



**CITY OF BLAINE
SAFETY SERVICES
Fire Inspections
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HIGH-PILED STORAGE WORKSHEET

Site Name:	Site Address:
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*ATTACH ADDITIONAL INFORMATION TO THIS FORM IF NECESSARY

Issue	Description
1. What is the commodity classification(s)? (See attached for examples)	
2. Any Special hazards: aerosols, flammable or combustible liquid storage?	
3. Construction type: fire resistive, non- combustible, combustible (describe)	
4. Provide floor plan showing storage arrangement and total square footage. Exterior doors.	
5. Roof construction: sloped, flat, bar joist, decking materials, Wall/floor construction	
6. Total square footage of the storage area(s)	
7. Freezers and Coolers? (Type, dimensions)	
8. Is storage area open to general public?	
9. What is the floor to ceiling height?	
10. What is the proposed storage height?	
11. How is the storage arranged?	
	Racks & pallets, piles or shelves? (back to back?)
	Rack layout: single/double/multiple:
	Number of tiers?
	Flue space?
	Bulk piles: dimensions
	Aisle
12. Type of shelving or rack materials, i.e. solid wood, slatted wood, grated metal?	
13. Describe commodity packaging method, i.e. exposed, plastic wrap, paper wrap, cartons	
14. Describe packing method, i.e. none, paper, combustible materials, carton dividers, plastic wrap, plastic foam sheets or beads?	
15. Type of sprinkler system proposed or installed? Designed to what standard? Existing and proposed design density/head types?	
16. Proposed water supply: single or two sources: looped underground or dead end?	
17. Hose rack layout/stations required?	
18. Site access issues: location of man doors	
19. Smoke venting roof vents or mechanical: stand alone or with normal HVAC? - source of make up air: - curtain boards:	

DEFINITIONS:

HIGH-PILED STORAGE AREA is an area within a building, which is designated, intended, proposed or actually used for high-piled combustible storage.

SOLID SHELVING is shelving that is solid, slatted, mesh, or grated located within racks that obstructs sprinkler water penetration through the racks.

COMMODITY CLASSES:

Class I commodities

Class I commodities are essentially noncombustible products on wooden or non-expanded polyethylene solid deck pallets, in ordinary corrugated cartons with or without single-thickness dividers, or in ordinary paper wrappings with or without pallets. Class I commodities are allowed to contain a limited amount of Group A plastics in accordance with Section 2307.4. Examples of Class I commodities include, but are not limited to, the following:

- Alcoholic beverages (not exceeding 20 percent alcohol)
- Appliances-noncombustible, electrical
- Cement in bags
- Ceramics
- Dairy products in non-wax-coated containers (excluding bottles)
- Dry insecticides
- Foods in noncombustible containers
- Fresh fruits and vegetables in non-plastic trays or containers
- Frozen foods
- Glass
- Glycol in metal cans
- Gypsum board
- Inert materials, bagged
- Insulation, noncombustible
- Noncombustible liquids in plastic containers having less than a 5-gallon (18.9 L) capacity
- Noncombustible metal products

Class II commodities

Class II commodities are Class I products in slatted wooden crates, solid wooden boxes, multiple-thickness paperboard cartons or equivalent combustible packaging material with or without pallets. Class II commodities are allowed to contain a limited amount of Group A plastics in accordance with Examples of Class II commodities include, but are not limited to, the following:

- Alcoholic beverages (not exceeding 20 percent alcohol, in combustible containers)
- Foods in combustible containers
- Incandescent or fluorescent light bulbs in cartons
- Thinly coated fine wire on reels or in cartons

Class III commodities

Class III commodities are commodities of wood, paper, natural fiber cloth, or Group C plastics or products thereof, with or without pallets. Products are allowed to contain limited amounts of Group A or B plastics, such as metal bicycles with plastic handles, pedals, seats and tires. Group A plastics shall be limited in accordance with Section 2307.4

Examples of Class III commodities include but are not limited to, the following:

Aerosol, Level 1
Combustible fiberboard
Cork, baled
Feed, bagged
Fertilizers, bagged
Food in plastic containers
Furniture: wood, natural fiber, upholstered, non-plastic, wood or metal with plastic-padded and covered arm rests
Glycol in combustible containers not exceeding 25 percent
Lubricating or hydraulic fluid in metal cans
Lumber
Mattresses, excluding foamed rubber and foamed plastics
Noncombustible liquids in plastic containers having a capacity of more than 5 gallons
Paints, oil base, in metal cans
Paper, waste, baled
Paper and pulp, horizontal storage, or vertical storage that is banded or protected with approved wrap
Paper in cardboard boxes
Pillows, excluding foamed rubber and foamed plastics
Plastic-coated paper food containers
Plywood
Rags, baled
Rugs, without foamed backing
Sugar, bagged
Wood, baled
Wood doors, frames and cabinets
Yarns of natural fiber and viscose

Class IV commodities

Class IV commodities are Class I, II or III products containing Group A plastics in ordinary corrugated cartons and Classes I, II and III products, with Group A plastic packaging, with or without pallets. Group B plastics and free-flowing Group A plastics are included in this class. The total amount of non-free-flowing Group A plastics shall be in accordance with Section 2307.4 Examples of Class IV commodities include but are not limited to, the following:

Aerosol, Level 2
Alcoholic beverages, exceeding 20 percent but less than 80 percent alcohol, in cans or bottles in cartons
Clothing, synthetic or non-viscose
Combustible metal products (solid)
Furniture, plastic upholstered
Furniture, wood or metal with plastic covering and padding
Glycol in combustible containers (greater than 25 percent and less than 50 percent)
Linoleum products
Paints, oil base in combustible containers
Pharmaceutical, alcoholic elixirs, tonics, etc.
Rugs, foamed back
Shingles, asphalt
Thread or yarn, synthetic or non-viscose

High-hazard commodities

High-hazard commodities are high-hazard products presenting special fire hazards beyond those of Class I, II, III or IV. Group A plastics not otherwise classified are included in this class.

Examples of high-hazard commodities include, but are not limited to, the following:

Aerosol, Level 3

Alcoholic beverages, exceeding 80 percent alcohol, in bottles or cartons

Flammable solids (except solid combustible metals)

Glycol in combustible containers (50 percent or greater)

Lacquers, which dry by solvent evaporation, in metal cans or cartons

Lubricating or hydraulic fluid in plastic containers

Mattresses, foamed rubber or foamed plastics

Pallets and flats which are idle combustible

Paper, asphalt, rolled, horizontal storage

Paper, asphalt, rolled, vertical storage

Paper and pulp, rolled, in vertical storage which is un-banded or not protected with an approved wrap

Pillows, foamed rubber and foamed plastics

Pyroxylin

Rubber tires

Vegetable oil and butter in plastic containers