105.6 Required operational permits.

The *fire code official* is authorized to issue operational permits for the operations set forth in Sections 105.6.1 through 105.6.46.

105.6.1 Aerosol products.

An operational permit is required to manufacture, store or handle an aggregate quantity of Level 2 or Level 3 aerosol products in excess of 500 pounds (227 kg) net weight.

105.6.2 Amusement buildings.

An operational permit is required to operate a special amusement building.

105.6.3 Aviation facilities.

An operational permit is required to use a Group H or Group S occupancy for aircraft servicing or repair and aircraft fuel-servicing vehicles. Additional permits required by other sections of this code include, but are not limited to, hot work, hazardous materials and flammable or combustible finishes.

105.6.4 Carnivals and fairs.

An operational permit is required to conduct a carnival or fair.

105.6.5 Cellulose nitrate film.

An operational permit is required to store, handle or use cellulose nitrate film in a Group A occupancy.

105.6.6 Combustible dust-producing operations.

An operational permit is required to operate a grain elevator, flour starch mill, feed mill, or a plant pulverizing aluminum, coal, cocoa, magnesium, spices or sugar, or other operations producing *combustible dusts* as defined in Chapter 2.

105.6.7 Combustible fibers.

An operational permit is required for the storage and handling of *combustible fibers* in quantities greater than 100 cubic feet (2.8 m³).

Exception: A permit is not required for agricultural storage.

105.6.8 Compressed gases.

An operational permit is required for the storage, use or handling at *normal temperature* and pressure (NTP) of compressed gases in excess of the amounts listed in Table 105.6.8.

Exception: Vehicles equipped for and using *compressed gas* as a fuel for propelling the vehicle.

TABLE 105.6.8 PERMIT AMOUNTS FOR COMPRESSED GASES

TYPE OF GAS	AMOUNT (cubic feet at NTP)
Corrosive	200
Flammable (except cryogenic fluids and liquefied petroleum gases)	200
Highly toxic	Any Amount
Inert and simple asphyxiant	6,000
Oxidizing (including oxygen)	504
Pyrophoric	Any Amount
Toxic	Any Amount

For SI: 1 cubic foot = 0.02832 m^3 .

105.6.9 Covered mall buildings.

An operational permit is required for:

- 1. The placement of retail fixtures and displays, concession equipment, displays of highly combustible goods and similar items in the mall.
- 2. The display of liquid- or gas-fired equipment in the mall.
- 3. The use of open-flame or flame-producing equipment in the mall.

105.6.10 Cryogenic fluids.

An operational permit is required to produce, store, transport on site, use, handle or dispense *cryogenic fluids* in excess of the amounts listed in Table <u>105.6.10</u>.

Exception: Permits are not required for vehicles equipped for and using *cryogenic fluids* as a fuel for propelling the vehicle or for refrigerating the lading.

TABLE 105.6.10
PERMIT AMOUNTS FOR CRYOGENIC FLUIDS

TYPE OF CRYOGENIC FLUID	INSIDE BUILDING (gallons)	OUTSIDE BUILDING (gallons)
Flammable	More than 1	60
Inert	60	500
Oxidizing (includes oxygen)	10	50
Physical or health hazard not indicated above	Any Amount	Any Amount

For SI: 1 gallon = 3.785 L.

105.6.11 Cutting and welding.

An operational permit is required to conduct cutting or welding operations within the

jurisdiction.

105.6.12 Dry cleaning plants.

An operational permit is required to engage in the business of dry cleaning or to change to a more hazardous cleaning solvent used in existing dry cleaning equipment.

105.6.13 Exhibits and trade shows.

An operational permit is required to operate exhibits and trade shows.

105.6.14 Explosives.

An operational permit is required for the manufacture, storage, handling, sale or use of any quantity of *explosives*, *explosive materials*, fireworks or pyrotechnic special effects within the scope of Chapter $\underline{33}$.

Exception: Storage in Group R-3 occupancies of smokeless propellant, black powder and small arms primers for personal use, not for resale and in accordance with Section 3306.

105.6.15 Fire hydrants and valves.

An operational permit is required to use or operate fire hydrants or valves intended for fire suppression purposes which are installed on water systems and accessible to a fire apparatus access road that is open to or generally used by the public.

Exception: A permit is not required for authorized employees of the water company that supplies the system or the fire department to use or operate fire hydrants or valves.

105.6.16 Flammable and combustible liquids.

An operational permit is required:

- To use or operate a pipeline for the transportation within facilities of flammable or combustible liquids. This requirement shall not apply to the off-site transportation in pipelines regulated by the Department of Transportation (DOTn) nor does it apply to piping systems.
- 2. To store, handle or use Class I liquids in excess of 5 gallons (19 L) in a building or in excess of 10 gallons (37.9 L) outside of a building, except that a permit is not required for the following:
 - 2.1. The storage or use of Class I liquids in the fuel tank of a motor vehicle, aircraft, motorboat, mobile power plant or mobile heating plant, unless such storage, in the opinion of the code official, would cause an unsafe condition.
 - 2.2. The storage or use of paints, oils, varnishes or similar flammable mixtures when such liquids are stored for maintenance, painting or similar purposes for a period of not more than 30 days.
- 3. To store, handle or use Class II or Class IIIA liquids in excess of 25 gallons (95

- L) in a building or in excess of 60 gallons (227 L) outside a building, except for fuel oil used in connection with oil-burning equipment.
- 4. To store, handle or use Class IIIB liquids in tanks or portable tanks for fueling motor vehicles at motor fuel-dispensing facilities or where connected to fuel-burning equipment.

Exception: Fuel oil and used motor oil used for space heating or water heating.

- 5. To remove Class I or II liquids from an underground storage tank used for fueling motor vehicles by any means other than the *approved*, stationary on-site pumps normally used for dispensing purposes.
- 6. To operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and *combustible liquids* are produced, processed, transported, stored, dispensed or used.
- 7. To place temporarily out of service (for more than 90 days) an underground, protected above-ground or above-ground flammable or *combustible liquid* tank.
- 8. To change the type of contents stored in a flammable or *combustible liquid* tank to a material that poses a greater hazard than that for which the tank was designed and constructed.
- 9. To manufacture, process, blend or refine flammable or combustible liquids.
- 10. To engage in the dispensing of liquid fuels into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments.
- 11. To utilize a site for the dispensing of liquid fuels from tank vehicles into the fuel tanks of motor vehicles, marine craft and other special equipment at commercial, industrial, governmental or manufacturing establishments.

105.6.17 Floor finishing.

An operational permit is required for floor finishing or surfacing operations exceeding $350 \text{ square feet } (33 \text{ m}^2) \text{ using Class I or Class II liquids.}$

105.6.18 Fruit and crop ripening.

An operational permit is required to operate a fruit- or crop-ripening facility or conduct a fruit-ripening process using ethylene gas.

105.6.19 Fumigation and thermal insecticidal fogging.

An operational permit is required to operate a business of fumigation or thermal insecticidal fogging and to maintain a room, vault or chamber in which a toxic or flammable fumigant is used.

105.6.20 Hazardous materials.

An operational permit is required to store, transport on site, dispense, use or handle hazardous materials in excess of the amounts listed in Table <u>105.6.20</u>.

TABLE 105.6.20
PERMIT AMOUNTS FOR HAZARDOUS MATERIALS

TYPE OF MATERIAL	AMOUNT
Combustible liquids	See Section <u>105.6.16</u>
Corrosive materials Gases Liquids Solids	See Section 105.6.8 55 gallons 1000 pounds
Explosive materials	See Section <u>105.6.14</u>
Flammable materials Gases Liquids Solids	See Section <u>105.6.8</u> See Section <u>105.6.16</u> 100 pounds
Highly toxic materials Gases Liquids Solids	See Section <u>105.6.8</u> Any Amount Any Amount
Oxidizing materials Gases Liquids Class 4 Class 3 Class 2 Class 1 Solids Class 4 Class 3 Class 2 Class 3 Class 1	See Section 105.6.8 Any Amount 1 gallons 10 gallons 55 gallons Any Amount 10 pounds 100 pounds 500 pounds
Organic peroxides Liquids Class I Class II Class III Class IV Class V Solids Class I Class II Class II Class II Class II Class II Class IV Class IV Class IV Class V Pyrophoric materials	Any Amount Any Amount 1 gallon 2 gallons No Permit Required Any Amount Any Amount 10 pounds 20 pounds No Permit Required
Gases	Any Amount

Liquids Solids	Any Amount Any Amount
Toxic materials Gases Liquids Solids	See Section 105.6.8 10 gallons 100 pounds
Unstable (reactive) materials Liquids Class 4 Class 3 Class 2 Class 1 Solids Class 4 Class 3 Class 2 Class 3 Class 2 Class 1	Any Amount Any Amount 5 gallons 10 gallons Any Amount Any Amount 50 pounds 100 pounds
Water-reactive materials Liquids Class 3 Class 2 Class 1 Solids Class 3 Class 2 Class 2 Class 1	Any Amount 5 gallons 55 gallons Any Amount 50 pounds 500 pounds

- For SI: 1 gallon = 3.785 L, 1 pound = 0.454 kg.
 a. 20 gallons when Table 2703.1.1(1) Note k applies and hazard identification signs in accordance with Section 2703.5 are provided for quantities of 20 gallons or less.
- b. 200 pounds when Table 2703.1.1(1) Note k applies and hazard identification signs in accordance with Section 2703.5 are provided for quantities of 200 pounds or less.

105.6.21 HPM facilities.

An operational permit is required to store, handle or use hazardous production materials.

105.6.22 High-piled storage.

An operational permit is required to use a building or portion thereof as a high-pilea storage area exceeding 500 square feet (46 m²).

105.6.23 Hot work operations.

An operational permit is required for hot work including, but not limited to:

- 1. Public exhibitions and demonstrations where hot work is conducted.
- 2. Use of portable hot work equipment inside a structure.

Exception: Work that is conducted under a construction permit.

- 3. Fixed-site hot work equipment such as welding booths.
- 4. Hot work conducted within a wildfire risk area.
- 5. Application of roof coverings with the use of an open-flame device.
- 6. When approved, the fire code official shall issue a permit to carry out a hot work program. This program allows approved personnel to regulate their facility's hot work operations. The approved personnel shall be trained in the fire safety aspects denoted in this chapter and shall be responsible for issuing permits requiring compliance with the requirements found in Chapter 26. These permits shall be issued only to their employees or hot work operations under their supervision.

105.6.24 Industrial ovens.

An operational permit is required for operation of industrial ovens regulated by Chapter 21.

105.6.25 Lumber yards and woodworking plants.

An operational permit is required for the storage or processing of lumber exceeding 100,000 board feet (8,333 ft³) (236 m³).

105.6.26 Liquid- or gas-fueled vehicles or equipment in assembly buildings.

An operational permit is required to display, operate or demonstrate liquid- or gas-fueled vehicles or equipment in assembly buildings.

105.6.27 LP-gas.

An operational permit is required for:

1. Storage and use of LP-gas.

Exception: A permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less serving occupancies in Group R-3.

2. Operation of cargo tankers that transport LP-gas.

105.6.28 Magnesium.

An operational permit is required to melt, cast, heat treat or grind more than 10 pounds (4.54 kg) of magnesium.

105.6.29 Miscellaneous combustible storage.

An operational permit is required to store in any building or upon any premises in excess of 2,500 cubic feet (71 m³) gross volume of combustible empty packing cases, boxes, barrels or similar containers, rubber tires, rubber, cork or similar combustible material.

105.6.30 Open burning.

An operational permit is required for the kindling or maintaining of an open fire or a fire

on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be adhered to.

Exception: Recreational fires.

105.6.31 Open flames and torches.

An operational permit is required to remove paint with a torch; or to use a torch or open-flame device in a wildfire risk area.

105.6.32 Open flames and candles.

An operational permit is required to use open flames or candles in connection with assembly areas, dining areas of restaurants or drinking establishments.

105.6.33 Organic coatings.

An operational permit is required for any organic-coating manufacturing operation producing more than 1 gallon (4 L) of an organic coating in one day.

105.6.34 Places of assembly.

An operational permit is required to operate a place of assembly.

105.6.35 Private fire hydrants.

An operational permit is required for the removal from service, use or operation of private fire hydrants.

Exception: A permit is not required for private industry with trained maintenance personnel, private fire brigade or fire departments to maintain, test and use private hydrants.

105.6.36 Pyrotechnic special effects material.

An operational permit is required for use and handling of pyrotechnic special effects material.

105.6.37 Pyroxylin plastics.

An operational permit is required for storage or handling of more than 25 pounds (11 kg) of cellulose nitrate (pyroxylin) plastics and for the assembly or manufacture of articles involving pyroxylin plastics.

105.6.38 Refrigeration equipment.

An operational permit is required to operate a mechanical refrigeration unit or system regulated by Chapter <u>6</u>.

105.6.39 Repair garages and motor fuel-dispensing facilities.

An operational permit is required for operation of repair garages and automotive, marine and fleet motor fuel-dispensing facilities.

105.6.40 Rooftop heliports.

An operational permit is required for the operation of a rooftop heliport.

105.6.41 Spraying or dipping.

An operational permit is required to conduct a spraying or dipping operation utilizing flammable or *combustible liquids* or the application of combustible powders regulated by Chapter <u>15</u>.

105.6.42 Storage of scrap tires and tire byproducts.

An operational permit is required to establish, conduct or maintain storage of scrap tires and tire byproducts that exceeds 2,500 cubic feet (71 m³) of total volume of scrap tires and for indoor storage of tires and tire byproducts.

105.6.43 Temporary membrane structures and tents.

An operational permit is required to operate an air-supported temporary membrane structure or a tent having an area in excess of 400 square feet (37 m²).

Exceptions:

- 1. Tents used exclusively for recreational camping purposes.
- 2. Tents open on all sides, which comply with all of the following:
 - 2.1. Individual tents having a maximum size of 700 square feet (65 m²).
 - 2.2. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m²) total.
 - 2.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided.

105.6.44 Tire-rebuilding plants.

An operational permit is required for the operation and maintenance of a tire-rebuilding plant.

105.6.45 Waste handling.

An operational permit is required for the operation of wrecking yards, junk yards and waste material-handling facilities.

105.6.46 Wood products.

An operational permit is required to store chips, hogged material, lumber or plywood in excess of 200 cubic feet (6 m³).

105.7 Required construction permits.

The *fire code official* is authorized to issue construction permits for work as set forth in Sections 105.7.1 through 105.7.14.

105.7.1 Automatic fire-extinguishing systems.

A construction permit is required for installation of or modification to an automatic fire-extinguishing system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.2 Battery systems.

A permit is required to install stationary storage battery systems having a liquid capacity of more than 50 gallons (189 L).

105.7.3 Compressed gases.

When the compressed gases in use or storage exceed the amounts listed in Table 105.6.8, a construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a *compressed gas* system.

Exceptions:

- 1. Routine maintenance.
- 2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

105.7.4 Cryogenic fluids.

A construction permit is required for installation of or *alteration* to outdoor stationary *cryogenic fluid* storage systems where the system capacity exceeds the amounts listed in Table <u>105.6.10</u>. Maintenance performed in accordance with this code is not considered an *alteration* and does not require a construction permit.

105.7.5 Fire alarm and detection systems and related equipment.

A construction permit is required for installation of or modification to fire alarm and detection systems and related equipment. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.6 Fire pumps and related equipment.

A construction permit is required for installation of or modification to fire pumps and related fuel tanks, jockey pumps, controllers and generators. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.7 Flammable and combustible liquids.

A construction permit is required:

- 1. To install, repair or modify a pipeline for the transportation of flammable or *combustible liquids* .
- 2. To install, construct or alter tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and *combustible liquids* are produced, processed, transported,

stored, dispensed or used.

3. To install, alter, remove, abandon or otherwise dispose of a flammable or *combustible liquid* tank.

105.7.8 Hazardous materials.

A construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a storage facility or other area regulated by Chapter <u>27</u> when the hazardous materials in use or storage exceed the amounts listed in Table <u>105.6.20</u>.

Exceptions:

- 1. Routine maintenance.
- 2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

105.7.9 Industrial ovens.

A construction permit is required for installation of industrial ovens covered by Chapter 21.

Exceptions:

- Routine maintenance.
- 2. For repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

105.7.10 LP-gas.

A construction permit is required for installation of or modification to an LP-gas system.

105.7.11 Private fire hydrants.

A construction permit is required for the installation or modification of private fire hydrants.

105.7.12 Spraying or dipping.

A construction permit is required to install or modify a spray room, dip tank or booth.

105.7.13 Standpipe systems.

A construction permit is required for the installation, modification or removal from service of a standpipe system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.14 Temporary membrane structures and tents.

A construction permit is required to erect an air-supported temporary membrane structure or a tent having an area in excess of 400 square feet (37 m²).

Exceptions:

- 1. Tents used exclusively for recreational camping purposes.
- 2. Funeral tents and curtains or extensions attached thereto, when used for funeral services.
- 3. Tents and awnings open on all sides which comply with all of the following:
 - 3.1. Individual tents shall have a maximum size of 700 square feet (65 m²).
 - 3.2. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m²) total.
 - 3.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be maintained.