

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 Operational Permit Application – Waste Handling (this document) Check all *Permit Conditions* checkboxes that are applicable to your project.
- Completed Hazardous 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):	
Have on site (for any purpose) at any one time, hazardous materials, including hazardous waste, at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs)?	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> All HMMP documents
Have on site (for any purpose) at any one time, hazardous materials, including hazardous waste, requiring a permit in accordance with Section 105.5 of the International Fire Code?	<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 <input type="checkbox"/> Flammable and Combustible Liquids Permit Application (where required) <input type="checkbox"/> Hazardous Materials Permit Application (where required)

Conduct operations, such as woodworking or other handling, 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 <input type="checkbox"/> Combustible Dust Permit Application
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If a full HMMP is required, it must contain the following minimum elements:

- Facility Information Form: Business Activities Declaration page
- Facility Information Form: Business Owner/Operator Identification page
- Hazardous Materials Inventory Statement (HMIS)
- HMIS Hazard Class Summary Report
- Emergency Response/Contingency Plan
- Employee Training Plan
- Recordkeeping
- Facility Site Plan & Storage Map
- Required supplemental forms

In addition to the HMMP documents listed above, provide the following documents:

- The owner or owner's authorized representative shall submit a fire prevention plan for review and approval by the City of Vancouver that includes all of the following (WSFC 2810.3):
 1. Frequency of walk-through inspections to verify compliance with the plan
 2. Hot work permit program in accordance with WSFC Chapter 35
 3. Preventative maintenance program for equipment associated with pallet activities
 4. Inspection, testing and maintenance of fire protection systems in accordance with WSFC Chapter 9
- The owner or owner's authorized representative shall prepare and train employees in an approved fire safety and evacuation plan in accordance with WSFC Chapter 4 (WSFC 2810.4)
- The owner or owner's authorized representative shall prepare a security management plan based on a security risk assessment and shall make the plan and assessment available to the City of Vancouver upon request (WSFC 2810.5)
- Plan for monitoring, controlling and extinguishing spot fires in accordance with WSFC 2808.10.

Plan Details

The following is a list of information required on all plan submittals for review of a waste handling 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 completed:

General:

- Each site shall maintain a current site plan. The site plan shall be submitted to the City of Vancouver for approval and contain all of the following (WSFC 2810.2):
 1. Lot lines
 2. Utilities
 3. Size, location and type of construction of the buildings on the property
 4. Presence of the fire protection systems
 5. Water supply sources for fire-fighting purposes
 6. Location of hazardous material storage areas
 7. Location of pallet storage
 8. Equipment protected with a dust collection system
 9. Fire apparatus access roads

10. Designated smoking areas

11. Location of fire alarm control panels

- Site plan to also include a north arrow, a measurable scale for calibration purposes, facility evacuation meeting point locations, vehicle gates, and Knox Box location(s)
- Interior plans showing all access points, hazardous materials storage rooms and/or cabinets, and hazardous equipment or operations areas.
- Fire-resistance rated construction.
- Type and volume of mechanical ventilation.
- Portable fire extinguisher types, sizes and locations per WSFC Section 906.
- Areas of open flames and sparks, hot surfaces, or other ignition sources.

Permit Conditions

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

Outside Storage of Pallets at Pallet Manufacturing and Recycling Facilities:

- 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 WSFC 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 WSFC 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 determined by the City of Vancouver (WSFC 2810.9).
- Portable fire extinguishers shall be selected, installed and maintained in accordance with WSFC Section 906 (WSFC 2810.10).
- Where approved by the City of Vancouver, pallet stacks are permitted to be located closer to a property line or structure than as required by WSFC Sections 2810.6 and 2810.7 where additional fire protection is provided, including, but not limited to, the following (WSFC 2810.11):
 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

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:

- 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 City of Vancouver 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 City of Vancouver for review and approval (WSFC 2808.10).

General Storage:

- An operational permit is required to store in any building or on any premises in excess of 2,500 cubic feet gross volume of combustible empty packing cases, boxes, barrels or similar containers, combustible pallets, rubber tires, rubber, cork or similar combustible material (WSFC 315.2).
- Storage of materials in buildings shall be orderly and stacks shall be stable. Storage of combustible materials shall be separated from heaters or heating devices by distance or shielding so that ignition cannot occur (WSFC 315.3).
- Storage shall be maintained 2 feet or more below the ceiling in non-sprinklered areas of buildings or not less than 18 inches below sprinkler head deflectors in sprinklered areas of buildings (WSFC 315.3.1).

Exceptions:

1. The 2-foot ceiling clearance is not required for storage along walls in non-sprinklered areas of buildings.
 2. The 18-inch (457 mm) ceiling clearance is not required for storage along walls in areas of buildings equipped with an automatic sprinkler system.
- Combustible materials shall not be stored in exits or enclosures for stairways and ramps. Combustible materials in the means of egress during construction, demolition, remodeling, or alterations shall comply with WSFC 3312.3 (WSFC 315.3.2).
 - Combustible material shall not be stored in boiler rooms, mechanical rooms, elevator machine rooms, electrical equipment rooms or in fire command centers (WSFC 315.3.3).

- Attic, under-floor and concealed spaces used for storage of combustible materials shall be protected on the storage side as required for 1-hour fire-resistance-rated construction. Openings shall be protected by assemblies that are self-closing and are of noncombustible construction or solid wood core not less than 1.75 inches in thickness. Storage shall not be placed on exposed joists (WSFC 315.3.4).

Exceptions:

1. Areas protected by approved automatic sprinkler systems.
2. Group R-3 and Group U occupancies.

- Outside storage of combustible materials shall not be located within 10 feet of a lot line.

Exceptions:

1. The separation distance is allowed to be reduced to 3 feet for storage not exceeding 6 feet in height.
2. The separation distance is allowed to be reduced where the City of Vancouver determines that hazard to the adjoining property does not exist.

- Where buildings are protected by an automatic sprinkler system, the outdoor storage, display and handling of combustible materials under eaves, canopies or other projections or overhangs are prohibited except where automatic sprinklers are installed under such eaves, canopies or other projections or overhangs (WSFC 315.4.1).
- Storage in the open shall not exceed 20 feet in height (WSFC 315.4.2).
- Storage is prohibited in plenums. Abandoned material in plenums shall be deemed to be storage and shall be removed. Where located in plenums, the portion of abandoned cables that are able to be accessed without causing damage, or requiring demolition to the building shall be identified for future use with a tag or shall be deemed storage and shall be removed (WSFC 315.6).
- Where buildings are equipped throughout with an automatic sprinkler system, the outdoor storage of pallets under eaves, canopies or other projections or overhangs are prohibited except where automatic sprinklers are installed under such eaves, canopies or other projections or overhangs (WSFC 315.7.1).
- Pallet storage shall not be located within 10 feet of a lot line (WSFC 315.7.2).
- Pallet storage shall not exceed 20 feet in height (WSFC 315.7.3).
- Pallet stacks shall be arranged to form stable piles. Individual pallet piles shall cover an area not greater than 400 square feet (WSFC 315.7.4)
- Pallets shall be all wood, with slatted or solid top or bottom, with metal fasteners, or shall be plastic or composite pallets, listed and labeled in accordance with UL 2335 or FM 4996. Plastic pallets shall be both solid and gridded deck, independent of the pallet manufacturing process, type of resin used in fabrication or geometry of the pallet (WSFC 315.7.5).
- Pallet stacks and piles shall be separated from buildings in accordance with Table 315.7.6(1) for wood pallets and Table 315.7.6(2) for plastic pallets (WSFC 315.7.6.1).

**TABLE 315.7.6(1)
SEPARATION DISTANCE BETWEEN WOOD PALLET STACKS AND BUILDINGS**

WALL CONSTRUCTION	OPENING TYPE	WOOD PALLET SEPARATION DISTANCE (feet)		
		≤ 50 Pallets	51 to 200 Pallets	> 200 Pallets
Masonry	None	2	2	2
Masonry	Fire-rated glazing with open sprinklers	2	5	20
Masonry	Fire-rated glazing	5	10	20
Masonry	Plain glass with open sprinklers	5	10	20
Noncombustible	None	5	10	20
Wood with open sprinklers	—	5	10	20
Wood	None	15	30	90
Any	Plain glass	15	30	90

For SI: 1 foot = 304.8 mm.

**TABLE 315.7.6(2)
SEPARATION DISTANCE BETWEEN PLASTIC PALLET STACKS AND BUILDINGS**

WALL CONSTRUCTION	OPENING TYPE	PLASTIC PALLET SEPARATION DISTANCE (feet)		
		≤ 50 Pallets	51 to 200 Pallets	> 200 Pallets
Masonry	None	2	2	2
Masonry	Fire-rated glazing with open sprinklers	10	20	50
Masonry	Fire-rated glazing	15	40	100
Masonry	Plain glass with open sprinklers	15	40	100
Noncombustible	None	15	40	100
Wood with open sprinklers	—	15	40	100
Wood	None	30	80	150
Any	Plain glass	30	80	150

For SI: 1 foot = 304.8 mm.

- Pallets shall be separated from other pallet piles and other storage in accordance with Table 315.7.6(3) for wood pallets and Table 315.7.6(4) for plastic pallets (WSFC 315.7.6.2).

**TABLE 315.7.6(3)
SEPARATION FROM OTHER PALLET PILES AND ON-SITE STORAGE (WOOD PALLET)**

	WOOD PALLET SEPARATION DISTANCE (feet)		
	≤ 50 Pallets	51 to 200 Pallets	> 200 Pallets
Between pallet piles	7.5	15	45
Other on-site storage	7.5	15	45

For SI: 1 foot = 304.8 mm.

**TABLE 315.7.6(4)
SEPARATION FROM OTHER PALLET PILES AND ON-SITE STORAGE (PLASTIC PALLET)**

	PLASTIC PALLET SEPARATION DISTANCE (feet)		
	≤ 50 Pallets	51 to 200 Pallets	> 200 Pallets
Between pallet piles	15	40	75
Other on-site storage	15	40	75

For SI: 1 foot = 304.8 mm.

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: _____