or other exposures by approved fire apparatus access roads (WSFC 2807.2).
Exception: The City of Vancouver is authorized to allow the pile size to be increased where additional fire protection is provided in accordance with WSFC Chapter 9. The increase shall be based on the capabilities of the system installed.
- Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible or enclosed conveyor systems shall be equipped with an approved automatic sprinkler system (WSFC 2807.3).
- Approved material-handling equipment shall be readily available for moving wood chips and hogged material (WSFC 2807.4).
- The owner or operator shall develop a plan for monitoring, controlling and extinguishing spot fires. The plan shall be submitted to the City of Vancouver for review and approval (WSFC 2807.5).

Storage and Processing of Wood Chips, Hogged Materials, Fines, Compost, Solid Biomass Feedstock and Raw Product Associated with Yard Waste, Agro-Industrial and Recycling Facilities:

This section applies only to facilities with processing operations. If the facility is for storage only, leave this section blank.

- Storage sites shall be level and on solid ground, elevated soil lifts or other all-weather surface. Sites shall be thoroughly cleaned before transferring wood products to the site (WSFC 2808.2).
- Piles shall not exceed 25 feet in height, 150 feet in width and 250 feet in length. Stackable products shall not be stacked in excess of 25 feet in height, 80 feet in width and 250 feet in length (WSFC 2808.3).
- Piles or stackable products are permitted to be increased beyond the dimensions given above provided that a written fire protection plan is approved by the fire code official. The fire protection plan shall include, but not be limited to, the following (WSFC 2808.3.1):
 1. Contact information for after-hours response by facility personnel.
 2. Storage yard areas and material-handling equipment selection, pile design and arrangement shall be based on sound safety and fire protection principles.
 3. Fire apparatus access roads around the piles or stacks and access roads to the top of piles, if applicable, shall be established, identified and maintained.
 4. The potential for spontaneous heating shall be evaluated and provisions made to control the temperature of the piles. Methods for monitoring the internal temperature of the pile shall be provided.
 5. Routine yard inspections shall be conducted by trained personnel.
 6. A means for early fire detection and reporting to the public fire department shall be provided.
 7. Facilities and equipment needed by the fire department for fire extinguishment shall be provided, including a water supply in compliance with WSFC Section 507 and heavy equipment necessary to move material.
 8. A de-inventory plan shall be utilized to remove alternating piles or stacked products in a manner to increase the separation distances between the remaining piles or stacks.
 9. The increased pile size shall be based on the capabilities of the installed fire protection systems and features.
 10. A controlled burn area shall be provided on-site for smoldering or damaged product.

- Piles or stacked product shall be separated from buildings, property lines and adjacent piles or stacks by a distance of not less than one and one-half times the height of the pile or stack. The distance between rows shall be a minimum of 30 feet. Approved fire apparatus access roads shall be provided within the separation space in accordance with WSFC Section 503 (WSFC 2808.4).
- The storage, accumulation and handling of combustible materials and control of vegetation shall comply with WSFC Chapter 3 (WSFC 2808.5).
- Static piles shall be monitored by an approved means to measure temperatures within the static piles. Internal pile temperatures shall be monitored and recorded weekly. Such records shall be maintained. An operational plan indicating procedures and schedules for the inspection, monitoring and restricting of excessive internal temperatures in static piles shall be submitted to the code official for review and approval (WSFC 2808.6).
- Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible conveyor systems and enclosed conveyor systems shall be equipped with an approved automatic sprinkler system (WSFC 2808.7).
- Portable fire extinguishers complying with WSFC Section 906 and with a minimum rating of 4-A:60-B:C shall be provided on all vehicles and equipment operating on piles and at all processing equipment (WSFC 2808.8). Approved material-handling equipment shall be available for moving wood chips, hogged material, wood fines and raw product during fire-fighting operations (WSFC 2808.9).
- The owner or operator shall develop a plan for monitoring, controlling and extinguishing spot fires and submit the plan to the code official for review and approval (WSFC 2808.10).

Exterior Storage of Finished Lumber and Solid Biofuel Products:

- Exterior storage shall be arranged to form stable piles with a maximum height of 20 feet. Piles shall not exceed 150,000 cubic feet in volume (WSFC 2809.2).
- Fire apparatus access roads in accordance with WSFC 503 shall be located so that a maximum grid system unit of 50 feet by 150 feet is established (WSFC 2809.3).
- Permanent storage areas shall be surrounded with an approved fence. Fences shall be not less than 6 feet in height (WSFC 2809.4).

Exceptions:

1. Lumber piles inside of buildings and production mills for lumber, plywood and veneer.
 2. Solid biofuel piles inside of buildings and agro-industrial processing facilities for solid biomass feedstock.
- An approved hydrant and hose system or portable fire-extinguishing equipment suitable for the fire hazard involved shall be provided for open storage yards. Hydrant and hose systems shall be installed in accordance with NFPA 24. Portable fire extinguishers complying with WSFC 906 shall be located so that the distance of travel from the nearest unit does not exceed 75 feet (WSFC 2809.5).

Outdoor Storage of Pallets at Pallet Manufacturing and Recycling Facilities:

- Employees must be prepared and trained for an approved fire safety and evacuation plan in accordance with Chapter 4 (WSFC 2810.4).
- Stacks of pallets shall not be stored within 0.75 times the stack height or 8 feet of the property line, whichever is greater, or shall comply with Section 2810.11 (WSFC 2810.6).
- Stacks of pallets shall not be stored within 0.75 times the stack height of any important building on site, or shall comply with Section 2810.11 (WSFC 2810.7).
- Pallet stacks shall not exceed 20 feet in height (WSFC 2810.8).
- Fire-flow requirements for the site shall be met (2810.9).

- Where approved, pallet stacks are permitted to be located closer to a property line or structure than as required by Section 2810.6 and 2810.7 where additional fire protection is provided, including, but not limited to, the following:
 1. The storage yard areas and materials-handling equipment selection, design, and arrangement are based on an approved risk assessment.
 2. Automatic fire detection that transmits an alarm to a supervising station in accordance with NFPA 72.
 3. Fire apparatus access roads around all storage areas.

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: _____